FIEDLER
ELEKTRONIKA PRO EKOLOGII

PRICE LIST 2026

PRODUCTS AND SERVICES CATALOG

Interactive version

ALPHABETICAL LIST OF PRODUCTS

FIEDLER
ELEKTRONIKA PRO EKOLOGII

COMPARISON OF MEASURING AND RECORDING INSTRUMENTS

		Control and data collection				Dataloggers and small telemetry stations						remote meter readings			Level meters and flow meters						Water quality	
		C8	H3	H7	M4016(/KDO)	H1	H2	H40	H50	STELA		H11		S130	Q2 (/KDO)	M2001Q (Z)	H500	H520	H531		E2	M2001E
Inputs and recording channels	Data memory [MB]	6	6	6	4	2	2	2	2	2					6	2					6	2
	Analogue recording channels	120	32	96	16	8	8	8	8	8					16	2					16	1
	Binary recording channels	240	64	208	40	4	4	2	2	2					16						16	
	Analog inputs 4 (0) -20 mA		6*	6*	6	3	3	1	2	2					4	1		1	1		4	1
	Voltage inputs 0-2 V DC		2*	2*	2	2	2															
	Voltage inputs for TSH27 (comp. ATM)																1	1	1			
	RS485 line for sensors (master)	4	2*	2*	1	1	1	1	1	1					2*	1	1		1		2*	1
	RS485 line for master system (slave)		1	1											1			1			1	
	SDI-12 data line for sensors		1*	1*	1*			1	1	1												
	Pulse / binary inputs (OPTO, REED)	9	6*	6*	8	2	2	2*	2*	2*		2		2	4						4	
	Binary inputs 0/1					2	2					1					1		1			
	Connect:. S-clamps; C-connector; K-cable	S	S	S	S	S	S	C	C	K/S		K		K	S	S	S	S	S		S	S
Outputs	Mechanical relay 230 VAC / 5 A	5	2*	2*											2*	3					2*	3
	Mechanical relay 24 VDC / 5 A		2	2	2										2						2	
	Electronic relays 12/24 V / 1 A		2*	2*											2*		1				2*	
	Current output 4-20 mA, active		2*	2*											2*	2*					2	2*
	OPTO sensor supply voltage output	1	1	1					1			1			1							
I/O module	DV2 external I / O module connection																					
	Out module connection MAV421, 422																					
	In module connection AIM600, AIM615																					
	Connecting the H520-B display module																					
Program functions	PID controller output																					
	Calculation of flow or rainfall from pulses																					
	Calculation of flowed volumes from level																					
	Calculation of flow volumes from velocity				1**										4**							
	Calibration of electrochemical probes																					
	Calibration of the ESKO12 sensor																					
	Self-diagnostics																					
Local control	Display: G = graphic; A = alphanumeric		G	G	A	G	G								G	A	G	A	G		G	A
	Keyboard (number of fingerboards)		8	8	21	1	1								8	3	3	3	3		8	3
	Local RS232 communication (MOST)																					
	Local USB communication (sw MOST4)																					
	Local NFC communication (mobile FC ap)																					
	Local BT5 communication (MOST4, FC)																					
Server services	Data collection in the GPRS network																					
	Data collection in the NB-IoT network																					
	Data collection in LoRa or Sigfox network																					
	Automatic completion of missing data																					
	Visualization of data, graphs and tables																					
	Remote parameterization - sw MOST																					
	Remote parameterization – sw MOST4																					
	Remote Cloud FM parameterization																					
Power	Internal battery power (num. of batteries)					1	1	2	2*	4*		1		1					1			
	Possibility of DC voltage supply, type [V]	24	12	12	12	12	12		5			12			12		24	12	5		12	12
	Possibility of power supply with 230 VAC																					
	Protection IP67 or higher																					

* The stated value represents the maximum possible number depending on the type of connection board used and the device configuration
** Applies to / KDO version only

The device meets the requirement
Meets after adjustments
Fulfillment is being prepared
Does not meet the requirement

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OVERVIEW OF OUTPUT SIGNALS AND SELECTED PARAMETERS OF SENSORS AND PROBES

		The main measured quantity	Measuring range	Secondary measured quantities	Output signal	FINET	MODBUS RTU	U supply [V] (U optimal)	Rise time [s]
Level and flow sensors	TSH22 (tensometer)	water level	3; 5; 7 or 10 mH_2O	water temperature	RS485	■	■	6..16 (12)	0,5
	TSH37 (tensometer)	water level	0..0,4m to 250mH_2O	water temperature	RS485		■	8..15 (12)	0,7
	LMP307/4-20 (tensometer)	water level	0..1 m to 250 mH_2O	-	4-20 mA			8..32 (24)	0,5
	TSH35 (tensometer)	water level	0..10 mH_2O	-	4-20 mA			8..32 (24)	0,5
	LMK809 (tensometer)	water level	0..4 m to 100 mH_2O	-	4-20 mA			9..32 (24)	0,7
	TSH28 (tensometer)	water level	0..10 m; 0..25 m	-	0..5 V DC			12	0,5
	US1200 – US4200 (ultr.)	water level	0..1,2 m to 4,2 m	air temperature	RS485	■	■	10..24 (12)	1,5
	SPA-5xx-4 (ultrasonic)	water level	0,15..3m; 0,35..18m	-	4-20 mA			11..36 (24)	30
	VEGAPULS C11 (radar)	water level	0..8 m	-	4-20 mA			12..35 (24)	15
	VEGAPULS C21,C23 (rad)	water level	0..15 m, 0..30 m	-	4-20 mA			12..35 (24)	15
	WPP, WES-1xx (radar)	water level	0,2..23 m	-	4-20 mA			22..36 (24)	120
	PSH30 (float)	water level	0..30 m	air temperature	RS485	■		6..14 (12)	per.
	NLP-1XX, NWP-1xx (plo.)	level switch	-	-	contact relay			-	-
	KDO/S-K0, KDO/P-R0	flow rate	-6 m/s to +6 m/s	water temp., level	RS485		■	10-24 (12)	3
	PF500, PF200	flowed volume	0..6 l/min	-	contact relay	-	-	-	-
Water quality sensors	PH485	pH	0,00..13,00 pH	temp., Upot. [mV]	RS485	■	■	5..24 (12)	0,5
	ORP485	Redox potential	-2000 ..+2000 mV	water temperature	RS485	■	■	5..24 (12)	0,5
	ISE485	potential ISE el.	-2000 ..+2000 mV	water temperature	RS485	■	■	5..24 (12)	0,5
	ESP11	pH	1,00..13,00 pH	water temperature	RS485	■		10..26 (12)	<1
	ESR11	Redox potential	-1200..+1200 mV	water temperature	RS485	■		10..26 (12)	<1
	ESK11	dissolved oxygen	0,00..30,00 mg/l	water temperature	RS485	■		10..26 (12)	120
	ESV11	Conductivity	0..2000 µS/cm	water temperature	RS485	■		8-16 (12)	<1
	ESKO12, S423/C/OPT	dissolved oxygen	0,00..20,00 mg/l	water temperature	RS485		■	12-26 (24)	<1
	ESZK11 (optical)	Clouding	0..10;.. 0..4000 NTU	water temperature	RS485		■	5..12 (12)	<1
	S461/TN, /LT (optical)	Clouding	0..10;100,4000 NTU	water temperature	RS485		■	12..24 (24)	<1
Meteorological sensors and transducers	SR03, SR02	rainfall	0..200 mm/h	-	contact relay			-	-
	RT03 heating regulator	rainfall	pulses-max 30p/min	temp. of heat. sect.	RS485	■		24-28 (27)	per.
	RG-11	rain detector	Pulses	rain intensity	contact relay			10..15 (12)	2
	RDH11	rainfall	it's raining/it's not r.	rain intensity	OK, RS485	■	■	10..24 (12)	1
	Pt100-XP	Temperature	-50°C to +120°C	-	change R			z TEP06	-
	TEP1/X	Temperature	-50°C to +100°C	-	RS485	■	■	6..16 (12)	0,5
	TEP06	conversion for Pt100	-50°C to +100°C	6 inputs for Pt100	RS485	■	■	6..16 (12)	2
	HFP01-05	heat flow	±2000 W / m^2	-	µV/ W/ m^2			-	-
	SG002	solar radiation	0..1000 W / m^2	-	0..2 V DC			11..15 (12)	2
	CMP3 – CMP11	solar radiation	0..2000 W / m^2	-	µV/ W/ m^2			-	-
	NR LITE2	solar radiation	±2000 W / m^2	-	µV/ W/ m^2			-	-
	CNR4	solar radiation	2xpyrano+2xpyrgeo	Temperature	µV/ W/ m^2			-	-
	TEP06/P	Convert µV / RS485	9 mV to 1,1V	2 temperature Pt100	RS485	■	■	6..16 (12)	2
	RVT80, RVT81	RH and air temp.	0..100%,-40..+60°C	-	RS485	■	■	6..14 (12)	<1
	RVT12, RVT12/RK5	RH and air temp.	0..100%; -50..+100°C	-	2x 0..1 V DC			3,3 (3,3)	<1
	RVT13, RVT13/RK5	RH and air temp.	0..100%; -50..+100°C	-	RS485	■	■	5..24 (12)	<1
	WS103, WS103-H	wind speed	0,6 to 60 m/s	Average / Gust	RS485	■	■	8..24 (12)	5
	WD360, WD360-H	wind direction	0 to 359°	Average / Interval	RS485	■	■	8..24 (12)	5
	UA4310	speed and direction	0..75 m/s; 0..359°	-	RS485		■	9..36 (24)	2
	VIRRIB	Volume soil moisture	5..50 %	-	0,2..5 mA			5,5..18 (12)	1
	CS650	Volume soil moisture	0..100 %	Soil temp., permit.	SDI-12			6..18 (12)	3
	TMS11A, TM4	soil suction pressure	0..-65 kPa, 0..50°C	Soil temp., ATM	RS485	■	■	6..14 (12)	0,5
	ATM10, ATM11	Atm. air pressure	300 .. 1100 mbar	air temperature	RS485	■	■	6..16 (12)	0,5
	CYBLE	pulse/speed sensor	1..100 l/puls, 0..75 Hz	-	OC (NPN)			-	-
	ELSTER	pulse/speed sensor	1..1000 l/puls, 75 Hz	alternatively M-Bus	OC (FET)			-	-
	VC-08 to VC-11	pulse/speed sensor	1l / pulse, max. 75 Hz	-	OC (NPN)			3,5..14 (5)	Per.
	ELM1	electrical energy	-	-	RS485		■	5..28 (12)	1

■ Digital sensor output ■ The communication protocol is being prepared

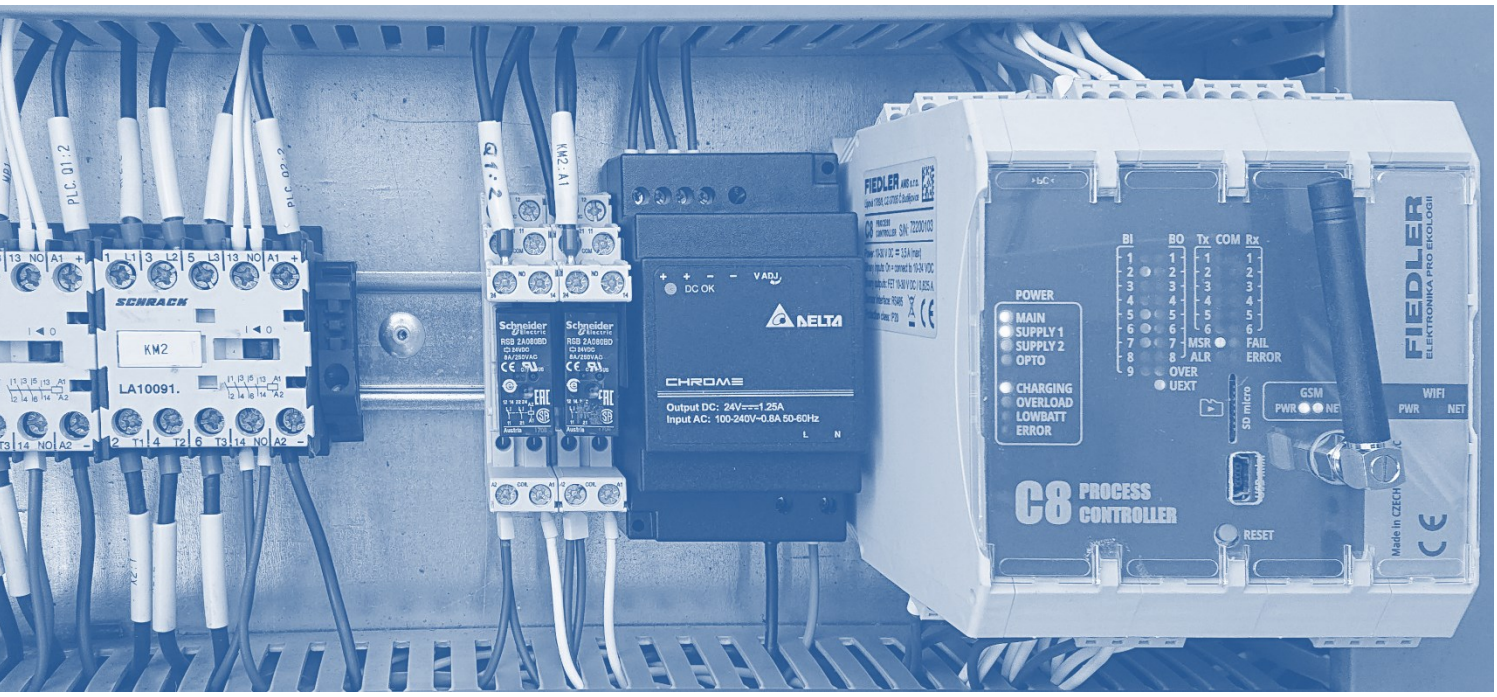
POSSIBILITIES OF CONNECTING SENSORS AND PROBES TO INDIVIDUAL MEASURING INSTRUMENTS

		Control and data collection			Dataloggers and small telemetry stations						Remote meter readings			Level meters and flow meters					Water quality		Converters for sensors			
		C8	H3, H7	M4016(/KDO)	H1	H2	H40	H50	STELA		H11		S130	Q2 (/KDO)	M2001Q (Z)	H500	H520	H531	E2	M2001E	TEP06	TEP06/P	TM4	AIM615
Level and flow sensors	TSH22	●	●	●	●	●	●	●	●					●	●									
	TSH37, LMP307i/485	●	●	●	●	●	●	●	●					●	●									
	TSH35, LMP307i/4-20	●	●	●	●	●	●	●	●					●	●		●	●						●
	LMK809	●	●	●	●	●	●	●	●					●	●		●	●						●
	TSH28															●	●	●						
	US1200 – US4200	●	●	●	●	●	●	●	●					●	●									
	SPA-5xx-4	●	●	●	●	●	■	●	■					●	●									■
	VEGAPULS WL 61	●	●	●	●	●	●	●	●					●	●									●
	WPP, WES-1xx	■	■	■	■	■	■	■	■					■	■									■
	PSH30	●	●	●										●										
	NLP-1XX, NWP-1xx	●	●	●	●	●	●	●	●					●				●	●					
	KDO/S-K0, KDO/P-R0			●										●										
	PF500, PF200	●	●	●	●	●	■	●	●		●		●	●										
Water quality sensors	PH485	■	●	●	■	■	■	■	■										●					
	ORP485	■	●	●	■	■	■	■	■										●					
	ISE485	■	●	●	■	■	■	■	■										●					
	ESP11			●																●				
	ESR11			●																●				
	ESK11			●																●				
	ESV11	●	●	●	●	●	●	●	●										●	●				
	ESKO12, S423/C/OPT	■	●	■															●	●				
	ESZK11	■	●	■															●					
	S461/TN, /LT	■	●	■															●					
Meteorological sensors and transducers	SR03, SR02	●	●	●	●	●	■	●	●					●										
	RT03	●	●	●	●	●	■	■	■					■										
	RG-11	●	●	●	●	●	■	●	●					●										
	RDH11	●	●	●	●	●	■	●	●															
	Pt100-XP																				●	●		
	TEP1/X	●	●	●	●	●	■	●	●															
	TEP06, TEP06/P	●	●	●	●	●	■	●	●															
	HFP01-05																					●		
	SG002		●	●																	■	■		■
	CMP3 – CMP11																					●		
	NR LITE2																					●		
	CNR4																					●		
	RVT80, RVT81	●	●	●	●	●	●	●	●															
	RVT12, RVT12/RK5		■	■																	■			■
	RVT13, RVT13/RK5	●	●	●	●	●	●	●	●															
	WS103, WS103-H	●	●	●	●	●	●	●	●															
	WD360, WD360-H	●	●	●	●	●	●	●	●															
	UA4310	●	●	●																				
	VIRRIB	●	●	●			●	●	●	■											■			●
	CS650		●	●			■	●	■															
	TMS11A																						●	
	TM4	●	●	●	●	●	●	●	●															
	ATM10, ATM11	●	●	●	●	●	●	●	●															
	CYBLE	●	●	●	●	●	●	●	●		●		●	●										
	ELSTER	●	●	●	●	●	●	●	●		●		●	●										
	VC-08 to VC-11	●	●	●	●	●	●	●	●		●			●										
	ELM1	●	●											●										

● Sensor connection is possible ■ Sensor cannot be connected ■ Sensor can be connected after modifications or with limited function

TABLE 3

MONITORING AND CONTROL TECHNOLOGY



C8 – PROCESS CONTROLLER, TELEMETRY AND DATA COLLECTION

Display	Type	Description	Price EUR without VAT
4 MoSt, cloud, USB, 2G	B W	Modular control unit with a large number of measuring analog and binary inputs and outputs designed to control technological processes in water supply. Four RS485 serial communication lines allow the connection of many different sensors under the MODBUS RTU and FINET protocols. The software supports flow measurement, control of pumps and blowers, including outages. C8 contains 4 integrated PID controllers and enables data hosting on the server via a built-in GSM / GPRS communication module, including remote parameterization of the device. **Typical applications:** control of WWTP technology, control of water treatment plants and CS, WWTP and VDJ and many other applications not only in water supply and industry. Data acquisition and warning system when preset limits are exceeded. **Analogue recording channels:** 120 channels for archiving the measured quantity (flow, level, volume, temperature, pH, ORP, dissolved oxygen, conductivity, energy, speed, pulses, precipitation,…). **Binary recording channels:** 240 binary channels. Each channel is configurable as a binary input or binary output. The input binary channel records the moment of switching on and off the input with a time resolution of 1 s (runs and faults, object security,…). Output binary channels allow to command relays based on logic functions with other binary channels (AND, NAND, OR, NOR, XOR). **Text channel** - diary of events: texts and phone numbers of received and sent SMS, sending data to the server, faults of connected sensors, power failures, ... **Communication interface**: four independent RS-485 buses for communication with the master system under FINET or MODBUS-RTU protocols, data collection from connected sensors, control of external modules, connection of an external display module, ... **USB mini:** device parameterization, transfer of measured data **GSM / GPRS internal communication module**: remote parameterization of the device, transmission of measured data to the server, sending of warning SMS **Analog inputs**: in the basic version 6 current inputs 4 (0) -20 mA **Binary inputs**: 9 0/24 VDC inputs in the basic version, easily expandable with external modules **Binary outputs**: in the basic version 5 relays (switching contact 250 V AC or 24 V DC / 5 A) easily expandable with external modules by relay outputs 250 V AC / 5 A. **Supply voltage:** 10 to 30 V DC (type 24 V DC), built-in backup rechargeable battery **Dimensions:** 114.5 x 90 x 99 mm, IP20	

PRELIMINARY

C8-BIC	Basic controller assembly, 6x AI, 9x BI, 5x BO, 4x RS485, internal GSM / GPRS module	1 247,-

Expansion modules for C8 unit

I/O modules for expanding the inputs and outputs of the C8 unit.
The expansion modules are connected to the basic C8-BIC assembly using a connector housed in a DIN rail, which contains the supply voltage for the module and the fast serial communication line. Connecting the module to the C8 base unit or replacing it is therefore very easy and fast and does not require any wire jumpers.
The expansion modules have a uniform width of 22.5 mm.
Up to 20 external input / output modules can be connected to the C8-BIC base unit. The following three expansion modules are currently available:

C8-EB35	Expansion I / O module for C8 unit, 9x BI 0/24 VDC, 5x switching BO 250 V AC / 5A	278,-
C8-EB60	Expansion I / O module to C8 unit, 18x BI 0/24 VDC	261,-
C8-EB08	Exp. I/O module for C8, 4x switching BO 250 VAC / 8A, 4x switching BO 250 VAC / 5 A	276,-

Optional accessories for the C8 control unit

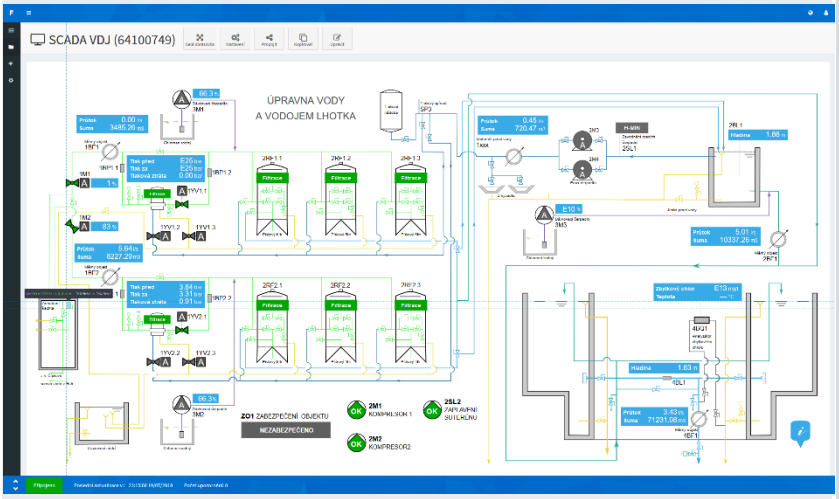
Display modules

Graphic display modules for visualization of measured data and parameterization of the C8 unit. The display modules are connected to the C8 unit via an RS-485 serial line.

PANEL HMI 24	Touch screen with a diagonal of 24 "with configurable graphics, typically technological scheme of operation. The price does not include SW work.	1 479,-

Service offer

Creating a technology screen



The price for the design of one technological screen and the subsequent graphic design corresponding to the controlled or monitored technology depends on the complexity of the screen and the number of active elements. Usually, the price for creating a technological screen ranges in a wide range from 5 to 20 thousand CZK without VAT.

Technology screen	Design and creation of a single technological screen	On request

H3, H7 - MULTICHANNEL TELEMETRIC STATION, CONTROL UNIT

Display	Type	Description	Price EUR without VAT
4 MoSt, cloud, USB, 2G	B W	Universal telemetry and control unit, parameterization via USB, GPRS or Wi-Fi, self-diagnostics, color touch screen, robust AI box, high IP67 protection.	

Up to 96 measuring recording channels for sensors of level, flow, pressure, rainfall, pH, REDOX potential, diss. oxygen, turbidity, conductivity, ISE voltage, temperature, operating hours and many other variables; optional units of measure, one or two-point calibration of connected sensors, 64 measuring channels with calculation of total, daily, monthly and annual sum.

Flow measurement: 4 recording channels for measuring and calculating the flow in open profiles using preset consumption equations, archiving of daily flow volumes.

Up to 208 binary channels adjustable as Input / Output, recording of movements and faults of motors, pumps, etc., to selected channels can be set operating hours counter

1 text channel as an event log (SMS recording, data sessions to the server, faults, ...).

Control: Limit, time and logic relay control, 4xPID controller. Depending on the type of connection board, up to 4x relays (control of other relays in external modules DV2, DV3), up to 2x active current output 4-20 mA, (additional current outputs 4-20 mA using external MAV42x / DIN modules).

Communication interface:

USB mini: device parameterization, transfer of measured data in the field

RS-485-I: data acquisition from connected sensors under FINET and MODBUS RTU protocol.

RS-485-II: data collection from connected sensors, control of external modules, data transfer to the superior system under the MODBUS RTU protocol

SDI-12 (TA4): data acquisition from connected sensors and transducers.

Configuration examples:

H3–G–TB2–B **(1000,- + 250,- + 196,- = 1 446,-)**

H3 unit, internal GSM communication module, TB2 connection board, power supply from an external 12-24 V DC source, built-in Li-Pol battery, location in an AI box with 5 metal cable glands

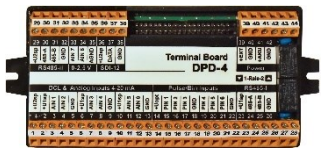
H7–G–TA5–A **(1250,- + 250,- + 117,- + 129,- = 1 746,-)**

H7 unit, internal GSM communication module, TA5 connection board, power supply from a 12V battery, possibility of external battery charging from a 13.8V source, location in an ARIA cabinet with 5 cables. glands, without lock

– Device type	– Communic. modules	– Terminal board	– Housing		Base price:
H3				Multichannel calibration and control unit, flow meter, 16 recording channels	1 000,-
H7				Multichannel calibration and control unit, flow meter, 96 recording channels	1 250,-
				Surcharges for communication module, terminal board and design:	
	U			Without communication module - only USB mini (IP67)	0,-
	G			Internal GSM module	+ 250,-
	W			Internal Wi-Fi module	+ 250,-
	E			Internal Ethernet module	+ 250,-
		TB1		IN: 4x AIN, 4x BIN, 2x RS485; Out:4x rele, Un= Pb batt., Uext. 14-28 V (solar), IP67	+ 175,-
		TB2		IN: 4x AIN, 4x BIN, 2x RS485; Out:4x rele, 2x 4-20 mA, Li-Pol batt., Un=2-28 VDC	+ 196,-
		TB3		IN: 4x AIN, 4x BIN, 2x RS485; Out:4x rele, 2x 4-20 mA, Li-Pol batt.,Un=230VAC, IP67	+ 213,-
		TA4		IN: 8x AIN, 6x BIN, SDI-12, 2x RS485; OUT: 2x rele, Un= Pb batt., Uext. 13,8 V	+ 117,-
		TA4E		IN: 8x AIN, 6x BIN, SDI-12, 2x RS485, 2x Pt100; OUT: 4x rele, Un=Pb b., Uext.13,8V	+ 196,-
		TA5		IN: 7x AIN (1x 0..10V), 8x BIN, 2x RS485; OUT: 2x rele, Un= Pb battery, Uext. 13,8V	+ 117,-
			B	Only with TBx connection plate, aluminum box 140x160x70 mm, 5x cable. gland	0,-
			A	ARIA cabinet 300x200x170 mm equipped, IP66, 5x cable gland	+ 129,-
			AZ	Cabinet ARIA 300x200x170, IP66 equipped, lockable handle, 5x cable gland	+ 138,-
			AK	ARIA 300x200x170 cabinet, IP66, portable design with connectors, handle	+ 210,-
			AKZ	ARIA 300x200x170 cabinet, IP66, portable design with connectors, handle, lock	+ 221,-
			S	Enclosure SCH 400x300x200 mm, IP66, 2 loops, 5x cable gland	+ 144,-
			SZ	SCH 400x300x200 cabinet, IP66, 2 lockable handles, 5x cable gland	+ 163,-
			NZ	Stainless steel cabinet 470x320x230, IP66, 2 lockable handles, 9x metal cable gland	+ 354,-
			P	Design for panel mounting	0,-
			V	Built-in unit	0,-

		**Cabinet design**	
		Al Box Made of aluminum alloy, the device is suitable for indoor and outdoor fixed installation. The cabinet has a high IP67 protection, metal cable glands 2x M20 and 3x M16, a filter for balancing the atmospheric pressure inside the cabinet with the outdoor environment. Recommended installation of the cabinet using KRV-2 brackets, which also form the basic protection of the device.	
	B	Only with or. TBx plate, aluminum box 140x160x70 mm, 5x cable gland, IP67	0,-
	**W**	**ARIA32 cabinet** Universal plastic case suitable for indoor and outdoor environments (polyester reinforced with glass fibers). The portable version of the cabinet (-AK and -AKZ) has a handle, rubber feet and usually 4 connectors on the side for connecting sensors and external power supply. The cabinet has IP66 protection, a handle or lockable closure, M20 and M16 cable glands, a filter for balancing the atmospheric pressure inside the cabinet with the outdoor environment. The cabinet is attached to the mast using two DSS-2 brackets (not included). Due to its size, the case is suitable for a 12V / 9Ah battery.	
	A	ARIA cabinet 300x200x170 mm, IP66, 5x cable gland	129,-
	AZ	ARIA 300x200x170 cabinet, IP66, lockable handle, 5x cable gland	138,-
	AK	ARIA 300x200x170 cabinet, IP66, portable design with connectors, handle, legs	210,-
	AKZ	ARIA 300x200x170 cabinet, IP66, portable design with connectors, handle, lock	221,-
	**W**	**SCHNEIDER cabinet** Universal plastic case suitable for indoor and outdoor environments (polyester reinforced with glass fibers). The cabinet has IP66 protection, 2 loops or 2 lockable closures, M20 and M16 cable glands, a filter for balancing the atmospheric pressure inside the cabinet with the outdoor environment. The cabinet is attached to the mast using two DSS-2 brackets (not included). Due to its size, the cabinet is suitable for a battery up to 12 V / 45 Ah.	
	S	Enclosure SCH 400x300x200 mm, IP66, 2 loops, 3x, 5x or 9x cable gland	144,-
	SZ	SCH 400x300x200 enclosure, IP66, 2 lockable handles, 3x, 5x or 9x cable gland	163,-
	**W**	**Stainless steel cabinet** Robust stainless steel cabinet suitable especially for outdoor environments (stainless steel material does not show signs of aging in the weather, even after years, like plastic cabinets). The cabinet has IP66 protection, 2 loops or 2 lockable closures, metal cable glands M20 (4 pcs.) And M16 (5 pcs.), A GSM antenna on the side and a filter for balancing the atmospheric pressure inside the cabinet with the outdoor environment. The cabinet is fastened to the mast with two 1 ½ “or 2“ brackets. Due to its size, it is suitable for placing a battery up to 12 V / 45 Ah.	
	NZ	Stainless steel cabinet 470x320x230, IP66, 2 lockable handles, 9x metal cable gland	354,-
		**Built-in version of the unit without cabinet** The upper part of the unit is designed for installation on the panel / door of the switchboard. The connection board type TA4, the power supply and the backup battery are located behind the panel in the body of the switchboard. The connection board is connected to the control unit with a flat cable. Installation of the unit into the panel requires mechanical modifications of the panel - creation of a mounting hole for passing a 40-core connecting cable and 4 holes for tightening screws. Installing the unit on the cabinet door does not violate the enclosure protection, because thanks to the double sealing profile, this type of mounting achieves a high degree of IP67	
	P	Design for panel mounting	0,-

	**Accessories for H3 and H7 units (E2, Q2)**	
	Cover-holder for units H3, H7, E2 and Q2 Stainless steel cover of the unit, which also serves as a holder for this unit. The cover is attached to the vertical or horizontal boom using brackets T1 to T2.	
KR2-V	Stainless steel cover-holder for placing the unit on a vertical mast.	87,-
KR2-H	Stainless steel cover-holder for placing the unit on a horizontal boom.	87,-
KR2-V-G	Stainless steel cover-holder for placing the unit on a vertical mast, GSM antenna cover	94,-
KR2-H-G	Stainless steel cover-holder for placing the unit on a horizontal boom, GSM ant. cover	89-
	**Connecting cable**	
USB/H7	USB-A communication cable to units H3, H7, Q2 and E2.	Page 64
	**Magnetic and directional GSM antennas with SMA connector**	
Anteny	GSM antennas with gain from 1 to 12 dB, various mechanical mounts, SMA connector	Page 62
	**Stainless steel stirrups**	
T1 to T2	Stainless steel brackets (A2) for attaching KR2 brackets to a mast or railing	Page 65
	Stands for ARIA and SCH cabinets	
ST1, ST2, STO-MET-02	Hot-dip galvanized weldments for quick installation cabinets in the field	Page 65

	**Replacement terminal boards**	
	Spare terminal plate User-easily replaceable connection board, which is connected to the unit itself with a flat cable PK-40. The connection board is supplied as a separate spare part in case of its destruction, eg by overvoltage during a storm or oxidation due to long-term air humidity..	
TA4	Terminal board with extended number of input signals for unit H3, H7, Q2, E2	117,-
TA4E	Expander for connection board TA4	196,-
TA5	Terminal board with extended number of input signals for unit H3, H7, Q2, E2	117,-
	**Cable to the connection board** Connecting cable between unit H3, H7, Q2, E2, M4016 and the used terminal board	
PK-40	Connecting 40-core ribbon cable between the unit and the terminal board	4,-

EXTERNAL INPUT-OUTPUT MODULES FOR CONTROL UNITS

Display	Type	Description	Price EUR without VAT
	W	**Binary input / output module**	
		The DV2 module expands the number of inputs and outputs of the control unit. Connection via RS485 to the M4016 unit under the FINET protocol and to the H7 type units under the MODBUS RTU protocol, DIN rail version (9 modules), supply voltage 12-24 V DC. **Outputs**: 6 relays, switching contacts 250 V AC / 6 A, light signaling of closed relay. The setting of switching limits and hysteresis or time or logic control (regular alternation of pumps, tripping,…) is performed by setting parameters in the control unit. **Inputs:** 16-binary inputs (switching against a common earth terminal by a potential-free contact or a sensor with an open collector), light signaling closed. entry.	
	DV2	External input / output module	260,-
	W	**Analog outputs module**	
		**Current output modules 4-20 mA, input via RS485.** Active analog output, galvanic isolation of the output current, high accuracy of the output signal (16-bit converter), connection to the control unit via RS 485 protocol FINET, light signaling of supply voltage and data communication, mounting on a DIN rail. Up to 16 MAV420 / DIN modules can be connected to one unit. Power supply from M4016 unit or from 12-15 V DC source).	
	MAV421/DIN	External module, 1 galvanically isolated active current output 4-20 mA, RS485 input	139,-
	MAV422/DIN	External module, double active current output 4-20 mA, RS485 input	175,-
	B W	**Analog input module**	
		**Current input modules 4 (0) .. 20 mA, output via RS485** Each module contains 6 current inputs 4-20 mA (0-20 mA). All inputs are galvanically isolated from the 10..26 V DC supply voltage and from the RS485 serial communication line. The data is transferred to the connected unit or control system under the Modbus RTU protocol. DIN rail mounting. The AIM615 module contains a galvanically isolated voltage source of 15 VDC / 150 mA for powering the connected sensors.	
	AIM600	Převodník 6x 4(0)-20 mA / RS485, protokol Modbus RTU a Finet	161,-
	AIM615	Převodník 6x 4(0)-20 mA / RS485, Modbus RTU a Finet, výstupní napětí 15 V /150 mA	171,-
	B W	**Water meter pulse signal splitter**	
		**Pulse signal splitter (REED, OPTO) from water meter** The pulse splitter ensures duplication (Output-A) and galvanic isolation of the water meter sensor pulses (Outputs-B, Output-C). Output-A forms the open collector of the transistor and is intended for connection to the pulse input of the register unit, from which the hub is usually powered. Output-A is not galvanically isolated from the supply voltage or the input OPTO/REED signal of the hub. Output-B and Output-C are galvanically isolated both from each other and from the supply voltage, and consist of a bi-directional semiconductor switch without polarity with an internal resistance of 4 Ω (typ.) and a maximum voltage of 28 VDC.	
	OPTO3	Water meter OPTO or REED signal splitter, supply voltage 3.5 to 24 V DC, 3 outputs	70,-
	W	**Display module**	
		**Module for displaying the level in meters, percentages and bargraph** A separate module measuring 120 x 80 mm with two LED displays and a bargraph equipped with an RS485 interface under the Modbus RTU protocol (slave mode). In addition to the level height, the module also displays the percentage level height. The binary transistor output can be used to control a power relay (switching of a pump or solenoid valve, light or sound signaling). Parameterization of the module using buttons and jumpers, adjustable 3 additional communication addresses using switches on the board (possibility of parallel arrangement of modules side by side). The standard mechanical design is adapted for panel mounting.	
	H520-B	Level display module with bargraph, RS485 interface under Modbus RTU	121,-

W

Data line surge protection

Combined overvoltage protection for RS485 or 4-20 mA data lines

Two-stage overvoltage protection of two RS485 communication lines or 4-20 mA data lines and at the same time a 6 to 24 VDC power supply line, rated discharge current up to 10 kA, DIN rail mounting.

PO2D	Combined overvoltage protection of data and power lines	49,-

Other frequently used modules and accessories

Current loop galvanic isolation module

Current loop galvanic isolation module without auxiliary power supply

The module is inserted into the primary current loop and creates a secondary active 4-20 mA current loop at its output. The module obtains energy from the primary current loop and therefore it is necessary to take into account the voltage drop in the primary loop of up to 4V.

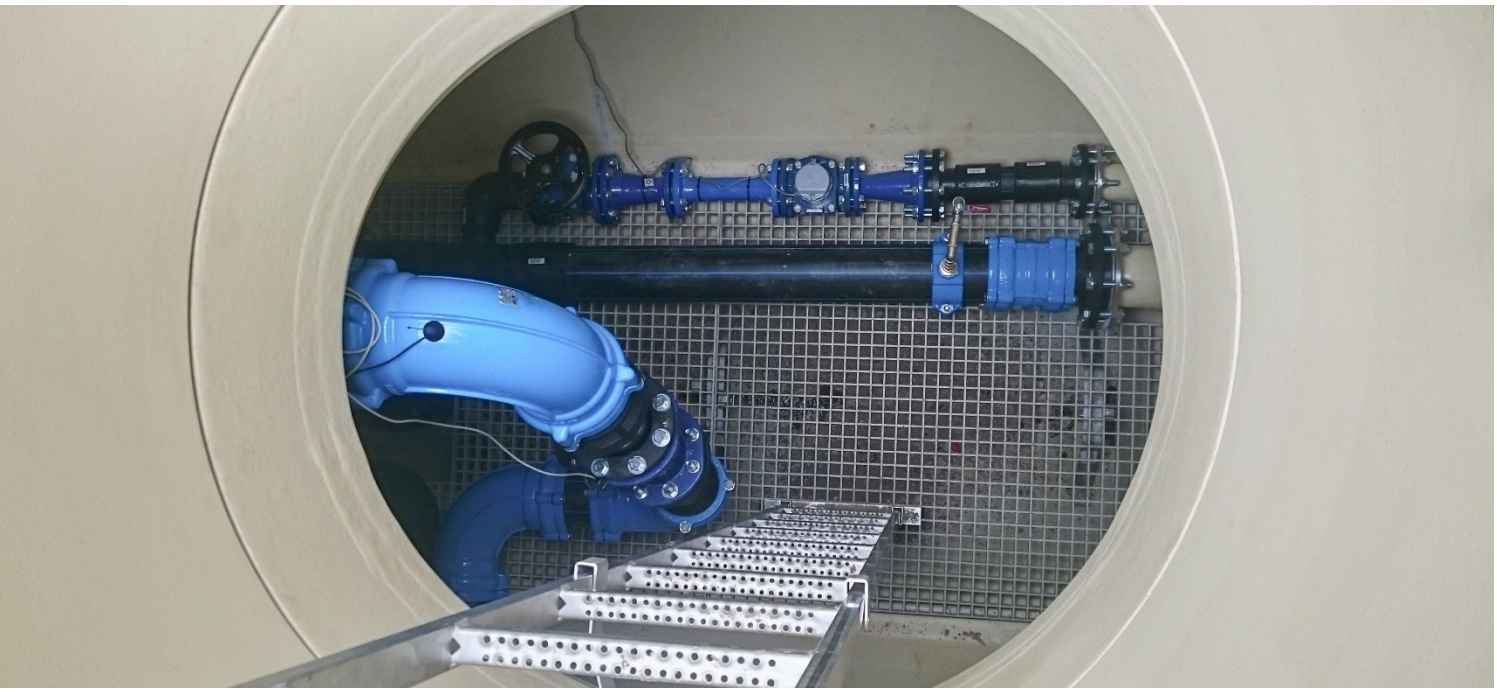
GY200	4-20 mA current signal repeater	115,-
GY200/2	Dual channel 4-20 mA current signal repeater	128,-

Converter for ISCO

Level converter for 3 binary signals between ISCO devices (binary signal output) and units M4016, H1, H3,… (binary signal input)

B3OK	Binary signal level converter	48 ,-

DATALOGGERS AND TELEMETRY



H1, H2 - SMALL TELEMETRIC STATION FOR WATER SUPPLY AND LWS

Display	Type	Description	Price EUR without VAT
MOST RS232 M8 2G	B W	**H1 - Small telemetry station for water supply applications**	
		**HYDRO LOGGER H1** is designed for monitoring of flows, pressures and levels in water meter shafts, in VDJ and ČS. The device transmits the measured data to the database to the server via its own GSM / GPRS + SMS modem, is powered by the battery and from an external source, has a graphic display for displaying instantaneous and accumulated values, battery status and for easy control of GSM field during installation. **Inputs:** 2 pulse inputs for connecting water meters, 2 binary inputs, 3 analog inputs 4-20 mA, serial interface RS-485 (FINET protocol), internal temperature and humidity sensor. **Total number of recording channels:** 8 analog, 8 binary, 5 control, 1 text. The control channels record, for example, the temperature and humidity inside the device, the amount of supply voltage of the battery and its remaining capacity or the amount of current taken by the sensors. Data memory capacity: 2048 kB Flash type, 250,000 - 450,000 measured values. Mechanical design: Metal casting with high IP67 protection. Washable graphic display cover panel. Dimensions 160 x 90 x 80 mm.	
HYDRO LOGGER H1		Small telemetry station in GSM / GPRS network	942,-
MOST RS232 M8 2G	W	**H2 - Small telemetry station for local warning systems - LWS**	
		**LEVEL LOGGER H2** was designed to monitor the level and flow in open streams and to monitor rainfall during the construction of local warning systems (LWS). The device transmits the measured data to the database via the GSM / GPRS + SMS modem at regular intervals to the server and in case of an emergency sends a warning SMS activated by a limit or gradient alarm of rising level or exceeding the moving sum of precipitation for a set time interval. Power supply of the device from the battery and from an external source, graphic display. **Inputs:** 3 analog inputs 4-20 mA, 4x pulse-binary input, serial RS-485 interface. **Total number of recording channels**: 8 analog, 8 binary, 5 control, 1 text. Data memory capacity: 2048 kB Flash type, 250,000 - 450,000 measured values. Mechanical design: Metal casting with high IP67 protection. Washable graphic display cover panel. Dimensions 160 x 90 x 80 mm.	
LEVEL LOGGER H2		Small telemetry station in GSM / GPRS network for LWS (Local Warning Systems)	942,-
		**Optional accessories for stations H1, H2**	
		Mounting stainless steel bracket Mounting plate and 4 stainless steel screws for easy mounting of Loggers H1 or H2	
DH1		Stainless steel bracket for H1.2 wall mounting, mounting screws and bolts	8,-
		**Cover box IP66** Plastic box for protection of H1,2 station in outdoor or humid environment. The Thalassa box includes a stainless steel holder H1.2, a stainless steel base and 2 A2 brackets for attaching the box to the foot of the rain gauge, a meteorological mast, a boom, etc. When ordering, specify the required size of the brackets (1, 1 ½ "and 2"). Dimensions of the box without mounting brackets: 240 x 195 x 90 mm, semi-permeable filter to protect against moisture condensation inside the cabinet.	
Thalassa-H1		Plastic enclosure for protection H1,2, IP66, part of internal and external stain.steel handles	88,-
		**IP66 protection box with space for backup battery** ARIA32 plastic cabinet for protection of a station working in a permanently humid, dirty or otherwise aggressive working environment. Enclosure IP66, space for inserting a backup battery 12V / 9 Ah (not included). Cabinet dimensions: 310 x 210 x 170 mm. Possibility of adding a lockable handle to the cabinet door, semi-permeable filter.	
ARIA-H1		ARIA cabinet equipped for H1,2, Protection IP66, space for backup battery 12V / 9Ah	129,-
ARIA-H1/Z		ARIA cabinet equipped for H1,2, IP66, space for backup battery. 12V / 9Ah, lock	138,-
		**Spare battery**	
ER34615M		Power supply Li-SOCl2 battery 3,6V, 13 Ah, Imax 2A, manufact .: GEBC	Page 59
		**Magnetic and directional GSM antennas with SMA connector**	
Antennas		GSM antennas with gain from 1 to 12 dB, various mechanical mounts, SMA connector	Page 62

H40 - SMALL SINGLE PURPOSE TELEMETRIC STATION

Display	Type	Description	Price EUR without VAT
	W	**H40 - small single-purpose telemetry station** The **H40** telemetry unit is housed in a robust stainless steel housing with a diameter of only 40 mm and is designed for measuring and recording a limited number of quantities and for the subsequent transmission of data to a superior system. The H40G station comes with a built-in GSM / GPRS + SMS communication module. **Inputs:** the unit is equipped with a 7-pin connector with IP66 protection designed for connection of one sensor or measuring probe. The connector has an RS485 bus (FINET protocol), one 4-20 mA analog input and one pulse input. **Total number of recording channels:** 6 analog, 2 binary, 5 control, 1 text. The control channels record, for example, the temperature inside the device, the amount of supply voltage of the battery and its remaining capacity or the amount of current taken by the connected sensor. Data memory capacity: 2048 kB Flash type, 250,000 - 450,000 measured values. Power battery: Replaceable 3.6V / 14Ah (28Ah) lithium block with cable connector and capacity for more than 2000 (4000) data sessions per server. Mechanical design: Stainless steel housing with a diameter of 40 mm, length 170 (250 mm), protection IP66.	
		HYDRO LOGGER H40G — Small single-purpose telemetry station in the GSM / GPRS network	667,-
		HYDRO LOGGER H40D — Data logger without data transfers to the server (does not contain GSM com. module)	533,-
		Accessories and spare parts for the H40 station	
		**Stainless steel hinge for H40** The holder for the telemetry station (Hydro logger) H40 is adapted for installation in a narrow pipe with an inner diameter of 50 mm (installation by hanging) or for wall mounting. The holder also contains a special mechanical clamp for the cable leading from the H40 unit to the sensor. The H40 recording unit itself is attached to the holder with plastic straps (supplied).	
		DH40-G — Stainless steel holder for hanging the H40G unit and pressure sensor in the borehole	18,-
		DH40-D — Stainless steel holder for hanging the H40D unit and pressure sensor in the borehole	18,-
		Napájecí baterie — **Replacement battery packs for H40G and H40D** Replacement battery packs with cable and connector for H40G and H40D data loggers	Page 59
		Antény — **Magnetic and directional GSM antennas with SMA connector** GSM antennas with gain from 1 to 12 dB, various mechanical mounts, SMA connector	Page 62
		**H40-TSH22 set for monitoring levels and temperatures in wells** For measuring groundwater levels and temperatures in wells, we offer the H40G-TSH22 set consisting of a small H40G telemetry station containing a GSM communication module, a TSH22 pressure level sensor and a combined DH40 holder, which also forms the pressure sensor hinge. The entire level gauge assembly, including the hanging bracket, fits into a borehole with an inner diameter of 50 mm. Alternatively, we also supply a set without GSM / GPRS communication module: H40D-TSH22 The measuring range and cable length must be specified when ordering the kit. The standard measuring ranges of the TSH22 sensor are 3 m, 5 m, 7 m or 10 m of water column. The sensor is connected to the H40G hydrologger (D) via a detachable connector with IP66 protection. Other measuring range and required cable length must be specified in the order. The sensor connector is equipped with a DA284 semi-permeable filter, which balances the atmospheric pressure inside and outside the sensor without letting air moisture into the sensor. **Components for assembling the required measuring set:**	
		H40G — Small single-purpose telemetry station in the GSM / GPRS network	667,-
		H40D — Data logger without data transfers to the server (does not contain GSM com. module)	533,-
		TSH22-3-x — Level sensor, range 3, 5, 7 or 10 m, accuracy 0.3%, RS-485, price without cable	298,-
		TSH22-1-x — Level sensor, range 3, 5, 7 or 10 m, accuracy 0.1%, RS-485, price without cable	356,-
		C91-K7-P-F — Termination of the pressure sensor cable with a connector with a DA284 filter	25,-
		PUR kabel — PUR cable to the level sensor, price for 1 m	3,-

H50 - SMALL TELEMETRIC STATION

Display	Type	Description	Price EUR without VAT
		H50 small telemetry station with BT5 communication	
		The telemetry station in a stainless steel housing with a diameter of 50 mm is based in its concept on the proven mechanical construction of the STELA station. The diameter of the case allows to power the H50 station with a pair of ER34615M lithium batteries, which can be easily changed by the user. Unlike the H40 or STELA stations, the new H50 station does not need a cable connection to a PC for local communication with the user, because it uses the energy-saving Bluetooth BT5 interface with a long range in tens of meters. On the user's side, in order to communicate with the device, it is necessary to install the FIEDLER CONNECT application on a mobile phone, which can be downloaded from Google Play. The station communicates with the server via the built-in GSM / GPRS module, as well as other telemetry stations. The station can also be parameterized remotely via the server. In addition to GSM / GPRS communication, data collection via the NB-IoT network is also being prepared. **Inputs:** the unit is equipped with a 7-pin connector with IP66 protection designed for connecting a sensor or measuring probe. The connector has an RS485 bus (FINET or MODBUS protocols), one 4-20 mA analog input and two pulse / binary inputs. In addition, the connector also contains a user-adjustable output supply voltage for the connected sensor / probe. Alternatively, the input connector can be fitted with an SDI-12 serial communication line and two analog inputs instead of the RS485 bus. The H50 station contains self-diagnostics, which continuously monitors the status of supply batteries, the amount of current taken by the connected sensor / probe, internal humidity and temperature inside the device and some other variables that can cause extraordinary data transmission to the server if the user exceeds the set limit problem. **Total number of recording channels:** 8 analog, 2 binary, 5 control, 1 text. The control channels record the outputs of the device's self-diagnostic functions. **Data memory capacity:** 2048 kB Flash type, 250,000 - 450,000 measured values. **Power batteries:** 2 pcs ER34615M. **Mechanical design:** Stainless steel housing with a diameter of 50 mm, length 250 mm, protection IP66	
PRELIMINARY	H50-G	Small telemetry station with BT5, 2 batteries, metal case, GSM / GPRS com. module	804,-
		Accessories for station H50	
		Stainless steel hinge for H50 The holder for the telemetry station (Hydro logger) H50 is adapted for installation in a narrow pipe with an inner diameter of 60 mm and larger (installation by hanging) or for wall mounting. The holder also contains a special mechanical clamp for the cable leading from the H50 unit to the sensor. The H50 recording unit itself is attached to the holder without straps by simply pressing the unit into the wings of the holder.	
	DH50	Stainless steel holder for mounting the H50 unit and the cable of the connected sensor	22,-
	ER34615M	**Spare battery** Power supply Li-SOCl2 battery 3,6V, 13 Ah, Imax 2A, manufact .: GEBC	Page 59
	Antény	**Magnetic and directional GSM antennas with SMA connector** GSM antennas with gain from 1 to 12 dB, various mechanical mounts, SMA connector	Page 62

STELA - TELEMETRIC STATION WITH LARGE BATTERY CAPACITY

Display	Type	Description	Price EUR without VAT
MOST, RS232 M12, 2G	B W	**STELA-3 small telemetry station with a large capacity of batteries**	

The small telemetry station STELA-3 (3rd generation of devices of this type) is designed for monitoring of flows, pressures and levels in water meter shafts, VDJ, ČS, in boreholes and everywhere where no external supply voltage is available. Built-in GSM / GPRS + SMS modem, robust stainless steel case with a diameter of 50 mm. The station is supplied in two basic versions differing in the number of replaceable 3.6V / 13Ah batteries:

STELA-3A contains 2 power supply batteries and is designed for data collection from pulse water meters, sensors and transducers with a current output of 4-20 mA or from intelligent measuring probes via RS485.

STELA-3B (picture on the left) contains 4 batteries connected in parallel and is suitable for those applications where communication with the server is required more than once a day or where more sensors are connected to the station. STELA-3B enables up to 10 years of operation on one battery charge during daily data sending to the server.

Thanks to its huge battery capacity, the STELA-3B is also suitable for long-term operation with a connected ultrasonic level sensor, which usually requires the presence of the supply voltage and the corresponding current consumption from the device for tens of seconds before a valid measurement result.

The measuring sensors are connected to the STELA station by means of a fixed 1 m long PUR cable. When ordering the device, the user can choose whether the cable end should be equipped with a round 7-pin connector or a terminal block located in the installation box of the DS02 holder.

Total number of recording channels: 8 analog, 2 binary, 1 text.

Data memory capacity: 2048 kB Flash type, 250,000 - 450,000 measured values.

STELA-3A	Small telemetry station, 2 batteries, metal housing, IP66 protection.	933,-
STELA-3B	Small telemetry station, 4 batteries, metal housing, IP66 protection	975,-

Accessories for the STELA station

Holders for mounting the STELA station

The stainless steel holder DS01 with plastic pipe clamps does not contain a terminal block and is used for mounting Stely equipped with a connection connector.

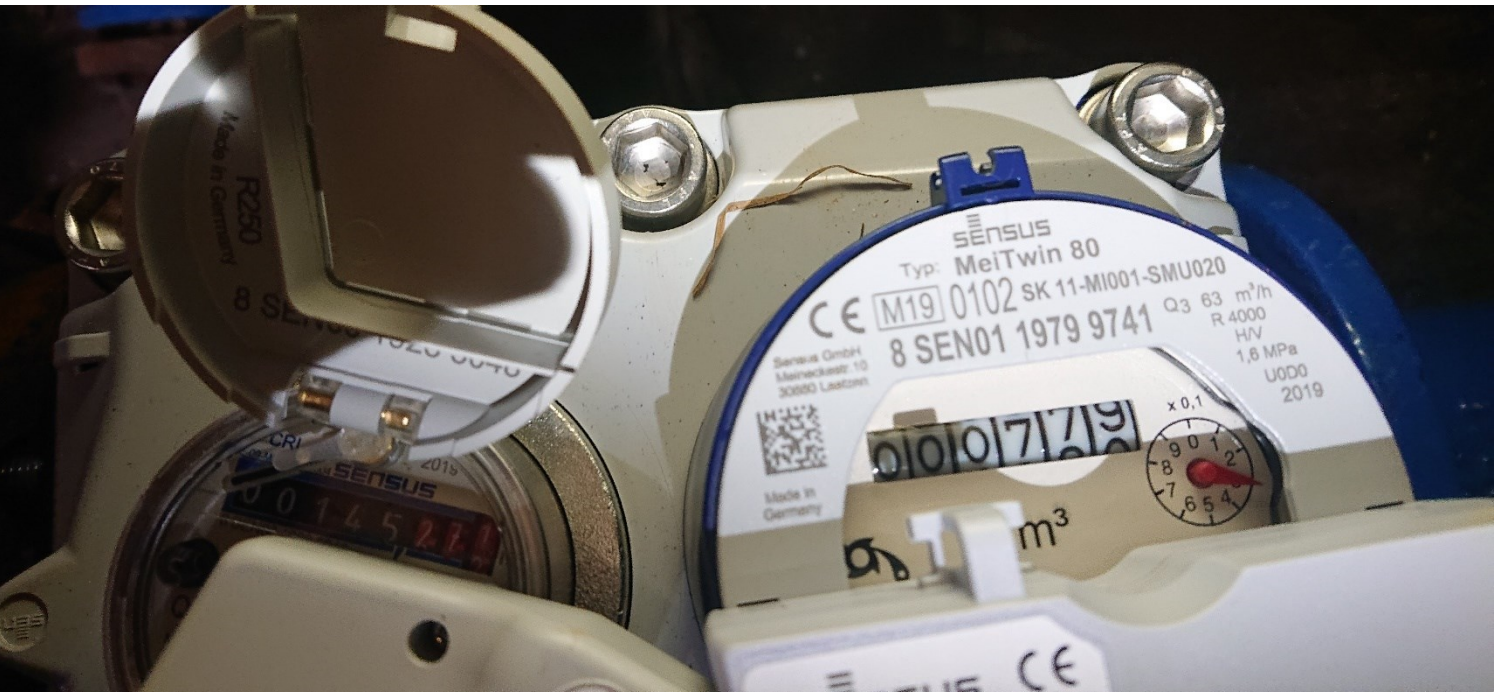
The DS02 holder contains an installation box with a terminal block, to which the individual inputs of the device and the output voltage for powering the connected probes are connected by means of a cable.

DS02	Stainless steel holder with installation box with terminal block	49,-

ER34615M	**Spare battery** Power supply Li-SOCl2 battery 3,6V, 13 Ah, Imax 2A, manufact .: GEBC	Page 59

Antény	**Magnetic and directional GSM antennas with SMA connector** GSM antennas with gain from 1 to 12 dB, various mechanical mounts, SMA connector	Page 62

REMOTE METER READING



SMART MODULES FOR REMOTE METER READING

Display	Type	Description	Price EUR without VAT
	B W	**Hydro Meter H11 (GSM / GPRS or NB-IoT technology) L**	
		Meter readings with pulse output Hydro Meter H11 is a wireless GSM or Narrowband module for remote meter readings (water meters, electricity meters, gas meters,…) with pulse output, ie smart metering. Communication is realized by GPRS (H11-G) or NB-IoT (H11-N) technology and data transmissions are performed automatically at regular intervals according to the settings of the module parameters or it can be initiated locally by command via NFC. Data transmissions are realized through the existing network of GSM operators. The data transferred to the Internet are recorded in a database (CloudFM service - graphs, tables,…). The device automatically logs on to the network of the operator with the strongest signal at the place of installation of the module, including foreign operators, while maintaining the same operating costs for the transmitted data (valid within the European Union). The device is without a classic SIM card, ie quick installation without administration associated with procuring a suitable SIM card. You can monitor the status of the water meter counter and some extraordinary events such as: backflow detection, exceeding the maximum flow value, exceeding the night minimum, detection of sensor disconnection from the water meter, detection of low battery voltage and battery disconnection. The current status of the water meter counter is read daily. The frequency of data transmissions can be configured at daily, weekly or monthly intervals. Extraordinary events are sent with priority as soon as they are detected.	
Hydro Meter H11-G/3P		Module for remote meter readings in GSM network, 3 inputs, glob. SIM, bat. 3.6V/12Ah	206,-
Hydro Meter H11-N/3P		Module for remote meter readings in Narrowband network, 3 pulse inputs, bat.3,6V/12Ah	206,-

SPEED SENSORS FOR WATER METERS

Display	Type	Description	Price EUR without VAT
	B W	**Remote meter reading – Inductive speed sensors for water meters**	
		Inductive water meter speed sensor, output constant 1 l/pulse, (10 l/pulse for FLOSTAR water meters), sensing principle ensures absolute compliance with the water meter counter, non-magnetic non-contact principle - cannot be affected by external magnetic field, sensor does not generate false pulses in case of vibrations, etc. ., service life does not depend on the number of switchings - battery capacity 12 years, uniform output for all types of ACTARIS water meters DN 15 - 500 mm, return flow recording, possibility of accurate reading of the return flow value (CYBLE VF), protection IP 68 - works reliably in in case of immersion, simple assembly and disassembly without interfering with the counter and breaking the water meter seal, direct connection to pulse inputs M4016, STELA, H1, H3, H7 or Q2.	
		Cyble NF - one output with backflow compensation	
CYBLE NF 001		Water meter sensor for FLOSTAR and FLODIS water meters, one output, K = 1	83,-
CYBLE NF 010		Water meter sensor for FLOSTAR and FLODIS water meters, one output, K = 10	83,-
CYBLE NF 100		Water meter sensor for FLOSTAR and FLODIS water meters, one output, K = 100	76 83,-
CYBLE NF 002		Water meter sensor for water meters FLOSTAR and FLODIS, one outputs, K = 2.5	83,-
CYBLE NF 025		Water meter sensor for water meters FLOSTAR and FLODIS, one outputs, K = 25	76 83,-
		Cyble VF - two outputs, one with backflow compensation, direction identification	
CYBLE VF 001		Water meter sensor for FLOSTAR and FLODIS water meters, two outputs, K = 1	94,-
CYBLE VF 010		Water meter sensor for FLOSTAR and FLODIS water meters, two outputs, K = 10	94,-
CYBLE VF 100		Water meter sensor for water meters FLOSTAR and FLODIS, two outputs, K = 100	88 94,-
CYBLE VF 002		Water meter sensor for FLOSTAR and FLODIS water meters, two outputs, K = 2.5	88 94,-
CYBLE VF 025		Water meter sensor for FLOSTAR and FLODIS water meters, two outputs, K = 25	88 94,-
		Cyble M-BUS	
CYBLE M-BUS		Water meter sensor for FLOSTAR and FLODIS water meters, M-BUS	88 94,-
	B W	**Sensors for ELSTER water meters**	
		Inductive speed sensors for ELSTER water meters, built-in battery for up to 10 years of operation, IP68 protection, cable length 2 m, output load 30 VDC / 30 mA, frequency max 75 Hz, pulse width CH 1P = 5 ms, CH 2P = 50 ms. Type PR6 is designed for water meters: V200, V210, V220F and C4000 Type PR7 is designed for water meters: H4000, H4200, S2000, C4000, C3100	
ELSTER FALCON PR6		Speed sensor for water meters ELSTER, outputs, K = 1 l / pulse and K = 10 l / pulse	104,-
ELSTER FALCON PR7		Speed sensor for water meters ELSTER, outputs, K = 1 l / pulse and K = 10 l / pulse	118,-
	W	**Remote meter reading - OPTO speed sensors for water meters**	
		**OPTO sensors** OPTO sensor for water meters ABB, Hydrometer, Sensus Metering System (formerly Meinecke), Schlumberger, etc. The current consumption of the sensor requires mains supply of the connected datalogger - telemetry station M4016 or H1 with external mains supply.	
VC-08, -09, -10, -11		OPTO sensors for the water meter	147,-
		OPTO sensor with low current consumption for water meters ABB, Hydrometer, Sensus Metering System (formerly Meinecke), Schlumberger, etc. The current consumption of the sensor does not require mains supply of the connected datalogger and is therefore suitable for stations powered by internal lithium battery or accumulator (station M4016 H1 or STELA).	
VLP-08, -09, -10, -11		OPTO sensor with low current consumption for the water meter	160,-
VLP-9A- bidirectional		Bidirectional OPTO sensor for water meters ABB, Hydrometer, Sensus Metering System (formerly Meinecke), Schlumberger, etc. The current consumption of the sensor requires mains supply of the connected datalogger - telemetry station M4016, H1.	218,-

CONVERTER AND TRANSDUCER FOR ELECTRICITY METERS

Display	Type	Description	Price EUR without VAT
	B W	**Converter for electrometer readings**	
		**ELM1 – converter with infrared communication for electricity meters** The ELM1 converter is designed for remote reading of electricity consumption. It can be used with electricity meters commonly used by energy distribution companies. Using the supplied cable, the converter is connected to FIEDLER data loggers via the RS485 bus under the MODBUS RTU protocol. The ELM1 converter enables infrared data communication with electricity meters according to the ČSN EN 62056-21 standard in the C protocol mode, which defines bidirectional data exchange with communication speed switching. A typical example of the use of the ELM1 converter are remote digital readings of consumed electrical energy in households, industrial plants or apartment buildings. The advantage of digital reading over the usual pulse counting is the transmission of absolute consumption. Converter ELM2 is certified for use in the CEZ distribution network.	
	ELM1	converter with infrared communication for electricity meters, output RS485, Modbus RTU	52,-
	ELM2	converter for electricity meters certified for use in the CEZ distribution network; RS485, Modbus RTU	60,-

MEASUREMENT OF WATER LEVEL

TENSOMETRIC LEVEL SENSORS

Display	Type	Description	Price EUR without VAT
	B W	**Hydrostatic level sensors with RS485 output**	
		**TSH22 and TSH37 sensors (RS485 / FINET or Modbus RTU output)** Immersion pressure level meter and water temperature sensor - measurement in open streams, boreholes, etc. Stainless steel design. Level measurement accuracy 0.3% (0.1%) of range, water temperature measurement accuracy ± 0.5ºC. RS-485 data output under FINET or Modbus RTU protocol. Supply voltage 6-14 V DC. The total price of the level meter is determined by the accuracy of the sensor and the length of the cable. Measuring ranges TSH22: 3 m, 5 m, 7 m or 10 m water column (H_2O) Measuring ranges TSH37: 1 m, 2.5 m, 4 m, 6 m, 10 m, 25 m, 40 m or 100 m H_2O.	
	TSH22-3-x	Level sensor, range x m, accuracy 0.3%, RS-485, price without cable	298,-
	TSH22-1-x	Level sensor, range x m, accuracy 0.1%, RS-485, price without cable	356,-
		**LMP307i / 485 sensors (RS485 / Modbus RTU output)** Immersion level meter, stainless steel design, PUR cable, measuring accuracy 0.1% of range. Supply voltage 8-15 V DC. The total price of the sensor is given by the measuring range and the length of the cable. Measuring ranges: **0..1 m, 1.6 m, 2.5 m, 4 m, 6 m, 10 m, 16 m, 25 m, 40 m, 100 m H_2O**	
	LMP307i/485-x	Immersion level sensor 0.1%, range 0-x m, RS485 output, price without cable	fr 440,-
		Hydrostatic level sensors with 4-20 mA output	
		**Sensors type LMP307 (4-20 mA Output)** Immersion level meter, stainless steel design, PUR cable, measuring accuracy 0.35% of range, 4-20 mA or RS485 output (LMP307i). Supply voltage 12-26 V DC. The price of the sensor is given by the measuring range and the length of the cable. Measuring ranges: **1m, 1.6 m, 2.5 m, 4 m, 6 m, 10 m, 16 m, 25 m, 40 m, 100 m H_2O.**	
	LMP307i/4-20-x	Immersion level sensor 0.1%, range 0-x m, output 4-20 mA, price without cable	fr 508,-
	LMP307-x	Immersion level sensor, range 0-x m, 4-20 mA output, price without cable	fr 356,-
		**Sensor type TSH35 (4-20 mA Output)** Immersion level gauge, stainless steel, PUR cable, measurement accuracy 0.5% of range, output 4-20 mA. Supply voltage 8-26 V DC. Price determined by cable length.	
	TSH35-10/10	Submersible level sensor, range 0-10 m H_2O, 4-20 mA output, 10 m cable	217,-
	W	**LMK858 and LMK809 sensors (ceramic membrane, increased resistance)** Immersion pressure level sensor in a plastic housing with a ceramic membrane. LMK858 sensors have a removable cable part. The sensors are suitable for polluted water (sludge sumps, sewage water). Measurement accuracy 1 % of range, 4-20 mA output. The price of the sensor is given by the length of the cable. Measuring ranges: **0.4m, 0.6m, 1m, 2.5m, 4m, 6m, 10m, 16m, 25m, 40m, 60m, 100m**	
	LMK809-x	Immersion level sensor, range x m, 4-20 mA, price without cable	fr 492,-
	LMK858-x	Level sensor, range x m, 4-20 mA, removable cable part, price without cable	fr 565,-
		Accessories for hydrostatic level sensors	
		**PUR cable** Polyurethane 4-core cable for level sensors supplemented with a compensating capillary of atmospheric air pressure. The free end of the cable can be equipped with a 7-pin connector with a built-in DA284 filter (compensation capillary protection).	
	PUR kabel	PUR cable to the level sensor, price for 1 m	3,-
	C91-K7-P-F	Termination of the pressure sensor cable with an IP66 connector with a DA284 filter	25,-
		The filter compensates for differences in atmospheric air pressure inside and outside the housing, while not letting water molecules into the housing. This prevents moisture condensation inside the sensor.	
	DA284	Filter with a special semi-permeable membrane for equalizing atmospheric pressure	4,-
		**Hinge for pressure sensor** Stainless steel hinge for stable attachment of the cable of the immersion pressure sensor. The hinge can be used when installing the sensor in a reservoir or a borehole.	
	Zaves J	Large stainless steel hinge for attaching the PUR cable of the pressure sensor	28,-
	Zaves U	Small stain.steel hinge for attaching the PUR cable of the pressure sensor, span 30 cm	20,-

ULTRASONIC LEVEL SENSORS

Display	Type	Description	Price EUR without VAT
	B W	**Ultrasonic level meters with RS485 output**	
		Ultrasonic level sensors with digital data output Measured value within 2 sec from power on - suitable for battery-powered devices, RS485 output, digital filter of measured values, adjustable damping and measurement frequency, automatic temperature compensation, supply voltage 12-24V / 20 mA. Data output: RS485 and DCL current loop (0/20 mA) for a distance of up to 1000 m.	
	US1200	Ultrasonic level sensor, range 0.15 to 1.2 m, RS485 and DCL output, 3 m cable	655,-
	US3200	Ultrasonic level sensor, range 0.25 to 3 m, RS485 and DCL output, 5 m cable	698,-
	US4200	Ultrasonic level sensor, range 0.35 to 4.2 m, RS485 and DCL output, 5 m cable	725,-
		**Adjustable holder for sensors type US1200 to US4200** Two-way adjustable stainless steel holder designed for attaching ultrasonic sensors US1200 to US4200 to holders type DUP1 to DUP6. The holder allows a fixed installation of ultrasonic sensors perpendicular to the measured water level.	
	DU2D	Stainless steel adjustable US probe holder for DUPx holders	13,-
		**Ultrasonic level sensors with digital data output in the radiation shield** Suitable for outdoor use, where the radiation cover of the sensor reduces the measurement error caused by the different temperature of the sunlit sensor and the temperature of the air under the sensor. The sensor also includes a stainless steel holder for attaching it to the horizontal boom.	
	US3200/RK	Ultrasonic transducer in radiation enclosure, range 0.25 to 3 m, RS485 output	830,-
	US4200/RK	Ultrasonic sensor in radiation cover, range 0.35 to 4.2 m, RS485 and DCL output	854,-
	US kabel	PUR cable shielded to USX00 sensor, price for 1 m	3,-
	M B W	**Ultrasonic level meters with 4-20 mA output**	
		Ultrasonic level sensors with 4-20 mA output and HART protocol Supply voltage 11-12 to 36 V DC, operating temperature -30… 80 ° C, small radiation angle 5-7 ° ensures reliable measurement even in narrow spaces, degree of protection IP 68 allows the sensor to be flooded without damaging it. Standard 4-20 mA analog output with HART communication. Measurement error less than 1% of range.	
	SPA-590-4	Ultrasound. level sensor, range 0.18-5 m, output 4-20 mA, cable 5 m, IP68	654,-
	SPA-580-4	Ultrasound. level sensor, range 0.2-8 m, output 4-20 mA, cable 5 m, IP68	654,-
	SPA-570-4	Ultrasound. level sensor, range 0.25-10 m, output 4-20 mA, cable 5 m, IP68	792,-
	SPA-560-4	Ultrasound. level sensor, range 0.25-12 m, output 4-20 mA, cable 5 m, IP68	792,-
	SPA-540-4	Ultrasound. level sensor, range 0.35-18 m, output 4-20 mA, cable 5 m, IP68	858,-

RADAR LEVEL SENSORS

Display	Type	Description	Price EUR without VAT
		Radar level meters	
		Due to their high accuracy and stability of measurement, radar sensors are used to measure the level of liquids, liquid mixtures, emulsions and sludges wherever there are increased requirements for the achieved accuracy and reliability of measurement. Radar sensors can also be used in operations with the presence of steam above the surface, where ultrasonic sensors stop working reliably. *The measuring principle of radar level sensors is based on measuring the frequency shift of the reflected echo of the microwave pulse. The speed of emitted pulses is practically the same in air, gases and vacuum, and moreover it is not affected by temperature and pressure*	
	B B W	**Radar sensors designed for water supply, wastewater treatment and industry** Affordable high-frequency radar level sensors for water, wastewater and industry, two-wire connection of 4-20 mA to stations H1, H2, H3, H7 or Q2, even in battery-powered assemblies operating in switched mode, high measurement accuracy up to 2 mm in full measuring range, durable design with IP68 protection, all-plastic design without metal parts, zero dead band and narrow beam angle of 8 ° thanks to the used measuring frequency 80 GHz, possibility of measuring through a plastic vessel wall, wide operating temperature range from -40 ° C to + 60 ° C, supply voltage from 12V to 35 VDC, integrated Bluetooth module for easy parameterization via a mobile phone application, HART protocol. Alternatively, for an additional charge, ATEX version for explosive atmospheres and Modbus or SDI-12 output signal.	
	VEGAPULS C 11	Radar level sensor, range 0..10 m, 4-20 mA output, PUR cable 5 m, IP68	708,-
	VEGAPULS C 21	Radar level sensor, range 0..15 m, 4-20 mA output, PUR cable 5 m, IP68	975,-
	VEGAPULS C 23	Radar level sensor, range 0..30 m, 4-20 mA output, PUR cable 5 m, IP68	1 208,-
	W W	**Contactless radar sensor PiloTREK series W-200** The PiloTREK W-200 series non-contact level sensor uses state-of-the-art 80 GHz FMCW radar technology for accurate level measurement of liquids, slurries and bulk solids with larger fractions. With a 4...20 mA output (2-wire) it can be connected to H1, H2, H3, H7 evaluation units, even in battery-operated switching mode. The PiloTREK sensor offers an accuracy of ±5 mm for the model with a range of up to 10 m and ±2 mm for the model with a range of up to 20 m. Measurements are possible from the antenna tip because the sensor has no dead zone and the full radiation angle is only 7°. Supply voltage 12 to 24 VDC. The sensor housing is made of Polypropylene with IP 68 protection. The process connection consists of top and bottom threads fitted with nuts. The electrical connection is via an integrated 5 m long cable. The electrical connection is via an integrated 5 m cable. Communication and sensor settings via Bluetooth.	
	WPA-214-B PILOTREK	Non-contact radar, G 1 1/2", cable 5 m, PP housing IP68, range 0..10 m, 4-20 mA out	662,-
	WPA-224-B PILOTREK	Non-contact radar, G 1 1/2", cable 5 m, PP housing IP68, range 0..20 m, 4-20 mA out	860,-

MOUNTS FOR ULTRASONIC AND RADAR LEVEL SENSORS

Display

W Holders for ultrasonic level meters

Stainless steel holders for Parshall troughs

The stainless steel trapezoidal brackets DUP1 to DUP6 shall be placed on the upstream side of the Parshall gutter P1 to P6 at the distance from the gutter throat specified by the gutter manufacturer. The bracket includes a set of stainless steel screws for attaching the DUP bracket to the top polypropylene plate of the Parshall gutter.

For attaching the US1200 or US3200 ultrasonic transducer to the DUP bracket, the DU2D adjustable stainless steel bracket is designed.

Adjustable mount for sensors type US1200 to US4200

Two-way adjustable stainless steel bracket for mounting ultrasonic transducers US1200 to US4200 to brackets type DUP1 to DUP6. The bracket allows for fixed installation of the ultrasonic transducers perpendicular to the measured water level.

DU2D	Two-way adjustable stainless steel US probe holder for DUPx holders	13,-

Side console holder for ultrasonic sensors

DU1-10 to 40	Stainless steel ultrasonic holder. probe side console. Lengths 10, 15, 20, 30 and 40 cm	35,-
DU1-50 to 80	Stainless steel holder ultrasonic probe side console Lengths 50, 60, 80 cm	41,-

W Mounts for ultrasonic and radar level gauges

Jib holders

A series of stainless steel (A2) or hot-dip galvanized brackets for mounting ultrasonic or radar transducers over watercourses and tanks.

Holders with radiation and protective cover

Robust holders equipped with a stainless steel cover, which protects the sensor from the effects of sunlight and partly from vandalism.

DUK8 brackets are supplied with a horizontal boom designed for installation on a vertical flat surface or adapted for attachment to a railing.

DUK1	Sensor holder including protective cover, installation on a vertical mast	98,-
DUK2	Sensor holder including protective cover, installation on a horizontal boom	107,-
DUK8	Sensor holder including protective cover and horizontal boom 800 mm	178,-

Stainless steel stirrups

T1 to T2	Stainless steel brackets (A2) for attaching DSPXX brackets to the mast	Page 65

FLOAT LEVEL SENSORS AND SWITCHES

Display	Type	Description	Price EUR without VAT
		Float level meter	
RS485		The float continuous level sensor can serve as a main or secondary sensor when measuring the water level in limnographic shafts, wells, boreholes, sumps and wherever a H1, H7, Q2, M4016 unit or a STELA unit is equipped for data recording. **Float level sensor PSH30** Contactless evaluation of pulley rotation (magnetic position sensing method), level resolution 1mm, practically unlimited measuring range 0-30 m vs, stainless steel cable, communication with unit M4016 (H1, STELA-3) via RS485 bus, very low current consumption at rest (max. 100 uA) practically does not load the power supply battery of the unit, setting and calibration of the measured level via the keyboard of the M4016 unit.	
	PSH30	Float level sensor, range 0-30 m, RS485 output	527,-
M B W		**Level float switches**	
		NIVOFLOAT float switches series NL-100 The float switches of the NIVOFLOAT NL-100 series are used for switching the required levels of drinking and waste water. The double polypropylene housing enables perfect watertightness and the cable length of 5.10, 20 m in PVC or neoprene design meets even the most demanding requirements. Inside the float is a built-in mercury-free switch, which switches at an angle of 45 °.	
	NLP-105	Float level switch for clean water, PVC cable 5 m	29,-
	NLP-110	Float level switch for clean water, PVC cable 10 m	38,-
	NLP-120	Float level switch for clean water, PVC cable 20 m	55,-
	NLN-105	Float level switch for clean water, neoprene cable 5 m	37,-
	NLN-110	Float level switch for clean water, neoprene cable 10 m	55,-
	NLN-120	Float level switch for clean water, neoprene cable 20 m	94,-
	NMW-100	Weights for NL switch	+ 3,-
M B W		**NIVOFLOAT float switches NW-100 series** For very demanding applications, the NW-100 series was created, which has a robust construction and almost 2x larger float volume than the NL series. Thanks to the larger volume, the float has a better ability to work in denser liquids. Another advantage is the functionality without counterweights.	
	NWP-105	Float level switch for polluted wastewater, PVC cable 5 m	105,-
	NWP-110	Float level switch for polluted wastewater, PVC cable 10 m	115,-
	NWP-120	Float level switch for polluted wastewater, PVC cable 20 m	131,-
	NWN-105	Float level switch for polluted wastewater, neoprene cable 5 m	109,-
	NWN-110	Float level switch for polluted wastewater, neoprene cable 10 m	130,-
	NWN-120	Float level switch for polluted wastewater, neoprene cable 20 m	169,-

LEVEL, BORN OR RETENTION TANK LEVEL GAUGES

Display	Type	Description	Price EUR without VAT
	B W	**Assembly of a simple level meter with a bargraph into a well or well**	
 		The assembly of the H520 level meter and the TSH27 immersion absolute pressure level sensor is intended for measuring the level in wells, boreholes, sumps and rainwater retention tanks. The two red LED displays of the H520 level meter show the measured level in meters and the percentage level relative to the set maximum level. The percentage level is also clearly shown on a bar graph. The measured level is displayed with a resolution of 0.1 m. The device also includes a binary output for controlling an external relay depending on the set level limits. The device is parameterized manually using 3 buttons and an LED display. The H520 level meter does not have its own power supply battery and therefore requires an external supply voltage in the range of 5 to 28 V DC / 0.15 A. The level meter does not allow remote access to the measured data (it does not contain data memory or communication module).	
	H520-10/10	Level meter with LED, measuring range 0..10 m, typ. accuracy 2,5%, PUR cable 10 m	188,-
	H520-10/25	Level meter with LED, measuring range 0..10 m, typ. accuracy 2,5%, PUR cable 25 m	205,-
	H520-25/30	Level meter with LED, measuring range 0..25 m, typ. accuracy 2,5%, PUR cable 30 m	215,-
	B W	**Simple level meter for the well with the possibility of data transfers**	
2G 		In the basic version, the H531 level meter, together with the TSH27 immersion level sensor, is intended for measuring the level in wells, boreholes, or in sumps and rainwater retention tanks. This inexpensive H531 level meter does not have data memory and therefore does not allow the datalogger to function. To display the measured values, the display capability of the graphic display is used, which informs the operator about the development of the level over time and thus partially replaces the missing data memory, while the display interval is adjustable from units of hours to several weeks. To save battery power, the device display is switched off and only switches on for a short time after pressing one of the control buttons. The device also includes a binary output for controlling an external relay depending on the set level limits. Parameterization is performed using the buttons and the display. In addition to the inexpensive TSH27 (TSH28) sensor, the electronic connection of the level meter also allows the connection of an level sensor with a 4-20 mA output. Because the level meter is primarily battery powered, it does not require the presence of an external supply voltage for its operation. However, external power supply of the device is possible and allows, in addition to continuous measurement, also permanent switching on of the backlit graphic display. The **H531-G** level meter contains a GSM/ GPRS communication module, which transmits the measured values once a day on the manufacturer's server, where they are accessible in the form of a graph or table to the user. A user can only have access to one H531-G level meter on the manufacturer's server. The operating costs of data hosting, including the costs of data transmissions in the GSM network, are included in the purchase price of the level meter for the first 5 years of operation. Then it is possible to purchase the continuation of these services in the form of a data package (see **Data packages**).	
	H531-G	Level meter measuring unit with GSM/GPRS com. module, without level sensor.	On request
	TSH27-10/10	Immersion level sensor, measuring range 0..10 m, typ. accuracy 2,5 %, PUR cable 10 m	On request
	TSH27-10/25	Immersion level sensor, measuring range 0..10 m, typ. accuracy 2,5 %, PUR cable 25 m	On request
	TSH27-25/30	Immersion level sensor, measuring range 0..25 m, typ. accuracy 2,5 %, PUR cable 30 m	On request
	TSH28-100/X	Level sensor, measuring range 0..100 m, type. 2.5% accuracy, PUR cable length X m	On request
 		**Optional accessories** **Mains power supplies** The mains adapter to the socket or the power supply to the DIN rail are intended for powering the H520 or H531 level meters. The H531 contains a battery pack that is disconnected in the presence of an external supply voltage to save capacity.	
	AC/DC-LV1203	Mains adapter for powering H500 series level meters, 12 V DC / 3 A output	19,-
	HDR-15-12	External power supply for DIN rail (1 module width), output 12 V DC / 1.25 A	18,-
	**ER34615(M)**	**Spare battery** Power supply Li-SOCl2 battery 3.6 V for level meters H531 and H531-G	Page 59

MEASUREMENT OF FLOWS

EVALUATION UNITS FOR MEASUREMENT OF FLOWS AND LEVELS

Display	Type	Description	Price EUR without VAT

Principle of flow measurement: If water flows through a specific overflow of a defined shape or a standardized measuring trough, the instantaneous flow and subsequently the flowed volume can be calculated from the measured level at a given location using the appropriate consumption equation.

Q2, Q2/KDO Four-channel flow meter, level meter, control unit.

Measurement, display and time recording of instantaneous flow as well as daily and monthly flow volumes; preset consumption equations for Parshall troughs and specific overflows, table input of Level / Flow dependence; backflow control, speed KDO probe support (Q2 / KDO), color touch screen, IP67 protection, data acquisition and parameterization via the Internet (-G)

16 recording channels for recording layers and mathematical calculations over the channels

16 binary channels adjustable as input / output, monitoring of movements and faults of motors, umps, inputs to the building,… An operation counter can be set for selected channels. throw.1 text channel (SMS recording, data sessions to the server, faults of connected sensors, ...)

Supply voltage: 12 28 VDC, 230 V / 50 Hz or battery 12 V / 7 to 45 Ah.

Control: limit, time and logic relay control, 4xPID controller. Depending on the type of connection board, up to 4x relays (control of other relays in external modules DV2, DV3), up to 2x active current output 4-20 mA, (additional outputs 4-20 mA using external modules MAV42x / DIN).

Communication interface: USB mini: device parameterization, transfer of measured data

RS-485-I: data acquisition from connected sensors under FINET and MODBUS RTU protocol.

RS-485-II: data collection from connected sensors, control of external modules, data transfer to the superior system under the MODBUS RTU protocol.

SDI-12 (TA4): data acquisition from connected sensors and transducers.

– Device type	– Com. modules	– Terminal board	– Housing (*)	Configuration examples: **Q2–G–TB2–B** ***(800,- + 250,- + 196,- = 1.246,-)*** Q2 unit, internal GSM communication module, TB2 connection board, power supply from an external 12-24 V DC source, internal Li-Pol battery, location in an Al box with 5 outlets **Q2–U–TA4–A** ***(800,- + 0 + 117,- + 129,- = 1046,-)*** unit Q2, connection board TA4, power supply from 12V battery, possibility of ext. recharging the battery from a 13.8V source, placed in an ARIA cabinet with 5 cable glands, without lock	**Base price:**
Q2				Four-channel evaluation unit for flow measurement, display and control	800,-
Q2/KDO				Four-channel evaluation unit for flow measurement, KDO sensor support	1 167,-
				Surcharges for communication module, terminal board and design:	
	U			Without communication module - only USB mini (IP67)	0,-
	G			Internal GSM module	+ 250,-
	W			Internal Wi-Fi module	+ 250,-
	E			Internal Ethernet module	+ 250,-
		TB1		IN: 4x AIN, 4x BIN, 2x RS485; Out:4x rele, Un= Pb batt., Uext. 14-28 V (solar), IP67	+ 175,-
		TB2		IN: 4x AIN, 4x BIN, 2x RS485; Out:4x rele, 2x 4-20 mA, Li-Pol batt., Un=12-28 VDC	+ 196,-
		TB3		IN: 4x AIN, 4x BIN, 2x RS485; Out:4x rele, 2x 4-20 mA, Li-Pol batt.,Un=230VAC, IP67	+ 213,-
		TA4		IN: 8x AIN, 6x BIN, SDI-12, 2x RS485; OUT: 2x rele, Un= Pb batt., Uext. 13,8 V	+ 117,-
		TA4E		IN: 8x AIN, 6x BIN, SDI-12, 2x RS485, 2x Pt100; OUT: 4x rele, Un=Pb b., Uext.13,8V	+ 196,-
		TA5		IN: 7x AIN (1x 0..10V), 8x BIN, 2x RS485; OUT: 2x rele, Un= Pb battery, Uext. 13,8V	+ 117,-
			B	Only with or. TBx board, aluminum box 140x160x70 mm, 5x cable. gland, IP67	0,-
			A	ARIA cabinet 300x200x170 mm, IP66, 5x cable gland	+ 129,-
			AZ	ARIA 300x200x170 cabinet, IP66, lockable handle, 5x cable gland	+ 138,-
			AK	ARIA 300x200x170 cabinet, IP66, portable design with 4 connectors, handle	+ 210,-
			AKZ	ARIA 300x200x170 cabinet, IP66, portable design with 4 connectors, handle, lock	+ 221,-
			S	Enclosure SCHNEIDER 400x300x200 mm, IP66, 2 loops, 5x cable gland	+ 144,-
			SZ	Enclosure SCHNEIDER 400x300x200, IP66, 2 lockable handles, 5x cable gland	+ 163,-
			NZ	Stainless steel cabinet 470x320x230, IP66, 2 lockable handles, 7x metal cable gland	+ 354,-
			P	Design for panel mounting	0,-
			V	Built-in unit	0,-

(*) … the design of cabinets and boxes is shown on page 11 of this price list

Other multi-channel display and control units for measuring flows and levels

MoSt · USB · 2G · B · W

H3, H7 Multichannel display, calibration and control unit, flow meter.

Display and timing of signal from connected sensors of level, flow, dissolved oxygen, pH, REDOX potential, turbidity, conductivity, ISE voltage and temperature and many other variables; up to 96 measuring recording channels and 208 binary recording channels, one or two-point calibration, four PID controllers, self-diagnostics, color touch screen, IP67 protection, data acquisition and parameterization via the Internet

H3–	Multichannel recording, calibration and control unit, flow meter, variants power supply	Configu-ration p.3
H7–	Multichannel recording, calibration and control unit, flow meter, variants power supply	

Single channel display and control unit

MOST · RS232 DB9 · W

M2001Q Single channel flow meter (external power supply)

Single-channel unit for measuring and displaying instantaneous flow and time recording of instantaneous flows as well as daily and monthly flow volumes, preset consumption equations for the most common types of simple and compound Parshall (Venturi) measuring troughs and some specific overflows, supply voltage 12 24 VDC.
Outputs: 3x switching contact 6A / 230VAC (alarm relay, sampler, limit), active separate current output 4-20 mA (on request another current output 4-20 mA).

M2001Q	Single-channel evaluation unit for flow measurement and level display	761,-
M2001Z	Single-channel evaluation unit for level display	578,-

Accessories for flow meters and level meters

Cover-holder for M2001 unit
The stainless steel cover of the M2001 unit against weather conditions, which also serves as a holder for this unit

KR1	Stainless steel cover-holder for outdoor placement of the M2001 display unit.	68,-

Secondary current output to M2001
Plug-in module for generating a 4-20 mA secondary current output on the M2001Q (Z). The output is active and is galvanically isolated from the M2001 supply voltage, as is the primary standard 4-20 mA current output.

MAV420/M	4-20 mA secondary analog output module to M2001 unit	74,-

Cover-holder for H7, E2 and Q2 units
Stainless steel cover of the unit, which also serves as a holder for this unit. The cover is attached to the vertical or horizontal boom using brackets T1 to T2.

KR2-V	Stainless steel cover-holder for placing the unit on a vertical mast.	87,-
KR2-H	Stainless steel cover-holder for placing the unit on a horizontal boom.	87,-
KR2-V-G	Stainless steel cover-holder for placing the unit on a vertical mast, GSM antenna cover	94,-
KR2-H-G	Stainless steel cover-holder for placing the unit on a horiz.boom, GSM antenna cover	89-

Stainless steel stirrups
Stainless steel brackets (A2) for attaching KR2 brackets to masts, booms, railings.

T1 to T2		Page 65

MEASURING PARSHALL FLUMES AND SPILLWAYS

Display	Type	Description	Price EUR without VAT
	W	**Parshall's measuring flumes**	
		Specific Parshall flumes are among the most common blowing objects designed for measuring the instantaneous flow and flowed volumes of wastewater by measuring the level in the trough and the relevant consumption equation. The level and flow units mentioned in the previous section contain preset consumption equations for all used Parshall flumes, including combined flumes. The advantage of Parshall measuring flumes is the fact that the overflow depth (level height) is measured in a tapering profile, where the velocity increases and the jets are more stable. Any sedimenting substances are deposited on the bottom of the riverbed before the measuring trough, and therefore this method of measurement is not usually sensitive to sedimentation and at increased flows, undissolved substances are washed away behind the Parshall flumes. Specific Parshall flumes are used mainly in localities with a balanced range of flows. For larger flow rates, it is advisable to use combined Parshall flumes.	
Parshalluv zlab P1		Polypropylene Pashall flume, flow range 0.3 to 6 l / s	800,-
Parshalluv zlab P2		Polypropylene Pashall flume, flow range 0.5 to 15 l / s	996,-
Parshalluv zlab P3		Polypropylene Pashall flume, flow range 0.8 to 54 l / s	1 392,-
Parshalluv zlab P4		Polypropylene Pashall flume, flow range 1.5 to 168 l / s	2 163,-
Parshalluv zlab P5		Polypropylene Pashall flume, flow range 2.3 to 368 l / s	2 729,-
Parshalluv zlab P6		Polypropylene Pashall flume, flow range 2.9 to 598 l / s	4 400,-
		The company FIEDLER AMS s.r.o. ensures the delivery and transport of the Parshall flume from the manufacturer to the place of its installation and subsequently, after its installation, also fitting the Parshall flume with a suitable measuring technique.	
Transportation costs		Shipping costs for the Parshall flume between its manufacturer and the installation site	on request
Installation		Installation of ultrasonic sensor and flow evaluation unit	on request
	W	**Ultrasonic sensor holders for Parshall flumes** The stainless steel trapezoidal holders DUP1 to DUP6 are placed on the leading side of the Parshall flume P1 to P6 at a distance specified by the trough manufacturer from the trough neck. The holder also includes a set of stainless steel screws for fixing the DUP holder to the top polypropylene plate of the Parshall flume. An adjustable stainless steel DU2D holder is intended for attaching the ultrasonic sensor US1200 or US3200 to the DUP holder.	
DUP1 to DUP3		Stainless steel holder for ultrasonic probe US1200 for PARS P1 (up to P3)	90,-
DUP4 to DUP6		Stainless steel ultrasonic probe holder US1200 for PARS P4 (up to P6)	107,-
		**Adjustable holder for sensors type US1200 to US4200** Two-way adjustable stainless steel holder designed for attaching ultrasonic sensors US1200 to US4200 to holders type DUP1 to DUP6. The holder allows a fixed installation of ultrasonic sensors perpendicular to the measured water level.	
DU2D		Stainless steel adjustable US probe holder for DUPx holders	13,-
	W	**Measuring spillways**	
		In addition to Parshall flumes, triangular specific profiles are often used to measure wastewater flow. These profiles can also be used to measure flows and flow volumes of surface water in small streams, but mostly in combination with a rectangular or trapezoidal cross-section to achieve a larger measuring range of flow after rains. The consumption equations for calculating the instantaneous flow are already preset in the level and flow units for common specific spillway. The construction of specific spillway on effluents from WWTPs, streams and drainage ditches so that they do not let water out of the specific cut-out requires experience and also the necessary technical equipment. Ensuring the strength of the spillway itself also places demands on its design and an important role in the whole project is the selection of a suitable place for the location of the spillway in the field. The company FIEDLER AMS s.r.o. has been involved in the construction of small spillways for WWTPs and surface water monitoring since its inception and is able to supply, install and install small spillways at its own expense with suitable technology for measuring instantaneous flows, flow volumes and possibly other water parameters (pH, conductivity, temperature ,…). Approximately, the price for the delivery and installation of a smaller spillway without fitting measuring equipment ranges from EUR 600 to 2000 without VAT depending on its size and local conditions.	
Specific spillway combined		Delivery and installation of simple and combined specific spillway	on request

FLOW MEASUREMENT IN OPEN PROFILE BY DOPPLER METHOD

Display	Type	Description	Price EUR without VAT
MOST, RS232 DB9, 2G	B W	**Use of flow meters using Doppler method measurement** If, for hydraulic or other reasons, a specific overflow cannot be built at the flow measurement point or a specific trough cannot be included in the water path, then the flow can be continuously calculated in a suitable recording unit in cooperation with the flow rate sensor and the level sensor. The flow rate sensor in an open profile (type KDO/S) or in a pipe type (KDO/P) uses the Doppler principle of measuring the speed of flowing water. The level can be sensed in parallel by an ultrasonic or pressure sensor. From the measured flow velocity, from the level height and from the cross-section of the specific profile, the instantaneous flow and partial accumulated flows are then calculated in the Q2/KDO or M4016/KDO unit. Both units can measure other quantities on their unoccupied channels and transmit all measured data to the Internet. The units can also be used to control technology using external I/O modules DV2 and MAV420.	

	Speed KDO probes	
	KDO / S sensor - design for sewer networks Sensor for measuring flow velocity by Doppler method. The sensor is adapted for installation on the bottom of the sewer network. The standard supplied cable length is 10 m. The sensor can also be equipped with a hydrostatic pressure sensor, thus eliminating the need to measure the level with another sensor. Communication between the sensor and the M4016 unit takes place under a secure digital protocol via RS485 and therefore the M4016-Gx-KDO unit can be placed at a distance of up to 500 m from the sensor.	
KDO/S-K0-02-030-K0	KDO sensor without hydrostatic level measurement, cable 30 m without connector	4 592,-
KDO/S-K0-02-010-K0	KDO sensor without hydrostatic level measurement, 10 m cable without connector	4 523,-
KDO/S-KP-02-030-L0	KDO sensor, hydrostatic level measurement, cable 30 m without connector	5 373,-
KDO/S-KP-02-010-L0	KDO sensor, hydrostatic level measurement, 10 m cable without connector	5 269,-
KDO/S-KP-02-030-F0	WHO sensor, hydrostatic level measurement, cable 30 m with connector and filter	6 001,-
KDO/S-KP-02-010-F0	KDO sensor, hydrostatic level measurement, cable 10 m with connector and filter	5 932,-

	KDO/P sensor - design for mounting in the pipe wall Sensor for measuring flow velocity by Doppler method. The sensor is adapted for mounting in the pipe wall. The diameter of the sensor is 35 mm. The standard supplied cable length is 10 m. Communication between the sensor and the M4016 unit takes place under a secure digital protocol via the RS485 interface and therefore the M4016-Gx-KDO unit can be placed at a distance of up to 500 m from the sensor.	
KDO/P-R0-02-030-K2	Pipe KDO sensor, sensor length 20 cm, cable 30 m	4 253,-
KDO/P-R0-02-010-K2	Pipe KDO sensor, sensor length 20 cm, cable 10 m	4 184,-
KDO/P-R0-02-030-K3	Pipe KDO sensor, sensor length 30 cm for application with ball valve, cable 30 m	4 575,-
KDO/P-R0-02-010-K3	Pipe KDO sensor, sensor length 30 cm for application with ball valve, cable 10 m	4 505,-

4 MoSt, USB, 2G	B W	**Evaluation units for KDO probes**
	Q2/KDO **Four-channel KDO flow meter, registration and control unit.** Measurement, display and time recording of instantaneous flow as well as daily and monthly flow volumes; data processing from KDO probe, preset consumption equations for Parshall measuring troughs and some specific overflows, possibility of table input of Level / Flow dependence; inputs for level sensors (backflow control), touch screen, IP67 protection, data acquisition and parameterization via the Internet (-G).	Configuration page33
Q2/KDO	Unit for flow calculation using KDO sensor, various modifications	

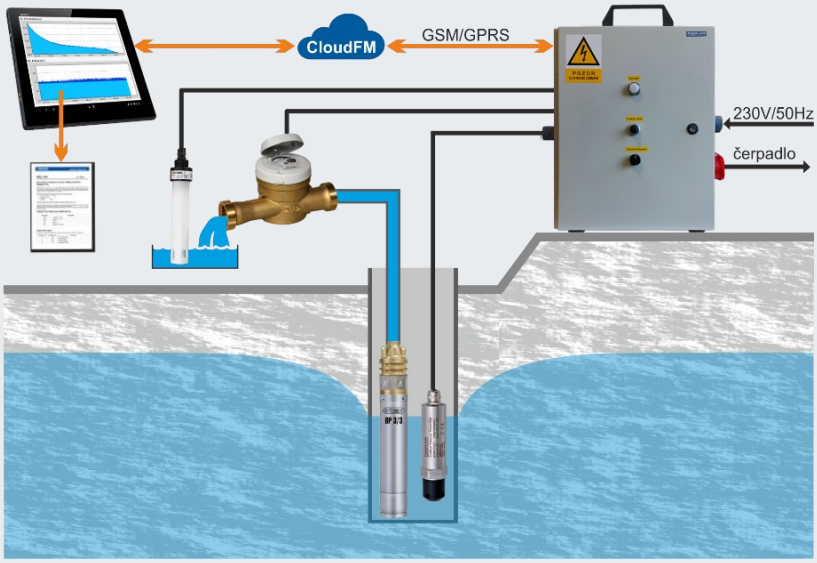
FLOW MEASUREMENT BY SHUTTLE FLOWMETER

Display	Type	Description	Price EUR without VAT
	B W	**Tilting shuttle flow meter**	
		PF500 is a simple pulse flow meter with a tilting double shuttle suitable for measuring flows in the range from 0 to 5 l / min. The smaller shuttle flow meter PF200 is suitable for measuring flows in the range of 0 to 2 l / min. **Mechanical design of the flow meter** The flow meters have a robust stainless steel design, a shaft also mounted in a stainless steel ball bearing, adjustable rubber feet and a pulse output formed by a switching contact of the relay. Compatibility with FIEDLER AMS units The flow meter can be easily connected to FIEDLER recording units equipped with a pulse input and a flow counter: H1, H2, H3, H7, H11, H40, H50, STELA, Q2. **Installation and use of a flow meter** The installation of the flow meter requires a height drop of at least 250 mm at the measuring point and a directed water supply above the center of the flow meter. On the other hand, there is no need to build the usual specific overflow, including level measurement. Because the above units can automatically transmit data to the database using the communication module, the user has access to daily, monthly and annual flow volumes, graphical and tabular data display and many other services provided by data hosting on the flowmeter manufacturer's server. Examples of use: measurement of leaks in construction and geology, measurement of spring yield, measurement of drainage water.	
			
	PF500	Stainless steel shuttle tilt flow meter, shuttle volume 2x 500 ml, pulse output	517,-
	PF200	Stainless steel shuttle flow meter, shuttle volume 2x 200 ml, pulse output	517,-

ASSEMBLY FOR PERFORMING PUMPING TESTS OF DRILLED WELLS

Display	Type	Description	Price EUR without VAT
4 MoSt, USB, 2G	B W	**Basic design**	

The variable measuring set enables automatic hydrodynamic tests of drilled wells autonomously and for a long time, even without the requirement for the presence of an operator at the equipment.



Constant flow or level control

The control recording unit of the assembly continuously measures the level in the well using an immersion level sensor and regulates the pump speed in the well via a frequency converter to ensure either a constant, preset flow independent of the current level in the well or maintain such a flow with pump speed pumping to maintain a constant level.

Data logging and remote access

The measured values of level and flow are recorded in the memory of the device, which sends them at set intervals via GSM / GPRS data transfer to the server for archiving, display and further processing, eg in a table in CSV format (Excel). The data on the server can be viewed with a common Internet browser on a PC or mobile phone.

The device can operate in automatic or manual mode.

The measured data are displayed on the color graphic touch screen of the measuring station. The device can also be set and controlled via the touch screen.

Composition of the basic assembly

- Switchboard equipped with: H3-G-TB3 control unit, ATV320U15M2C frequency converter, 230V / 16A connection for power cable, 3x400V / 16A socket for 3x400V pump, 1.5 kW, controls for manual control, connectors for level probe and water meter connection
- Water meter FLODIS 2.5-15-165-3/4 (Qn=2.5 m3/hour, DN15 L=165mm, G¾)
- Inductive speed sensor of the CYBLE NF 001 water meter, one output, K = 1
- Immersion level sensor TSH37, range 0-40 m above sea level, cable 50 m
- Hinge for mounting the level sensor
- O2 Standard CZ SIM card - long-term rental

The measuring range of the level sensor, the cable length and the type of water meter can be changed within the ordering process according to the customer's requirements.

Basic set CZ	Basic set for performing the pumping test of drilled wells	3 773,-

Variable and optional accessories

	Along with the basic set, other accessories and services can also be ordered	
PH485-K5M	pH probe with RS485 output (Modbus RTU / FINET), PUR cable 5 m shielded, free end	290,-
S461/LT	Optical turbidity sensor, 2 measuring ranges 0..10 and 0..100 NTU, RS-485	2 868,-
Extension cable	Extension cable to level sensor or water meter, connector termination	on request
Datahosting	Server services per station and month	4,-

WATER QUALITY MONITORING

ELECTROCHEMICAL MEASUREMENTS - PH, REDOX, ISE, CONDUCTIVITY, …

Display	Type	Description	Price EUR without VAT
	B W	**485 series electrochemical probes for pH measurement**	
RS485		**New range of pH probes with digital output RS485 / Modbus RTU.** The probes are characterized by built-in electronics in close proximity to the measuring electrode, to which the measuring and communication circuits of the probe are hermetically and inseparably connected. This solution offers very accurate measurements without the negative effects of the environment on the connector connection or on the gradual wetting of the connecting cables. The measuring electrodes used have an extended service life of 2-3 years of operation and are characterized by a self-cleaning ability that reduces the need for recalibration. The mechanical design of the probes is adapted for easy and quick installation in pipes, open flows and sumps (2x ¾" thread). A set of accessories is also available, ranging from the replacement electrode cover KE145 to the tubular sensors TS500, TS1700 with adjustable bracket DE2 to connection and extension cables. The electrochemical probes of the PH485 series are supplied with the KE145 enclosure, either without cable with M12 connector or with a four-core shielded PUR cable with a free end for direct connection of the probe to the terminals of the measuring unit connection board, typically 5 m long, with any cable length available on request. Probes with 5 m cable terminated with M12 connector are also available.	
			
PH485-M12		pH probe with RS485 output (Modbus RTU), without cable, M12/4M connector	360,-
PH485-K5		pH probe with RS485 output (Modbus RTU), PUR cable 5 m shielded, free end	361,-
PH485-K1,7M12		pH probe with RS485 output (Modbus RTU), PUR cable 1,7 m, M12 / 4M connector	367,-
PH485-TS1700		pH sonda s výstup RS485 (Modbus RTU) ve snímači TS1700, PUR kabel 5 m, M12/4M	511,-
PH485-TS500		pH sonda s výstup RS485 (Modbus RTU) ve snímači TS500, PUR kabel 5 m, M12/4M	504,-
	B W	**485 series electrochemical probes for measuring redox potential**	
RS485		**New series of ORP probes with digital output RS485 / Modbus RTU.** The technical solution of these probes is identical to the PH485 type probes with the only difference that the pH electrode is replaced by a high-quality redox potential electrode with a platinum target. Ie. the measuring electronics is inseparably and tightly connected to the electrode and is galvanically separated from the supply voltage and the RS485 communication line to suppress ground balancing currents. The mechanical design of the probes is adapted for easy and quick installation in pipes, open flows and sumps (2x ¾" thread). A set of accessories is also available, ranging from the replacement electrode cover KE145 to the tubular sensors TS500, TS1700 with adjustable bracket DE2 to connection and extension cables. The electrochemical probes of the ORP485 series are supplied with the KE145 enclosure, either without cable with M12 connector or with a four-core shielded PUR cable with a free end for direct connection of the probe to the terminals of the measuring unit connection board, typically 5 m long, with any cable length available on request. Probes with 5 m cable terminated with M12 connector are also available.	
			
ORP485-M12		redox probe with RS485 output (Modbus RTU), without cable, M12 4M connector	360,-
ORP485-K5		redox probe with RS485 output (Modbus RTU), PUR cable 5 m shielded, free end	361,-
ORP485-K1,7M12		redox probe with RS485 output (Modbus RTU), PUR cable 1,7 m, M12/4M connector	367,-
ORP485-TS1700		redox probe, RS485 output (Modbus RTU) in TS1700 sensor, PUR cable 5 m, M12/4M	511,-
ORP485-TS500		redox probe, RS485 (Modbus RTU) output in TS500 sensor, PUR cable 5 m, M12/4M	504,-

	**Accessories for XX485 series electrochemical probes**	
	Replacement electrochemical probe cover The plastic cover KE145 serves as protection of electrochemical probes types XX485 against mechanical damage. The cover is made of chemically resistant Tecaform material and has an internal thread jedné “on one side, through which it is attached to the probe body. Therefore, the cover can be easily removed when calibrating or cleaning the probe.	
KE145	Plastic electrode cover for XX485 series electrochemical probes	30,-
	**Tubular holder for electrochemical probes series xx485-K2M12.** The stainless steel tubular holder is used to attach electrochemical probes to a designated location. The basic length of the holder is 1700 mm (500 mm). The upper end of the holder contains an M12 connector for connecting the connecting cable.	
TS1700	Tubular holder for electrochemical probes series 485, diameter 40 mm, length 1700 mm	133,-
TS500	Tubular holder for electrochemical probes series 485, diameter 40 mm, length 500 mm	125,-
	**Holder for TS tube holder.** The DE holder consists of two pieces so that the TS holder can be easily and quickly removed from the fixed holder and moved, for example, to an adjacent measuring well. Adjustable inclination of the TS holder.	
DE2	Stainless steel sensor holder ESKO12	85,-
 **T1 to T2**	**Stainless steel stirrups** Stainless steel brackets (A2) for attaching DSPXX brackets to the mast	Page 65
 **M12/4F-XM**	**M12 connection cables for connecting probes and sensors** Cables for connecting probes and sensors equipped with an M12 connector, various lengths	Page 65

Sensors of electroch. quantities of the ES series (dis. oxygen, pH, redox)

Electrochemical sensors for measuring pH, dissolved oxygen or redox pot.

The sensor contains a replaceable sensor (electrode) and a Pt100 temperature sensor. Power supply and calibration from the unit (E2, H7, M2001-E, M4016) connected by cable via RS485, IP66 connector.
The length of the sensor is selectable in the range of 50-300 cm. The standard length of the sensor for measuring dissolved oxygen is 170 cm and for measuring pH and redox potential 120 cm. The sensors have a diameter of 63 mm. A DE1 stainless steel holder with plastic handles can be ordered for the sensor.

ESP11	pH meter, RS-485 output, FINET protocol	1 040,-
ESR11	Redox meter, RS-485 output, FINET protocol	985,-
ESK11	Oximeter, RS-485 output, FINET protocol	1 065,-

Accessories for electrochemical sensors of the ES series

Electrochemical sensor holder.

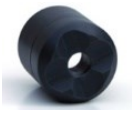
The holder consists of two pieces so that the sensor can be easily and quickly removed from the fixed mounting and moved, for example, to an adjacent measuring well. The inclination of the sensor in the holder is adapted to calibrate the dissolved oxygen sensor, which requires a position other than vertical so that no drop of water remains on the membrane.

DE1	Stainless steel sensor holder ESx11 for mounting on railings	68,-

Replacement sensor for ESK11 sensor

Replacing the sensor in the ESK11 sensor requires a subsequent calibration of the device

OC 254	Replacement oxygen sensor for ESK11 sensor	263,-



Replacement diaphragm for OC254

The service life of the measuring membrane of the OC254 oxygen sensor ranges from 6 months to 2 years, depending on the type of contamination of the monitored water.

Membrana	Replacement membrane for oxygen sensor OC254	72,-

1

Electrolyte for OC254

Replacing the OC254 oxygen sensor membrane requires replacing the old electrolyte with a new one. One electrolyte charge (50 ml) is enough to replace 2-3 membranes.

Elektrolyt OC254	Reference electrolyte charge for oxygen sensor OC254 (50 ml)	13,-

HC 255-C	Replacement combined pH electrode for ESP11 self-cleaning sensor	208,-
Pufry 100	PH buffer set 100 ml, basic range pH = 4.01 pH = 6.86 pH = 9.18	31,-

ORC253-C	Replacement electrode for redox potential sensor ESR11	136,-

OPTICAL MEASUREMENT OF DISSOLVED OXYGEN

Display	Type	Description	Price EUR without VAT
	B W	**Optical dissolved oxygen sensors**	
RS485		**Optical sensor of dissolved oxygen and water temperature** The ESKO12 digital sensor is designed for measuring dissolved oxygen using the digital luminescence method. The optical technology used has minimal maintenance requirements and due to the low drift, the sensor does not require frequent calibration. The sensor has a digital RS-485 output, via which it is connected to the M2001-E display unit or to the M4016 telemetry unit. The delivery includes a 4 m (8 m) connecting communication cable, which is terminated with a connector on the sensor side. The cable can be extended up to 100 m. The sensor consists of a sensor placed in a stainless steel tube with a diameter of 40 mm with a selectable length in the range from 50 cm to 400 cm. A 170 cm long sensor is supplied as standard. A DE2 stainless steel holder with adjustable inclination can be ordered for the sensor.	
			
	ESKO12	Optical sensor of the amount of dissolved oxygen in water and temperature, RS-485	1 206,-
	S423/C/OPT	Suspended version of the sensor - without stainless steel tube, RS-485 output	1 115,-
		Optional accessories for optical oximeter	
		**Replacement head with phosphor for ESKO12 sensor** Replacement head for optical dissolved oxygen sensor ESKO12 (Z). The CAP12 replacement head has a typical life of 1 to 3 years. Extending the life of the head is possible by performing more frequent calibration of the sensor at the end of the life of the head.	
	Hlavice CAP12	Spare front part with luminescent target for optical sensor ESKO12	208,-
	W	**Dissolved oxygen optical sensor holder.** The holder consists of two pieces so that the sensor can be easily and quickly removed from the fixed mounting and moved, for example, to an adjacent measuring well. The inclination of the sensor in the holder is adapted to calibrate the dissolved oxygen sensor, which requires a position other than vertical so that no drop of water remains on the membrane.	
	DE2	Stainless steel sensor holder ESKO12	85,-
	**T1 to T2**	**Stainless steel stirrups** Stainless steel brackets (A2) for attaching DE2 brackets to railings	Page 65

OPTICAL TURBIDITY MEASUREMENT

Display	Type	Description	Price EUR without VAT
	M B W	**Optical nephelometric NTU turbidimeters**	
RS485	M B		
		**Optical turbidity sensors S461/TN and S461/LT.** The S461/TN and S461/ LT sensors are designed for operational turbidity measurements in municipal and industrial wastewater treatment plants, for monitoring surface water pollution and for various industrial applications. **S461 / TN:** Measuring range 0–1000 / 4000 NTU, operating temperature 0-50 ºC, measuring accuracy ± 2.5 to 5% of range, repeatability 98%, RS485 (Modbus RTU), max. Operating pressure 4 bar **S461 / LT:** Measuring range 0–10 / 100 NTU, operating temperature 0-50 ºC, measuring accuracy ± 1 to 5% of range, repeatability 98%, RS485 (Modbus RTU), max. Operating pressure 4 bar The rod extension to the sensor consists of a stainless steel pipe with a diameter of 40 mm with a selectable length in the range from 500 to 4000 mm, provided with a screw connection for mounting the sensor and terminated with an IP67 connector. An extension with a length of 1700 mm is supplied as standard. A DE2 stainless steel holder with adjustable inclination can be ordered for the rod attachment.	
	S461/TN	Optical turbidity sensor, 2 measuring ranges 0..1000 and 0..4000 NTU, RS-485	2 868,-
	S461/LT	Optical turbidity sensor, 2 measuring ranges 0..10 and 0..100 NTU, RS-485	3 033,-
	TNS170/CH	Rod extension for S461 sensor, length 1700 mm, dia.40 mm, connector termination	151,-
		**Optional accessories for optical turbidimeters**	
		Flow cell The plastic flow cell can be ordered together with the S461/LT sensor.	
	CELA/LT	Flow cell for optical turbidity sensor S461 / LT	121,-
	W	**Holder for rod attachment** The holder consists of two pieces so that the sensor can be easily and quickly removed from the fixed mounting and moved, for example, to an adjacent measuring well. Adjustable inclination of the sensor.	
	DE2	Stainless steel holder for rod attachment	85,-
	T1 to T2	**Stainless steel stirrups** Stainless steel brackets (A2) for attaching DE2 brackets to railings	Page 65
		**USB-RS485 converter** Converter for connecting sensors and probes with RS485 output to PCs and Notebooks with USB 2.0 interface	
	USB-485-SV	USB / RS-485 converter for parameterization and calibration of sensors	70,-

DISPLAY AND CALIBRATION UNITS FOR WATER QUALITY SENSORS

Display	Type	Description	Price EUR without VAT
4 MoSt, USB, 2G	B W	**Unit designed for sensors pH, redox, O2, conductivity, turbidity,…**	
		**E2** **Dual-channel display, calibration and control unit** Display and record of signal from one to two connected sensors of dissolved oxygen, pH, REDOX potential, turbidity, conductivity, ISE voltage and temperature; one or two-point calibration, two PID controllers, self-diagnostics, color touch screen, IP67 protection, data acquisition and parameterization via the Internet (only E2-G), AI box. Inputs: 2x RS485, 4x 4-20 mA, 2x pulse input Outputs: 2x switching contact of relay 6A / 250V; 2x solid state relay 0/12 V DC, 2A 2x active galvanically isolated current output 4-20 mA The E2 unit can be ordered with/without a GSM built-in modem and with different types of connection plate and cover box (similar to the variants of the H3, H7, Q2 units). Some of the possible configurations are listed in the following price list:	
E2-U-TB1		Display, calibration and control unit, 12-28 V DC power supply	925,-
E2-U-TB2		Display, calibration and control unit, 24 V DC power supply	946,-
E2-U-TB3		Display, calibration and control unit, 230 V AC power supply	963,-
E2-U-TA4-AK		Display, calibration and control unit, 12 V DC power supply, Aria with connectors	1 077,-
E2-U-TA4-AZ		Display, calibration and control unit, 12 V DC power supply, Aria with lock	1 004,-
E2-U-TA5-P		Display, calibration and control unit, 12 V DC power supply, in panel	867,-
E2-G-TB1		Display, calibration and control unit, GSM module, power supply 12-28 V DC	1 175,-
E2-G-TB1-SZ		Display, calibration and control unit, GSM module, pow.supply 12-28 VDC, enclosure	1 338,-
E2-G-TB2		Display, calibration and control unit, GSM module, 24 V DC power supply	1 196,-
E2-G-TB2-AZ		Display, calibration and control unit, GSM module, 24 V DC power supply, enclosure	1 333,-
E2-G-TB2-SZ		Display, calibration and control unit, GSM module, 24 V DC power supply, enclosure	1 358,-
E2-G-TB3		Display, calibration and control unit, GSM module, 230 V AC power supply	1 213,-
E2-G-TA4-SZ		Display, calibration and control unit, GSM module, 12 V DC power supply, enclosure	1 279,-
MOST, RS232 DB9	B W	**Other units for pH, redox, O2, conductivity, turbidity,… sensors**	
		**M2001** **Single channel display and calibration unit** Display and timing of signal from connected sensor of dissolved oxygen, pH, REDOX potential, turbidity, conductivity, ISE voltage and temperature; one or two-point calibration, large two-line display. Supply voltage 8-24 VDC, overvoltage protection of inputs and outputs Outputs: 3x relay 6A / 250V (alarm, limit, sampler), active current output 4-20 mA.	
M2001-E		Calibration and display unit for electrochemical sensors, 3x relay, 1x out 4-20mA	702,-
M2001-E/T		Calibration and display unit for electrochemical sensors, 3x relay, 2x out 4-20 mA	773,-
4 MoSt, USB, 2G	B W	**H3, H7** **Multichannel display, calibration and control unit, flow meter.** Display and timing of signal from connected sensors of level, flow, dissolved oxygen, pH, REDOX potential, turbidity, conductivity, ISE voltage and temperature and many other variables; up to 96 measuring recording channels and 208 binary recording channels, one or two-point calibration, four PID controllers, self-diagnostics, color touch screen, IP67 protection, data acquisition and parameterization via the Internet	
			
H3–		Multichannel recording, calibration and control unit, flow meter, variants. power supply	Configu-ration p.3
H7–		Multichannel recording, calibration and control unit, flow meter, variants. power supply	

		**Optional accessories for display and calibration units**	
		Cover-holder for H7, E2 and Q2 units Stainless steel cover of the unit, which also serves as a holder for this unit. The cover is attached to the vertical or horizontal boom using brackets T1 to T2.	
	KR2-V	Stainless steel cover-holder for placing the unit on a vertical mast.	87,-
	KR2-H	Stainless steel cover-holder for placing the unit on a horizontal boom.	87,-
	KR2-V-G	Stainless steel cover-holder for placing the unit on a vertical mast, GSM antenna cover	94,-
	KR2-H-G	Stainless steel cover-holder for placing the unit on a horizontal boom, GSM ant. cover	94,-
	**T1 to T2**	**Stainless steel stirrups** Stainless steel brackets (A2) for attaching KR2 brackets to masts, booms, railings	Page 65
		**Cover-holder for M2001 unit** The stainless steel cover of the M2001 unit against weather conditions, which also serves as a holder for this unit	
	KR1	Stainless steel cover-holder for outdoor placement of the M2001 display unit.	68,-
		**Secondary current output to M2001** Plug-in module for generating a 4-20 mA secondary current output on the M2001. The output is active and is galvanically isolated from the M2001 supply voltage, as is the primary standard 4-20 mA current output. The secondary current output is usually intended for transmitting the water temperature (M2001 E) to the higher-level control system.	
	MAV420/M	4-20 mA secondary analog output module to M2001 unit	74,-
	**M12/4F-XM**	**M12 connection cables for connecting probes and sensors** Cables for connecting probes and sensors equipped with an M12 connector, various cable lengths	Page 63

METEOROLOGICAL SENSORS AND STATIONS

PRECIPITATION GAUGES AND PRECIPITATION GAUGES

Display	Type	Description	Price EUR without VAT
	W	**Shuttle rain gauges**	
	W	Mechanically resistant shuttle rain gauge with a collection area of 500 cm2 and a resolution of 0.1 mm precipitation / pulse. The cover and the collecting surface of the rain gauge are made of metal, only the base carrying the tilting shuttle and possibly also the heating elements in the version for year-round operation (SR03 / V) is plastic. A stainless steel stand S301 can be ordered together with the rain gauge, which after installation ensures that the upper edge of the rain gauge is at the usual height of 1 m above the ground.	
	SR03	Shuttle rain gauge, resolution 0.1 mm / pulse, collection area 500 cm2	934,-
	SR03/V	Heated shuttle rain gauge, resolution 0.1 mm / pulse, collection area 500 cm2	1 169,-
	S301	Stainless steel stand under the SR03 rain gauge, without concrete tiles	107,-
	W	Mechanically resistant shuttle rain gauge with a collection area of 200 cm2 and a resolution of 0.2 mm precipitation / pulse. The cover and the collecting surface of the rain gauge are made of metal, only the base carrying the tilting shuttle and possibly also the heating elements in the version for year-round operation (SR02 / V) is plastic. A stainless steel stand S201 can be ordered together with the rain gauge, which after installation ensures that the upper edge of the rain gauge is at the usual height of 1 m above the ground.	
	SR02	Shuttle rain gauge, resolution 0.2 mm / pulse, collection area 200 cm2	800,-
	SR02/V	Heated shuttle rain gauge, resolution 0.2 mm / pulse, collection area 200 cm2	921,-
	S201	Stainless steel stand under the SR02 rain gauge, without concrete tiles	98,-
		Optional accessories for shuttle rain gauges	
	W	**Rain gauge attachment** The crown prevents the birds from sitting on the edge of the rain gauge and thus clogs the drain hole of the rain gauge with their faeces. The crown is fixed to the upper edge of the rain gauge by means of a tightening screw connection. Material: stainless steel.	
	Korunka-02	Protection against birds - attachment for rain gauge SR02	49,-
	Korunka-03	Protection against birds - attachment for rain gauge SR03	58,-
	W	**Heating regulator for rain gauge SR03/V** The RT-03 heating controller maintains the temperature in the upper and lower sections of the SR03/V rain gauge at the required values and also monitors faults. Failure of the supply voltage for heating or failure of the temperature sensor can be detected at the galvanically isolated outputs of the controller. A separate galvanically isolated output with a pulse extension to 100 mS is assigned to the output pulses of the rain gauge. RS485 output of the controller can be used for monitoring the temperatures of the upper and lower heating section and for recording faults using a connected recording unit (M4016, H1,…)	
	RT-03	Replacement two-circuit heating controller for rain gauge SR03 / V, RS485 output	175,-
		Concrete tiles	
	BETON	Concrete tile for mounting the stand S301, S201, weight 60 kg	24,-
		**Mains switchboards with source for heated rain gauges** Surge protection and safety switchboard installed in places with older electrical installation without surge protection. In addition to protections and fuses, the switchboard also contains one or more mains sources for powering the M4016 recording unit (H1, H2, H3, H7, STELA-3,…) and for heating the SR02 / V or SR03 / V rain gauge. Protection: IP54.	
	Rozvodnice R3	Switchboard, power supply DRC-138/30W, power supply for heated rain gauge SR03/V	333,-
	Rozvodnice R2	Switchboard, source DRC-138/30W, source for heating rain gauge SR02/V	351,-
	DRC-24/100W	External switching power supply DELTA, output 24 VDC/100W /3.8 A, (width 6 modules)	60,-

MOST RS232 M12 2G

W

Rain gauge assemblies

The warning rain gauge station consists of a rain gauge, the appropriate stainless steel stand of the rain gauge and some telemetry unit STELA, H1, H3, H7, Q2 or M4016-SR, which provides rainfall recording, calculation of set moving totals of precipitation for selected time period and transmission of measured data to server and sending warning SMS about exceeding the precipitation totals for the set period to selected telephone numbers from the station directory.

For year-round operation of the station, a heated version of the rain gauge can also be used when building a rain gauge station. In such a case, however, it is necessary to have a source of mains voltage at the place of installation of the rain gauge station (heating of the rain gauge cannot be operated from the battery).

Other measured quantities can be stored on the free channels of the telemetry station, for example soil moisture measured by VIRRIB sensors, the amount of suction soil pressure measured by the soil strain gauge or soil and air temperatures, etc.
The software of the telemetry station allows to set the pulse weight with an accuracy of 0.001 mm. This can be used to quickly and easily recalibrate the rain gauge station by accurately measuring the weight of the pulse from a known amount of water and the actual number of pulses measured..

SR03	Shuttle rain gauge, resolution 0.1 mm / pulse, collection area 500 cm2	934,-
S301	Stainless steel stand under the SR02 rain gauge without concrete tiles	107,-
HYDRO-LOGGER H1	Small telemetry station in GSM / GPRS network	942,-
STELA-3A	Small telemetry station, 2 batteries, metal housing, IP66 protection.	933,-

B W

RG-15 Rain gauge - rain intensity detector

RG-156 is an optical rain gauge with pulse output, simple mechanical construction and sophisticated software. The principle of measuring precipitation is based on the continuous evaluation of 4 reflected light rays from water-soaked transparent spherical cover of a sensor with a diameter of 70 mm.

The method used to evaluate the amount of rainfall is very sensitive and allows you to set in addition to the standard output 0.2 mm rainfall / pulse and 0.01 mm and even in the most sensitive mode and 0.001 mm rainfall / pulse. However, the high sensitivity of the sensor does not mean absolute measurement accuracy and therefore this device cannot fully replace shuttle or weight rain gauges in applications requiring accurate measurement under various operating and weather conditions but is suitable as a suitable complement to such measurement due to high resistance and reliability of this sensor. This is achieved due to the absence of mechanical moving parts and in conjunction with the glossy spherical surface of the sensor, which prevents dirt or fallen leaves from settling.

The pulse output of the sensor consists of a relay contact and can be connected to all FIEDLER stations similarly to the output of shuttle rain gauges. However, the RG-15 requires, unlike shuttle rain gauges, the permanent presence of a supply voltage of 10-15 V (type 12V). However, the quiescent current consumption of 12V / 15 mA, which can increase up to 70mA in the rain, does not allow the connection of this interesting sensor to stations powered only by the battery.

In addition to the pulse output, the user-adjustable sensor mode also allows a permanently closed contact in the rain (adjustable intensity for contact closing), detection of condensed water and icing on the sensor surface, irrigation control and detection of drops, ie leakage. The mode and its parameters are selected by switches inside the sensor.

RG-15	Optical rain intensity detector with pulse output	187,-
DRG-15	Stainless steel holder for optical rain gauge RG-15, boom 250 mm	16,-

Stainless steel stirrups

T1 to T2	Stainless steel brackets (A2) for attaching radiation shields to the mast	Page 65

RS485

B W

Rain detector with capacitive sensor

Rain detector with durable corundum capacitive sensor, microprocessor-controlled sensor heating (heating only in rain, keeping the corundum sensor temperature set above the ambient temperature), detector output open collector (ON .. rain, OFF ... no rain) and serial bus RS485 for parameterization and reading of the approximate intensity of rain 0 to 100%, FINET and MODBUS RTU communication protocols via RS485, adjustable delay for switching on / off the output, supply voltage 12 to 24 V DC, stainless steel holder for mounting the detector on a pole or vertical wall .

RDH11	Rain detector with controlled heating, capacitive ceramic sensor, OK and RS485 output	182,-

TEMPERATURE AND HEAT FLOW SENSORS

Display	Type	Description	Price EUR without VAT
	B W	**Temperature sensors**	
		**Temperature sensor with Pt100 sensor** The stable and high-precision Pt100 resistance sensor - accuracy class A - is hermetically encapsulated in a stainless steel housing with a diameter of 7 mm. The four-wire PUR cable with a diameter of 4 mm allows the connection of the sensor to the temperature inputs of the DPD-III connection board of the M4016 unit as well as to the TEP-06 / S converter at a distance of up to 50 m without affecting the measurement accuracy. In places with the presence of mains or other industrial interference, it is advisable to use a shielded connection cable.	
	PT100-KP	Pt100 sensor, class A, stainless steel housing diameter 7 x 35 mm, price without cable	25,-
	PT100-DP	Pt100 sensor, class A, stainless steel housing diameter 10 x 75 mm, price without cable	29,-
	PT100-CU	Pt100 sensor, class A, nickel-plated. copper case 8x8x30mm, magnet, price without cable	45,-
		**Temperature sensor with Pt100 sensor and screw connection** The stable and high-precision Pt100-A resistance sensor is hermetically encapsulated in a stainless steel housing with ½ "screw connection. This robust mechanical design allows the temperature sensor to be installed in a pipe or tank weldment. The cable connection can be made with a four-core cable without shielding or with shielding according to the place of use of the sensor.	
	Pt100-SP	Pt100 sensor, class A, housing with ½" thread, four-wire connection, price without cable	61,-
	Kabel Pt100	Price for 1 m of PUR cable 4x0.14	2,-
	Kabel Pt100-ST	Price for 1 m of PUR shielded cable 4x0.14	3,-
RS485	B W	**Temperature sensors with RS485 output**	
		Temperature probes with integrated Pt100 class A resistance sensor. Depending on their design, the probes are suitable for measuring water or air temperature. The TEP1/H probe for measuring the water temperature is suitable for permanent immersion of the probe in the measured water and has a non-removable PUR communication cable with the required length from 5 to 30 m - the standard length of 5 m is included in the price of the probe. The design of the TEP1/K probe with an M12 connector for connecting a PUR cable is intended for measuring the air temperature. This probe can be ordered including the radiation cover - TEP1/K/RK. The RS485 output signal under the FINET (MODBUS RTU) protocol can be transmitted over long distances of up to 200 m. High accuracy and stability is achieved by electronic calibration without the presence of trimmers and other unstable elements. The probes have a standard resolution of 0.01 °C.	
	TEP1/H	Immersion probe for measuring water temperature (0°C+50°C), Pt100-A sensor, RS485	125,-
	TEP1/K	Probe for measuring air temperature (-40°C .. +60°C), Pt100-A sensor, RS485 output	134,-
	TEP1/E	Converter for external Pt100 sensor (end M12), range -40°C… +100°C, RS485 output	125,-
	TEP1/K/RK	Air temperature probe (-40°C… +50°C), Pt100-A sensor, RS485 output signal, rad. cover	218,-
RS485	B W	**Converters for temperature sensors with RS485 output**	
		**Converter 6x temperature-RS485, fixed cable connection, IP68** Accurate measuring converter with permanently connected Pt100 temperature sensors via PUR cables with a selectable length from 1 m to 30 m. The mechanical design enables permanent operation of the converter even under water, connection to the M4016 station via RS-485 protocol FINET or Modbus RTU. When ordering, it is necessary to specify the length and number of cables with PT100 temperature sensors. These are not included in the price of the converter.	
	TEP06	Converter temperature-RS485, wired Pt100 sensors, IP68, cable 5 m	218,-
		**Converter 6x temperature-RS485 by connecting Pt100 sensors to the terminals** Converter equipped with terminals for four-wire connection of up to 6 Pt100 temperature sensors. The basic offer of the converter does not include cables with Pt100 sensors (recommended type: PT100xM). The probes have a standard resolution of 0.01 °C.	
	TEP06/S	Converter temperature-RS485, connection of sensors Pt100 to terminals, cable 1 m	236,-
	Kabel Pt100	Price for 1m unshielded PUR cable to converter TEP06, /S, TEP01, TEP01/K	2,-

M W

Heat flow sensor

Sensor for measuring the heat flow in the soil or the heat flow passing through building structures.

The sensor converts thermal energy into electrical energy using a series of thermocouples that measure the differential temperatures of the surfaces of the ceramic-plastic body. The output signal of the HFP01 is a small DC voltage proportional to the heat flux and the sensor does not need any external power supply for its operation. The polarity of the output voltage determines the direction of the heat flow. Typical sensor sensitivity: type sensitivity 60 uV / W/m2.

HFP01-05	Hukseflux heat flow sensor, 5 m cable	630,-

B W

Accessories for temperature sensors

Radiation shield

Radiation cover to protect the sensor or measuring probe from direct radiant radiation.

The radiation cover is made of UV-resistant and mechanically strong plastic. The delivery also includes a stainless steel holder adapted for mounting the radiation cover on the wall or with the help of brackets on a vertical mast or boom.

The mounting sleeve allows the insertion of either Pt100 temperature sensors (PT1000) or probes of the TEP1 or RVT81 type, or ATM01, into the body of the radiation cover.

Dimensions: cover diameter 146 mm, height without stainless steel holder 110 mm, 5, 7, 9 or 11 shielding slats.

RK5	Radiation cover for temperature sensor - 5 blades, stainless steel holder	104,-
RK7	Radiation cover for temperature sensor - 7 blades, stainless steel holder	125,-
RK9	Radiation cover for temperature sensor - 9 blades, stainless steel holder	146,-
RK11	Radiation cover for temperature sensor - 11 blades, stainless steel holder	167,-

T1 to T2	**Stainless steel stirrups** Stainless steel brackets (A2) for attaching radiation shields to the mast	Page 65

M12/4F-XM	**M12 connection cables for connecting probes and sensors** Cables for connecting probes and sensors equipped with an M12 connector, various cable lengths	Page 63

GLOBAL SUNLIGHT SENSORS

Display	Type	Description	Price EUR without VAT
	W B M	**Pyranometers**	
		**Pyranometers** - global radiation sensors from the world manufacturer Kipp & Zonen. Output signal in µV/W/m^2, measuring range 0 - 2000 W/m^2, spectral range 0.31 to 2.80 µm. To connect the pyranometer, a separate cable with a standard length of 6 m and a connector on the side of the pyranometer must be ordered. The output signal from the pyranometer can be processed by one of the two special inputs to the TEP06/P converter	
	CMP3	Kipp & Zonen pyranometer, temperature error in the range -10 °C to +40 °C <5%.	1 033,-
	CMP6	Kipp & Zonen pyranometer, temperature error in the range -10 °C to +40 °C <4%.	on request
	CMP11	Kipp & Zonen pyranometer, temperature error in the range -10 °C to +40 °C <1%.	on request
	Albedo-CMP3	Holder for a pair of CMP3 pyranometers.	113,-
	CMP3 kabel 6M	Shielded PUR cable 6 m with connector for CMP3 sensor connection, one free end.	41,-
	W B	**Net radiometers**	
		**NR Lite2** is designed to measure the resulting radiation, which is obtained by one sensor as the difference between incoming and reflected radiation from the earth's surface. The output signal of the sensor is generated by the thermoelectric voltage of a special Teflon sensor, which is proportional to the measured resulting radiation. Spectral range 200 to 100,000 nm, typical sensitivity 10 µV/W/m^2. The delivery includes a 15 m cable.	
	NR LITE2	Net radiometr Kipp & Zonen	1 800,-
	W B M	**The Net Radiometer CNR4** consists of a pair of pyranometers for measuring short-wave incident and reflected radiation and a pair of pyrgeometers for measuring long-wave infrared incident and reflected radiation. In addition, the sensor is equipped with a Pt100 temperature sensor to record the parallel temperature of the sensor and a heating resistor to remove condensation drops on the sensors. The spectral range of shortwave sensors is 300 to 2,800 nm, typical sensitivity 5 to 20 µV /W/m^2. The spectral range of longwave sensors is 4,500 to 42,000 nm, typical sensitivity 5-20 µV/W/m^2. Nonlinearity <1%, temperature error in the range -10 °C to +40 °C is <5%, weight 850 g, working temperature -40 °C to +80 °C Included is a 10 m cable.	
			
	CNR4	Combined sensor with pyranometers and pyrgeometers from Kipp & Zonen	7 442,-
	CNF4	Ventilation unit for CNR4 sensor, 10 m cable	1 854,-
RS485	B W	**Accessories for Net radiometers and pyranometers**	
		**Converter 4x µV + 2x Pt100 / RS485** TEP06/P is a measuring converter adapted for connection of up to 4 voltage outputs of pyranometers and pyrgeometers, which it converts to a digital signal accessible on the RS485 bus (FINET or Modbus RTU). In addition, the transmitter contains 2 inputs for Pt100 temperature sensors. In addition to 4 analog voltage channels and two temperature channels, it is possible to obtain from this transducer on a separate measuring channel also the 4th power of the metal body temperature of the CNR4 radiometer, which is needed for correct calculation of longwave radiation intensity of pyrgeometers. The delivery of the measuring amplifier includes a communication PUR cable.	
	TEP06/P	Converter for connection of 2 pyranometers, 2 pyrgeometers and 2 Pt100, output RS485	260,-
	W	**Robust stainless steel holder** DNR2 is a universal stainless steel holder designed for fast and stable installation of a pyranometer or Net radiometer on a vertical mast. The holder is installed using stainless steel brackets T1 to T2 and allows you to set the horizontal working position of the device in two planes.	
	DNR2	Holder for installation radiometers on a mast with a diameter of up to 30 to 60 mm	80,-

RELATIVE HUMIDITY, TEMPERATURE AND AIR PRESSURE SENSORS

Display	Type	Description	Price EUR without VAT
	B W	**Humidity and air temperature sensors**	
RS485		**Relative humidity and air temperature sensor for common applications** Modern relative humidity sensor without the need for calibration. Measurement accuracy ± 1.8% RH in the range from 10 to 90% RH. The air temperature is sensed by a separate Pt100-A sensor with very low temperature inertia. The probes have a standard resolution of 0.1% RH and 0.01 °C. The probe contains a digital RS485 output and communicates with the superior recording unit using the FINET or MODBUS RTU protocol	
	RVT80	Relative humidity and air temperature sensor (SHT sensor), RS485 output	162,-
	RVT81	Relative humidity and air temperature sensor (Pt100 sensor), RS485 output	185,-
	RVT80/RK5	Sensor rel. humidity and air temperature (SHT sensor), RS485 output, radiation cover	251,-
	RVT81/RK5	Sensor rel. humidity and air temperature (Pt100 sensor), RS485 output, radiation cover	274,-
RS485	B W	**Highly accurate sensors for measuring relative humidity and air temperature** The relative humidity and air temperature sensors RVT12/RK7 and RVT13/RK7 use highly reliable, accurate and stable HydroClip2 probes from the Swiss company ROTRONIC for measurement- measurement accuracy: ±0.8% RH, ±0.1°C in the entire measuring range. The RVT12 sensor requires a 3.3V supply voltage and has two voltage outputs 0 to 1V. The RVT13 sensor has its own microprocessor for communication with the connected recording unit via RS485 (FINET, Modbus RT) and the supply voltage can be in the range of 5 to 14 V DC. The probes have a standard resolution of 0.1% RH and 0.01 °C.	
	RVT12/RK7	Precision sensor rel.humidity and air temperature, 3.3V supply,2x output 0-1 V, rad. cover	634,-
	RVT13/RK5	Precision sensor rel.humidity and air temperature, RS485 output, radiation cover	661,-
	RVT13/RK7	Precision sensor rel. humidity and air temperature, RS485 output, radiation cover	679,-
RS485	B W	**Atmospheric air pressure sensor - barometer**	
		Accurate atmospheric air pressure sensor The sensor contains a temperature-compensated sensor that allows the measurement of atmospheric pressure in the range of 300 to 1100 mbar and a maximum measurement error of <0.5 mbar for 25 °C and <1 mbar in the range of 0 to 50 °C. The sensor communicates with the unit via the RS485 interface under the FINET protocol The mechanical design of the sensor allows its placement in the radiation cover RK5 or in the cable gland of the telemetry station.	
	ATM10	Atmospheric air pressure sensor, RS485 output	241,-
	ATM11	Atmospheric air pressure and air temperature sensor (Pt100 sensor), RS485 output	263,-
		Replacement sensors and accessories for humidity, temp. and air pressure probe	
		**Replacement sensor for sensors RVT80, RVT81** Replacement relative humidity and air temperature sensors for sensors RVT80, RVT81. The sensor is equipped with a connector for easy replacement in the sensor directly in the field. The SHT sensor was calibrated during production and the calibration constants were stored in the sensor's memory - the achieved measurement accuracy is thus better than ±1.8% RH and ±0.3 °C at 25 °C.	
	SHT85K	Replacement sensor with reduction for RVT80 and RVT81	71,-
		**Replacement sensor for RVT12 and RVT13 sensors** Replacement very accurate and stable sensor of relative humidity and air temperature for RVT12 and RVT13 sensors. The sensor is equipped with a connector for easy replacement in the sensor directly in the field. The sensor was calibrated at the factory and the calibration constants were stored in the sensor chip. Thus, an excellent measurement accuracy of ± 0.8% RH, ± 0.1 °C was achieved.	
	HC2-S3	Replacement sensor with connector for RVT12 (/ RK5) and RVT13 (/ RK5) sensors	427,-
	T1 to T2	**Stainless steel stirrups** Stainless steel brackets (A2) for attaching the WH700 bracket to the mast	Page 65
	M12/4F-XM	**M12 connection cables for connecting probes and sensors** Cables for connecting probes and sensors equipped with an M12 connector	Page 63

WIND SPEED AND WIND DIRECTION SENSORS - ANEMOMETERS

Display	Type	Description	Price EUR without VAT
		**Ultrasonic sensors of wind speed and direction**	
		Universal 2D ultrasonic anemometer A wind speed and direction sensor that uses the Doppler principle for measurement. The sensor connects to FIEDLER telemetry and recording units via RS485 interface under Modbus RTU protocol (variant SDI-12). The sensor operates in the range of 0..75 m/s and 0..359°. The construction of the sensor is made of durable materials with no moving parts. The sensor achieves excellent accuracy of ±3% of the measured value at wind speeds up to 35 m/s. For higher speeds the accuracy drops to ±5 %. The resolution of the sensor reaches 0.1 m/s and 0.1°.	
	WS200	Ultrasonic wind speed and direction sensor 0..75 m/s	1 658,-
	M12/8-10M-WS200	10 m cable with M12 connector for connection to WS200 sensor, free end	55,-
		Accessories for wind speed and direction sensors	
	T1 to T2	**Stainless steel stirrups** Stainless steel brackets (A2) for attaching the WH700 bracket to the mast	Page 65
	M12/4F-XM	**M12 connection cables for connecting probes and sensors** Cables for connecting probes and sensors equipped with an M12 connector, various cable lengths	Page 63

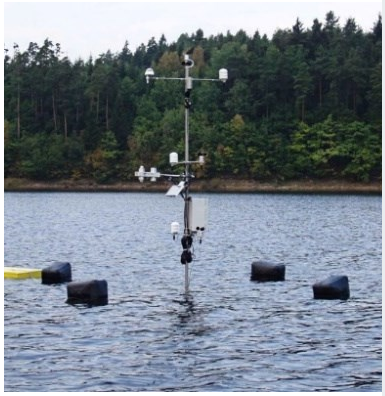
SOIL HUMIDITY SENSORS

Display	Type	Description	Price EUR without VAT
	W	**Volumetric soil moisture sensors**	
		**VIRRIB soil moisture sensors** Volume soil moisture sensor in the range from 5% to 50%, current output 0-5 mA. For the correct function of the sensor, it is necessary to operate the measuring system in the economical intermittent mode of operation (standard operation of all FIEDLER telemetry stations). Analog output connectable to H1, H3, H7, H40, STELA units.	
	VIRRIB	Volume soil moisture sensor, current output 0-5 mA, rectangular design	108,-
	W W B M	**Soil moisture sensors from Campbell Scientific** Volumetric soil moisture sensor in the range from 0% to 100%, soil temperature, conductivity and soil permittivity. Typical measurement error ± 3% soil moisture and ±0.5 °C. Digital output SDI-12 connectable directly to units H3, H7, H40, STELA or M4016. Supply voltage 6-18 V.	
	CS650	Soil moisture and temperature sensor, SDI-12 output, cab. 3 m, measuring tips 30 cm	438,-
	CS650-5M	Soil moisture and temperature sensor, SDI-12 output, cab. 5 m, measuring tips 30 cm	442,-
	CS655	Soil moisture and temperature sensor, SDI-12 output, cab. 3 m, measuring tips 12 cm	438,-
	CS655-5M	Soil moisture and temperature sensor, SDI-12 output, cab. 5 m, measuring tips 12 cm	442,-
	W	**Set for measuring suction pressures in the soil**	
		The set for measuring suction pressures in the soil consists of 1 to 4 soil tensiometers TMS11A and the evaluation module TM4 **Soil tensiometer TMS11A** Temperature compensated absolute pressure sensor, measuring range -85 kPa to +30 kPa, ceramic head diameter 25 mm, optional strain gauge length from 20 cm to 100 cm, connection cable 3 m long terminated with M12 connector, stainless steel capillaries for filling the soil tensiometer without removing it from soil, ceramic head material - sintered corundum, tensiometer body made of Tecaform.	
	TMS11A	Temperature compensated soil tensiometer, connection to the TM4 measuring module	288,-
RS485 	W	**Measuring module TM4 for soil tensiometer TMS11A** The TM4 module corrects the absolute pressure obtained from the soil tensiometer by the value of the atmospheric air pressure. The atmospheric air pressure sensor is located in the TM4 module. The resulting calculated vacuum-overpressure in the soil is transmitted to the connected recording unit (datalogger) via the RS485 bus. Up to 4 TMS11A soil tensiometer can be connected to one TM4 module via M12 connectors. Supply voltage 6 to 14 V DC / 5 mA.	
	TM4	Module for connection of 4 TMS11A, calculation of suction pressure, RS485-Modbus	290,-
		Accessories for soil moisture sensors	
	T1 to T2	**Stainless steel stirrups** Stainless steel brackets (A2) for attaching the TM4 bracket to the mast	Page 65

METEOROLOGICAL STATIONS

Display	Type	Description	Price EUR without VAT
MOST, RS232 M8, 2G	W	**Variable weather stations**	
		**Measuring stations.** Telemetry units H3, H7 and M4016 are suitable for meteorological stations, which contain an accurate analog signal converter and thus guarantee reliable measurement of output signals of many different probes and sensors. Because these units also have a digital RS485 and SDI-12 interface, virtually all commonly available meteorological sensors and transducers can be connected to them. For a small weather station with a smaller number of probes and sensors, a simpler H1 or H2 unit can be used. Low current consumption of used telemetry units, controlled power supply of connected sensors and data transmissions to the server allow to permanently operate the station with only a small solar panel or completely without external charging with only occasional replacement of the power battery. **Wide range of professional sensors** When assembling a meteorological station, you can choose from a wide range of sensors and measuring probes listed in this overview price list, as well as from the offer of many other renowned manufacturers. **Example of a universal weather station set:** Measuring control panel: H7-G-TA4-NZ in stainless steel cabinet with lock, SIM Power supply system: solar panel 10W, battery 12 V/42 Ah, RS13 controller Moss construction: stainless steel mast 3 m with anchorage, booms for sensors Measuring rain precipitation: rain gauge SR03 with stand S301 and concrete plinth Temperature and humidity: (0.3 m and 2 m above the ground): 2x RVT13 / RK5 Measurement of air pressure: sensor ATM11 Wind speed and direction measurement: WS103, WD360 + holder WH700 Measuring global radiation: pyranometer CMP3 + converter TEP06 / P	
Weather station		Approximate price of the station according to the above overview, cable connections	7 500,-
		**Example of a set of a small weather station:** Measuring control panel: H1-G-AZ in ARIA cabinet with lock, global SIM Power supply system: solar panel 10 W, battery 12 V / 9 Ah, RS13 controller Moss construction: hot-dip galvanized mast 2 m, booms for sensors Measuring rain precipitation: rain gauge SR02 with stand S201 and concrete plinth Temperature and humidity measurement 2 m above the ground: RVT81/RK5	
Small weather station		Approximate price of the station according to the above overview, cable connections	2 500,-
4 MoSt, USB, 2G	W	**Measurement of height and water value of snow cover**	
		Snow gauge stations have, among other sensors, ultrasonic snow cover height sensors and usually include a cushion for measuring the water value of the snow cover. **Measuring the water value of snow cover** The water value of the snow cover is measured by means of a hydrostatic pressure sensor, which is placed in a special, 10 cm high snow cushion with a diameter of 3 m. The large area of the pillow reduces the measurement error due to the cohesiveness of the snow cover at the edges of the pillow. The snow meter station is usually supplemented by measuring the temperature and humidity of the air and a TEP06 converter with Pt100 sensors can be connected to it for monitoring the temperature of snow and soil at different depths. **Example of a snow gauge station set:** Measuring control panel: H3-G-TA4-SZ in a plastic case with a lock, global SIM Power supply system: solar panel 20 W, battery 12 V / 42 Ah, RS13 controller Mechanic. construction: stainless steel mast 3 m with anchorage, booms for sensors Snow depth measurement: ultrasonic sensor US4200 with radiation cover Snow cover weight measurement: snow gauge with pressure sensor Temperature and humidity measurement: RVT81 / RK5 Measurement of soil temperature and snow cover at 6 points: TEP06 + Pt100	
Snow gauge station complete		Approximate price of a snow gauge station according to the above list of sensors	7 625,-
Snow gauge station		Approximate price snow gauge station without measuring cushion and temp. sensors	3 833,-

Floating weather stations



Floating meteorological stations can record both data from sensors located up to 2 m above the surface and from temperature and water quality sensors below the surface.

Measured quantities

In addition to temperature and humidity, the quantities measured above the surface include wind speed and direction, incident and reflected global radiation and air pressure. Below the surface, the temperature is usually measured at various depths, sometimes supplemented by qualitative water sensors (pH, O2, conductivity, turbidity,…).

A special system of moorings and floating buoys maintains a stable position of the station in windy weather even at different water levels.

Example of a floating weather station set:

- Measuring control panel: H7-G-TA4-AZ in plastic case with lock, global SIM
- Power supply system: solar panel 10 W, battery 12V/9Ah, RS13 controller
- Mechanical construction: special 2 m high stainless steel mast, 4 floats
- Temperature and humidity measurement: RVT81/RK5
- Wind speed and direction measurement: WS103, WD360 + holder WH700
- Global radiation measurement: CMP3 pyranometer + TEP06/P transducer
- Measurement of water surface temperature and temperature at 10 different depths up to 40 m: 2x TEP06 + Pt100 sensors

Floating weather station	Approximate price of a floating meteo. station according to the above list of sensors	7 083,-

Masts for meteorological stations

The masts are made with regard to long life in the outdoor environment. Therefore, in addition to the cheapest 2 m high STO-MET-02 mast, all other masts on offer are made of stainless steel. Fastening ropes and cable ties are also made of stainless steel.

The specialty is a dismantling floating 2 m high mast for weather stations located on the water surface of lakes and ponds. The system of adaptable moorings and floating buoys maintains a stable position of the station in windy weather even at different water levels.

STO-MET-02	Mast 2 m, stainless steel	155,-
STO-MET-03	One-piece stainless steel mast 3 m, diameter 60 mm, concrete base, fastening ropes	259,-
STO-MET-08	Three-part stainless steel mast 8 m, concrete base, fastening ropes	785,-
BETON	Concrete tiles under meteorological stands, weight 60 kg	24,-
STO-HYD-02	Floating 2m high stainless steel mast, 4 floats, adaptive anchoring system	1 521,-

VAPOR MEASUREMENT

Display	Type	Description	Price EUR without VAT
4 MoSt, USB, 2G	W	**Floating evaporometer station type GGI 3000**	

The VYPAR-3000 floating vapor meter with an area of 3000 cm2 is a sophisticated device for automatic measurement of vapor and rainfall. In addition, wind speed and direction (WS103 and WD360), global radiation (Net radiometer NR Lite 2), humidity and air temperature (RVT13/RK7), rainfall (optical rain gauge RG-114) and water temperature are continuously measured. at five different depths, including the surface temperature of the water inside the evaporator vessel (Pt100 temperature sensors).

Evaporometer control system

The central measuring station of the VYPAR-3000 evaporator consists of a telemetry unit H7. Through a specially designed module, it controls the automated operation of the evaporator as well as data collection from connected meteorological sensors. Automated operation of the evaporator includes regular transmission of measured data to the server via the GSM / GPRS network, pumping of evaporated water into the measuring vessel and possibly its pumping out of the vessel after a heavy rainfall.

If necessary, the floating vapor meter can be supplemented with other measured quantities using sensors connected to free inputs of the H7 measuring control panel.

The power supply of the measuring control panel and the control unit of the evaporometer station is provided by a maintenance-free 12 V accumulator charged from two differently oriented solar panels.

Mechanical design

The robust stainless steel construction of this relatively large floating vapor meter (assembled vapor meter has dimensions of 2.5 x 2.5 m) with a central vapor meter located in the soothing bath helps stable and reliable measurement of both vapor and rainfall, even in stronger winds.

The soothing bath with a floor plan of 1.1 x 1.1 m also has a protective collar, which significantly reduces the penetration of water splinters into the measuring container in the middle of the bath. Because the soothing bath is connected to the surroundings, the level in the measuring vessel is practically as high as the surrounding level, which has a positive effect on maintaining similar conditions inside and outside the measuring vessel (air humidity, water and air temperature). The measuring vessel itself with a diameter of 620 mm is 500 mm deep, but its edge exceeds the surrounding level by only about 10 cm, so that the shading of the level in the measuring vessel is minimal even in low sun.

Assembly and installation

The floating vapor meter is relatively easy to disassemble into 2 parts measuring 2.5 x 1.3 m by means of screw connections, so that it can be easily transported before and after the summer season. For this reason, the evaporator's cabling is also made using detachable connector connections, including meteorological sensors.

The lower left figure shows the two parts of the vapor meter placed on top of each other just after transport before assembling the vapor meter.

VYPAR-3000	Approximate price of the floating vapour meter according to the above list of sensors	13 750,-

Display	Type	Description	Price EUR without VAT
MOST, RS232 M8, 2G	W	**Class A stationary evaporator**	

The stationary evaporator VYPAR-1200 contains a measuring vessel with a diameter of 1207 mm with an area of 1.14 m^2 with a height of 450 mm, which is made of stainless steel material and can be sunk into the level of the surrounding terrain to achieve comparable temperature, wind and humidity conditions with the environment.

Autonomous management of filling and pumping

A simple autonomous evaporator control unit automatically controls the pumping of water into the measuring vessel from a jug located near the vapor meter and also controls a second pump located not at the bottom of the measuring vessel, which is started only when the level of the measuring vessel rises after heavy or prolonged rain. The control unit, including the pumps, is powered by a 12 V accumulator continuously charged from the solar panel.

Evaporation measurement

The actual measurement of evaporation (or rainfall) is provided by a separate assembly of a small H3 telemetry unit and a precision strain gauge level sensor. The binary inputs of the H3 unit monitor both the operation of the two pumps and the low level in the storage tank, to which the H3 unit can respond by sending a warning SMS.

As the H3 monitoring station is separate from the autonomous control of the evaporator (water supply or pumping after rain), the evaporator measuring vessel itself together with the autonomous control unit can be connected e.g. to an existing weather station equipped with RS485 bus (Modbus RTU protocol) and 3 free binary inputs.

VYPAR-1200-H3	Stationary evaporator with autonomous pump control and monitoring unit H40-G	3 875,-
VYPAR-1200	Stationary evaporator with autonomous pump control without telemetry unit	2 027,-

ACCESSORIES






POWER BATTERIES, ACCUMULATORS AND BACKUP ENERGY SOURCES

Display	Type	Description	Price EUR without VAT
		Lithium batteries and battery packs, rechargeable batteries	
		**Batteries for real-time backup** Batteries for real-time backup in units H3, H7, Q2, E2, C8, M4016, M2001	
	CR2032	Replacement Li battery 3V / 230 mAh for units M4016, M2001, C8, H3, H7, Q2, E2	1,-
	W B B	**Size D lithium batteries** Power replaceable battery for H1, H2, H50, STELA-V3 and H531 devices. Devices with a built-in GSM/GPRS communication module have increased current consumption during transmission and require the use of ER34615M batteries. These batteries cannot be recharged.	
	ER34615M	Replacement Li-$SOCl_2$ battery 3.6V, 13 Ah, Imax 2A, for H1, H2, H50, STELA, H531-G	20,-
	ER34615	Replacement Li-$SOCl_2$ battery 3.6V, 19Ah, Imax 300 mA, for devices without GSM	17,-
	W	**Power supply battery pack for SMART modules H11, H12** Connector with replaceable power pack for H11 and H12 devices. The battery pack cannot be charged.	
	ER34615M/K11	Replacement battery 3.6V / 13Ah with cable and connector for SMART module H11, H12	23,-
	W	**Power supply battery packs for data logger H40** Connector with replaceable power pack for H40D and H40G devices. The battery pack cannot be charged.	
	ER34615/K40	Replacement battery pack 3.6V/19Ah with cable and connector for data logger H40-D	23,-
	2ER34615M/K40	Replacement battery pack 3.6V/26Ah with cable and connector for data logger H40-G	44,-
	B	**Backup rechargeable battery for connection boards TB2, TB3** Backup battery for powering units H3, H7, Q2 and E2 with TB2 or TB3 board	
	ICR18650	3.7V/2600 mA Li-on backup battery for H3, H7, Q2, E2, C8 backup power supply	12,-
	W B	**Maintenance-free gel batteries**	
	W B W B B	The batteries are designed for backup power supply of M4016 or H1 stations. Instead of liquid electrolyte, these batteries use a maintenance-free gel over the life of the battery, which is 5 to 10 years, depending on the type. All types of batteries can be continuously charged from an external mains or solar voltage source of 13.8V. Unlike lithium batteries, the self-discharge of accumulators is approximately 50% of the capacity/year, and therefore even with devices with low current consumption, it is necessary to take into account the recharging of the accumulator in the interval of 3 months and shorter. More frequent recharging of the battery prolongs its life, and on the contrary, it shortens with each deep discharge below about 11 V.	
	AKU-12/7	Maintenance-free battery 12 V / 7 Ah for station M4016	22,-
	AKU-12/9	Maintenance-free battery 12 V / 9 Ah for station M4016	35,-
	AKU-12/28	Maintenance-free battery 12 V / 28 Ah for limnigraphic stations	107,-
	AKU-12/39	Maintenance-free battery 12 V / 39 Ah for limnographic stations	139,-
	B W	**Backup power supply for GSM communication modules**	
		**Backup power supply PB35 and PB70.** The power supply is used for short-term operation of GSM or radio communication modules powered from the mains power supply immediately after a mains supply voltage failure. The energy accumulated in the special capacitor of the PB35 or PB70 source allows up to several minutes of operation of communication devices even after a power failure. The superior system, server or human operator can thus receive practically online information about this extraordinary event. Because the backup PB modules do not contain a battery or accumulator, these elements cannot age and the backup power supply can serve without restriction practically for the lifetime of the connected communication module.	
	PB35	Backup power supply for GSM communication devices, capacity 35 mWh	71,-
	PB70	Backup power supply for GSM communication devices, capacity 70 mWh	76,-

AC POWER SUPPLIES AND BATTERY CHARGERS

Display	Type	Description	Price EUR without VAT
		**Power supplies 12 VDC and 13.8 VDC**	
	W W B	**12 VDC, 0.8A power supplies for powering H1, H2 and H500 series units** Power supplies suitable for level meters H520, H531 or H1, H2. Power supplies do not allow the connection and charging of a maintenance-free battery.	
	AC/DC-LV1203	Mains adapter for powering H500 series level meters, 12 V DC / 3 A output	19,-
	HDR-15-12	External switching power supply MEAN-WELL, output 12 V DC / 1.25 A, (width 1.5 mod.)	18,-
	DRC-12/10W	External switching power supply DELTA, output 12 VDC / 30 W / 2.1 A (width 18 mm)	18,-
	W B	**Power supply 12V / 13.8V 30W 2A, SELV** power supply for smaller measuring sets built on FIEDLER AMS units. The 13.8V power supply can be used to charge a 12 V backup battery up to a capacity of 9 Ah.	
	DRC-12/30W	External switching power supply DELTA, output 12 VDC / 30 W / 2.1 A (width 3 modules)	35,-
	DRC-138/30W	External switching power supply DELTA, output 13.8 VDC / 30 W / 1.8 A (width 3 mod.)	35,-
	W B	**Power supply 12V / 13,8V 60W 4A, SELV** power supply for measuring sets built on FIEDLER AMS units. The 13.8V power supply can be used to charge a 12 V backup battery up to a capacity of 45 Ah.	
	DRC-12/60W	External switching power supply DELTA, output 12 VDC / 60 W / 4.5 A (width 4 modules)	41,-
	DRC-138/60W	External switching power supply DELTA, output 13.8 VDC / 60 W / 3.9 A (width 4 mod.)	41,-
	W B	**24 VDC power supplies**	
		Power supply 24V 10W 0.4A, SELV Power supply suitable for powering galvanically isolated 4-20 mA current loops	
	DRC-24/10W	External switching power supply DELTA, output 24 VDC / 10 W / 0.4 A (width 18 mm)	18,-
	W B W B	**Power supply 24V 30W 2A, SELV** **Power supply 24V 60W 4A, SELV** Power supplies suitable for measuring sets built on units H3, H7, Q2, E2 or C8 with connection board TB2.	
	DRC-24/30W	External switching power supply DELTA, output 24 VDC / 30 W / 1.25 A (width 3 modules)	35,-
	DRC-24/60W	External switching power supply DELTA, output 24 VDC / 60 W / 2.5 A (width 4 modules)	41,-
	W B	**Power supply 24V 100W 3.8A, SELV** Power supply for large measuring and control assemblies of instruments. The source is also suitable for powering the heating circuits of a heated SR03 / V rain gauge.	
	DRC-24/100W	External switching power supply DELTA, output 24 V DC / 100 W / 3.8 A, (width 5 mod.)	62,-
		Distribution board for power supply of FIEDLER AMS measuring sets	
		The switchboard with overvoltage protection and fuse contains one or more mains sources for powering the M4016 station (H1, H3, Q2, E2,…) and possibly also a power supply for heating the SR02 / V or SR03 / V rain gauge. Protection: IP54.	
	Rozvodnice R1	Fitted switchboard, power supply DRC-138 / 30W for powering the backup unit	265,-
	Rozvodnice R2	Fitted switchboard, power supply DRC-138/30W,pow.sup. for heated rain gauge SR02/V	351,-
	Rozvodnice R3	Fitted switchboard, power supply DRC-138/30W,pow.sup. for heated rain gauge SR03/V	333,-
		Battery charger	
		**12 V lead-acid and Li-FePO4 battery charger** Constant output voltage of 14.3 V is suitable for permanently connected lead-acid battery without risk of damage to the battery by overcharging, automatic current limitation to 2 A for heavily discharged battery, efficiency >78%, weight 400 g, integrated protection against short circuit, overvoltage, current and thermal overload.	
	GC30E-4P1	Battery charger 12 V, 3 to 30 Ah; Uout=14.3 V; Imax 2 A; Pmax=30 W	42,-

SOLAR PANELS WITH ACCESSORIES

Display	Type	Description	Price EUR without VAT
	W B	**Solar Panels**	
		**Solar panels with accessories** Solar panels are used to recharge backup 12 volt maintenance-free batteries of telemetry stations. Thanks to the low current consumption of the units, a small 10 W solar panel is sufficient for recharging the battery in most applications. Only for those installations where frequent data is sent to the server or where the measurement interval is short, it is advisable to use a solar panel with higher power. Also use the power panel in permanently shaded places such as the north sides of the building or the dense vegetation above the solar panel. Each solar panel contains a mounting box for connecting the cable. The panels can be ordered with a stainless steel bracket adapted for mounting the panel on a vertical or horizontal wall or with the help of brackets on a mast or a display console.	
	SOLAR-10W	Pmax: 10 W (18 V / 0.57A), dimensions: 354 x 251 x 18 mm	29,-
	SOLAR-20W	Pmax: 20 W (18 V / 1,10A) rozměry: 435 x 356 x 25 mm	39,-
	SOLAR-30W	Pmax: 30 W (18 V / 1.6A) dimensions: 650 x 356 x 25 mm	53,-
	W	**Solar panel holders and other accessories**	
		Photovoltaic panel holders for installation on mast or flat surfaces Stainless steel holders for mounting PV panels in vertical or inclined position. The inclined panel surface provides the greatest output from a unit of panel area year-round. The vertical panel surface does not allow snow to settle on the panel, providing an advantage in winter operation when the sun is low over the horizon. The universal tilting brackets DSP-US and DSP-UL allow the PV panel to be installed at an angle of 45° (inclined position) to 0° (vertical panel position). The holders are made from stainless steel material and can be ordered with brackets for easy attachment of the panel to the vertical pipe/mast. Without the brackets, the holders can be screwed to a vertical or horizontal surface (DSP10 and DSP20 holders only).	
	DSP10	Stainless steel solar panel holder for inclined mounting of 5 W and 10 W PV panels	18,-
	DSP-US	Adjustable stainless steel holder from 0° to 45° for 5 W to 10 W PV panel	48,-
	DSP-UL	Adjustable stainless steel holder from 0° to 45° for PV panel 20 W to 40 W	52,-
		**Solar panel holder on top of the mast** Stainless steel holders for solar panels with outputs of 10 W to 30 W adapted for sliding on the top of the age with a diameter of 60 mm. The holder has the advantage that it does not take up space on the mast, which can be used, for example, for meteorological sensors and sensors.	
	DSPVV	Stainless steel holder for mounting a 20 W solar panel on top of a 60 mm diameter mast	34,-
	T1 to T2	**Stainless steel stirrups** Stainless steel brackets (A2) for attaching brackets and brackets to the mast	Page 65
	Konzole-25 to Konzole-60	**Mounting bracket** Galvanized brackets with different liner lengths.	Page 65
	W	**Charging controller with load disconnector**	
		Charging controller for a connected maintenance-free battery with very low self-consumption, which practically does not burden the rechargeable battery even during inactive charging. The RS13 controller is connected between the solar and panel and the rechargeable battery. The controller limits the charging current to the charged battery and thus prevents it from overcharging. The RS13 controller also contains a disconnector that disconnects the discharged battery (voltage lower than 11 V) from the load. This prevents the battery life from being shortened when it is deeply discharged.	
	RS13 5-20W	Charging controller supplemented by a discharged battery disconnector for solar 5-20 W	41,-
	PWN SC1205 30-60W	Charging controller supplemented for solar panel 30 to 60 W	40,-

ANTENNAS WITH ACCESSORIES

Display	Type	Description	Price EUR without VAT
		GSM / UMTS antennas	
  	W	Antennas for GSM / UMTS band with magnetic or mechanical mount. All types of antennas have a coaxial cable 3 or 4 meters long terminated with a connector. **FME** connectors: H1-V1 **SMA** connectors: H1-V2, H2, H3, H7, Q2, E2, H40, STELA-3, H531	
		Magnetic omnidirectional antenna 3 dB This antenna comes with most telemetry units as accessories.	
	AGSM-3dB-FME	Omnidirectional two-band GSM antenna 3 dB, FME connector, 3 m cable	13,-
	AGSM-3dB-SMA	Omnidirectional two-band GSM antenna 3 dB, SMA connector, cable 3 m	13,-
	W	**Magnetic omnidirectional antenna 2 dB for surface mounting** Antenna suitable for installation on metal cabinets or other, for electromagnetic waves, difficult to penetrate materials. The antenna is fastened with a nut to a hole with a diameter of 12 mm.	
	AGSM-2dB/P-FME	Small dual-band GSM antenna 2 dB, panel mount, FME connector, 3 m cable	21,-
	AGSM-2dB/P-SMA	Small dual-band GSM antenna 2 dB, panel mount, SMA connector, 3 m cable	21,-
	W	**Magnetic omnidirectional antenna 9 dB** Antenna suitable for weak signal areas. Robust GSM cable with a length of 3.5 m.	
	AGSM-9dB-SMA	Omnidirectional GSM antenna 9 dB, magnetic mounting, SMA connector, cable 3.5 m	21,-
	AGSM-9dB-FME	Omnidirectional GSM antenna 9 dB, magnetic mounting, FME connector, cable 3.5 m	21,-
	W	**Directional antenna 12 dB** A directional GSM antenna requires precise routing and a homogeneous electromagnetic field. If any of these assumptions are not met, the antenna signal is weaker than that of the AGSM-9dB omnidirectional antenna.	
	AGSM -12dB-FME	External directional GSM antenna, 10 elements, coaxial cable 4 m, FME connector	70,-
	AGSM-12dB-SMA	External directional GSM antenna, 10 elements, coaxial cable 4 m, SMA connector	67-
	W	**Coaxial extension cables to antennas**	
		Dual extension cables: FME connectors: H1-V1 units, SMA connectors: H1-V2, H2, H3, H7, Q2, E2, H40 and STELA-3 units	
	PK-GSM-3-FME	Coaxial extension cable 3 m, FME connectors	18,-
	PK-GSM-5-FME	Coaxial extension cable 5 m, FME connectors	21,-
	PK-GSM-8-FME	Coaxial extension cable 8 m, FME connectors	27,-
	PK-GSM-10-FME	Coaxial extension cable 10 m, FME connectors	30,-
	PK-GSM-3-SMA	Coaxial extension cable 3 m, SMA connectors	18,-
	PK-GSM-5-SMA	Coaxial extension cable 5 m, SMA connectors	21,-
	PK-GSM-8-SMA	Coaxial extension cable 8 m, SMA connectors	27,-
	PK-GSM-10-SMA	Coaxial extension cable 10 m, SMA connectors	30,-
	W	**Cover for omnidirectional antenna**	
		Stainless steel cover with flange for mechanical fastening and masking of the GSM omnidirectional antenna at the underground sump, shaft, etc. The antenna is placed in the plastic extension of the cover so that the field around the antenna rod is not weakened. Access to the antenna after removing the cover plug on top of the cover. The cable from the antenna is routed through the center of the flange.	
	KA-600	Cover for omnidirectional antenna with a height of 600 mm	34,-
	KA-1000	Cover for omnidirectional antenna with a height of 1000 mm	43,-

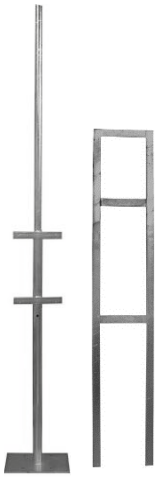
SENSOR CABLES AND INTERCONNECTING EXPANDERS

Display	Type	Description	Price EUR without VAT
	W	**Connecting cables to sensors equipped with an M12 connector**	
		Cables with lengths of 2 to 20 m for connecting sensors and sensors to telemetry units and data loggers. PUR insulation suitable for outdoor use or PVC insulation for indoor use only. One end of the cable is always equipped with an M12 connector (female) for connecting the sensor, the other free end of the cable is connected to the terminals of the station / datalogger connection board.	
	2/4F-2M-PUR	4-core cable 2 m with M12 connector / socket, outdoor design	16,-
	2/4F-5M-PUR	4-core cable 5 m with M12 connector / socket, outdoor design	19,-
	/4F-10M-PUR	4-core cable 10 m with M12 connector / socket, outdoor design	26,-
	M12/4F-20M-PUR	4-core cable 20m with M12 connector / socket, outdoor design	43,-
	M12/4F-2M-PVC	4-core cable 2 m with M12 connector / socket	13,-
	M12/4F-5M-PVC	4-core cable 5 m with M12 connector / socket	17,-
		Extension cables (M12 connectors on both sides of the cable)	
		Extension cables for connecting sensors with M12 connectors. Extension connectors can be used, for example, to connect sensors without cable outlet (RVT12, RVT13, WS103, WD360, TS1700, TS500,…) to the EX6M12 expander.	
	M12/4M-M12/4F-5M-PUR	4-core extension cable 5 m with M12 connectors (socket / plug), outdoor design.	30,-
	M12/4M-M12/4F-10M-PUR	4-core extension cable 10 m with M12 connectors (socket / plug), outdoor design.	37,-
	M12/4M-M12/4F-15M-PUR	4-core extension cable 15 m with M12 connectors (socket / plug), outdoor design.	43,-
	M12/4M-M12/4F-20M-PUR	4-core extension cable 20 m with M12 connectors (socket / plug), outdoor design.	52,-
		Expanders for connecting multiple sensors via RS485	
		Enclosure with IP66 protection equipped with connectors: 6x M12/4F for connection of sensors, 1x Amphenol-7 for connection of level sensor TSH22, 1x M12/4M for connection with telemetry station/datalogger. The delivery includes a stainless steel holder designed for mounting the expander on a mast or column. Cabinet dimensions: 240x 120 x 65 mm.	
	EX6M12/4	Expander with M12 connectors for connecting up to 7 sensors to the RS485 bus	131,-
	W	**Expansion terminal block for RS485** RS485 terminal expander designed for DIN rail installation for connecting several probes and sensors with RS485 bus to one RS485 terminals. Usual use for stations of type C8, H3, H7, Q2 and others. On request, the expander can be supplied with a 6-core cable connected to the individual terminals connected in parallel. When ordering, it is possible to specify the length of this connecting cable (without specification, the connecting cable is 30 cm long).	
	EXSV/DIN- RS485	RS485 terminal expander designed for DIN rail mounting	26,-
	EXSV/DIN/K- RS485	RS485 terminal expander in DIN rail design, connection cable 30 cm	29,-
		**Expansion terminal block for RS485** Expander for connecting multiple probes and sensors with RS485 bus to one terminal. Usual use for M4016 stations.	
	EXSV- RS485	RS485 terminal expander	16,-
	W	**Amphenol connectors**	
		**Connector for connecting external signals** 7-pin connector (s) used to connect a measuring probe or sensor to a portable unit with a connector connection on the side of the cabinet or to the H40, H50 data logger.	
	C91-K7-P	Connector for connecting sensors to the M4016 or H40, H50, IP66, 7-pin unit	9,-
		**Power connector** 7-pin connector (sockets) for supplying external power to the unit in a portable design with connectors on the side of the cabinet.	
	C91-K7-D	Connector for connecting external power supply to the M4016 unit, IP66, 7 sockets	9,-

COMMUNICATION SIGNAL CONVERTERS AND INTERCONNECTING CABLES

Display	Type	Description	Price EUR without VAT
	W B	**USB / RS-232 and USB / RS-485 converters**	
		The converters are used to connect telemetry stations, data loggers, sensors and measuring probes equipped with the RS232 or RS485 bus to a PC or laptop equipped only with USB ports. Included is a driver CD for all common operating systems. The USB-485-SV converter is supplemented with screw terminals and a power cable to the 12 V battery terminals, from which both the converter and the connected sensor / probe can also be powered.	
	USB-485	USB / RS-485 converter in basic design	64,-
	USB-485-SV	USB / RS-485 converter for parameterization of probes, terminals for bus connection	70,-
	UC232R-10	USB / RS-232 converter for connecting telemetry stations via SW MOST	38,-
	W	**Connecting cables between PC / converter and unit / datalogger**	
		The connecting cable is used to connect the unit, data logger or measuring probe to a computer with a communication program installed. Devices communicating with a PC via the RS232 bus require the insertion of a UC232R-10 PC converter and a connecting cable	
	KP232/M12	Cable for PC connection to STELA-3 and H40 station (RS-232 / M12 connector)	33,-
	KP232/M8	Cable for PC connection to H1, H2 (RS-232 / M8 connector)	33,-
	KP232/CANON	Cable for PC connection to M4016 or M2001 station (RS-232 / CANON connector)	9,-
	USB/H7	USB-A communication cable to H3, H7, Q2, E2 units	19,-
	W	**RS-232 / RS-485 MODBUS RTU converter to telemetric station**	
		**External communication module RS-232 / RS-485_MODBUS_RTU** The MEK1 module is used to connect external devices via a serial communication line RS-232 to a telemetry station with RS45 bus. On the side of the connected external device, the module has an RS-232 bus connected to a separate 9-pin CANON connector, and on the side of the connected M4016 station (H1, H7,…) it is an RS-485 bus under the FINET protocol. In the basic version, the MODBUS_RTU communication protocol is implemented on the RS-232 side in the MEK1 module.	
	MEK1/DIN	Converter for communication M4016 with external device via RS-232	143,-

MECHANICAL ASSEMBLY ELEMENTS

Display	Type	Description	Price EUR without VAT
	W	**Console**	
		**Mounting bracket** Galvanized brackets with different liner lengths. The console can be used for suitable placement of the solar panel, antenna or even the measuring sensor and sensor. 1 or 2 T1 brackets can be used to attach the element to the bracket.	
	Konzole-25	Mounting bracket 25 cm for mounting a solar panel or directional GSM antenna	13,-
	Konzole-40	Mounting bracket 40 cm for mounting a solar panel or directional GSM antenna	18,-
	Konzole-50	Mounting bracket 50 cm for mounting a solar panel or directional GSM antenna	19,-
	Konzole-60	Mounting bracket 60 cm for mounting a solar panel or directional GSM antenna	21,-
	W	**Stainless steel stirrups**	
		**Caliper with nut** Stainless steel brackets (A2) fitted with a nut and spring washer in three sizes for attaching various brackets to a mast, railing or boom brackets.	
	T1	Stainless steel caliper M10 x 37 mm (1 “), nuts, washers	5,-
	T1,5	Stainless steel caliper M10 x 51 mm (1 ½ “), nuts, washers	6,-
	T2	Stainless steel caliper M12 x 63 mm (2 “), nuts, washers	7,-
	W	**Mast and stands for ARIA and SCHNEIDER cabinets**	
		Hot-dip galvanized racks for cabinets A stand marked ST2 can be used for outdoor installation of the ARIA32 cabinet, and a ST3 stand for a larger SCH cabinet. The mast type STO-MET-02 is intended for small meteorological stations in ARIA32 cabinets, for which a concrete tile can also be ordered. The mast is fixed to the concrete tile with dowels and stainless steel screws. The mast and both stands are protected against the effects of the weather by hot-dip galvanizing. The cabinets are attached to these holders using the supplied 4 M5x30 screws. M5 threads are prepared in stands/masts. The mounting holes for the screws are only accessible when the cabinet door is open, and because the screw heads are hidden in the cabinet, they make it impossible to disassemble the cabinet without forcibly opening it.	
	ST2-150	Robust stand for ARIA32 and SCH cabinets, height 150 cm, hot-dip galvanized weldment	113,-
	ST2-200	Robust stand for ARIA32 and SCH cabinets, height 200 cm, hot-dip galvanized	118,-
	STO-MET-02	Mast for placing the ARIA32 cabinet, height 200 cm, hot-dip galvanized weldment	133,-
	W	**Concrete tiles under the poles** Concrete foundation under the heel of meteorological poles and under rain gauge stands	
	BETON	Concrete tiles under meteorological and rain gauge stands, weight 60 kg	24,-
	W	**Bracket for fixing the ARIA or SCH cabinet to the pole** Stainless steel holder for attaching the ARIA or SCH cabinet to a pole with a diameter of more than 40 mm using BANDIMEX stainless steel strips. 2 DSS-2 holders are required to mount one cabinet.	
	DSS-2	Stainless steel holder for attaching the cabinet to the pole using Bandimex tapes	13,-
	W	**Mast booms**	
		**Arms for meteorological masts** Robust stainless steel sleeves with welded 8 mm or 10 mm log booms for 33 mm or 50 mm diameter masts, length 280 or 400 mm, various combinations.	
	STO-RAM-1.08.33.400	Single-arm boom 8 mm for meteo mast with a diameter of 33 mm, length 400 mm	25,-
	STO-RAM-1.08.33.400	Two-arm boom 8 mm for meteo mast with a diameter of 33 mm, length 2x400 mm	38,-
	STO-RAM-1.10.50.280	Single-arm boom 10 mm on a meteo mast with a diameter of 50 mm, length 280 mm	30,-
	STO-RAM-2.10.50.280	Two-arm boom 10 mm on a meteo mast with a diameter of 50 mm, length 2x 280 mm	43,-

WATER METERS

INDUSTRIAL WATER METERS AND THEIR ACCESSORIES

Display	Type	Description	Price EUR without VAT
	W	**FLODIS - industrial water meters for single-flow cold water** **Single-flow vane water meter, dry-running, for cold water, accuracy class: horizontal position - C, vertical position - B, DN 15 to DN 32 (threaded connection G¾“ to 1 2/4“)** Mounting position: Horizontal - accuracy class C without demands for calming pipe length, very low pressure drop, high accuracy over a wide flow range, low starting flow, permanently loadable at Qmax, high overload capacity, long-term constant metrological parameters, water inlet filter, high resistance to impurities in the water, hydrodynamically balanced turbine, dry-running counter with wiper as standard pre-equipped for the installation of CYBLE communication elements (1 l / pulse). Water meters are suitable for reducing the cross-section and replacing obsolete water meters	
FLODIS Q2,5-DN15-L165-G3/4		Water meter Qn = 2.5 m^3 / hour, DN 15 L = 165 mm, thread G ¾".	60,-
FLODIS Q2,5-DN15-L165-G1		Water meter Qn = 2.5 m^3 / hour, DN 15 L = 165 mm, thread 1"	65,-
FLODIS Q4-DN20-L190-G1		Water meter Qn = 4 m^3 / hour, DN 20 L = 190 mm, thread 1"	82,-
FLODIS Q6,3-DN25-L260-G5/4		Water meter Qn = 6.3 m^3 / hour, DN 25 L = 260 mm, thread 1 1/4“	171,-
FLODIS Q10-DN32-L260-G6/4		Water meter Qn = 10 m^3 / hour, DN 32 L = 260 mm, thread 1 1/2“	208,-
	W	**FLOSTAR-M - industrial water meters for single-flow cold water** **Threaded design** **Single-flow vane water meter, dry-running, for cold water, accuracy class: horizontal position - C, vertical position - B, DN 40 (threaded connection G 2 “)** Mounting position: horizontal - accuracy class C without demands for calming pipe length, accurate registration of low flows and water leaks, high accuracy in a wide range of flows, possibility of large overload for two hours (fire consumption), 1.5x Qmax! Measuring mechanism with hydrostatically and hydrodynamically balanced turbine, minimum frictional resistance, high accuracy, low pressure drop, metrological stability, rolling turbine mounting - extended service life and higher sensitivity in the area of very small flows, high reliability - single moving part in water, dry-running rotary counter connected to the measuring part by a magnetic coupling, standardly pre-equipped for the installation of the CYBLE communication element. Counter protection IP68 - copper casing and mineral glass. Version for cross-section reductions: DN65 with flanges DN80, DN80 with flanges DN100.	
FLOSTAR Q16-DN40-L300-G2		Water meter Qn = 16 m^3 / hour, DN 40 L = 300 mm, thread 2“	398,-
FLOSTAR 25-DN50-L270-G2,5		Water meter Qn = 25 m^3 / hour, DN 50 L = 270 mm, thread 2 1/2“	456,-
FLOSTAR 25-DN50-L300-G2,5		Water meter Qn = 25 m^3 / hour, DN 50 L = 300 mm, thread 2 1/2“	485,-
		**FLOSTAR-M - industrial water meters for single-flow cold water** **Flange design** **Single inlet vane water meter, dry running, for cold water, accuracy class: horizontal position - C, vertical position - B, DN 40 (Flange connection DN50 to DN150)**	
FLOSTAR Q25-DN50-L270		Water meter Qn = 25 m^3 / hour, DN 50 L = 270 mm, flange PN16	531,-
FLOSTAR Q25-DN50-L300		Water meter Qn = 25 m^3 / hour, DN 50 L = 300 mm, flange PN16	531,-
FLOSTAR Q40-DN65-L300		Water meter Qn = 40 m^3 / hour, DN 65 L = 300 mm, rotating flange PN16	768,-
FLOSTAR Q63-DN80-L300		Water meter Qn = 63 m^3 / hour, DN 80 L = 300 mm, rotating flange PN16	1 108,-
FLOSTAR Q63-DN80-L350		Water meter Qn = 63 m^3 / hour, DN 80 L = 350 mm, rotating flange PN16	1 108,-
FLOSTAR Q100-DN100-L350		Water meter Qn = 100 m^3 / hour, DN 100 L = 350 mm, rotating flange PN16	1 371,-
FLOSTAR Q100-DN100-L360		Water meter Qn = 100 m^3 / hour, DN 100 L = 360 mm, rotating flange PN16	1 454,-
FLOSTAR Q160-DN150-L450		Water meter Qn = 160 m^3 / hour, DN 150 L = 450 mm, rotating flange PN16	2 956,-

W

Industrial water meters for cold water WP and WS, accuracy class B

WOLTEX-M Horizontal woltman water meter (WP)

Dry running water meter, for cold water, accuracy class B is guaranteed in all mounting positions, DN 50 to DN 500

Mounting position horizontal, vertical - accuracy class B, high overload capacity up to twice Qmax, removable - self-calibrating measuring mechanism, hydrodynamically balanced turbine, minimum frictional resistances, rotary dry-running counter, long life and metrological stability, counter standard pre-equipped for CYBLE communication module installation.

WOLTEX-M DN50-Q40-L200	Water meter Qn=40 m^3/hod, DN 50, L=200 mm, PN16	502,-
WOLTEX-M DN65-Q63-L200	Water meter Qn=63 m^3/hod, DN 65, L=200 mm, PN16	529,-
WOLTEX-M DN80-Q100-L200	Water meter Qn=100 m^3/hod, DN 80, L=200 mm, PN16	568,-
WOLTEX-M DN80-Q100-L225	Water meter Qn=100 m^3/hod, DN 80, L=200 mm, PN16	614,-
WOLTEX-M DN100-Q160-L250	Water meter Qn=160 m^3/hod, DN 100, L=250 mm, PN16	654,-
WOLTEX-M DN125-Q160-L250	Water meter Qn=160 m^3/hod, DN 125, L=250 mm, PN16	841,-
WOLTEX-M DN150-Q400-L300	Water meter Qn=400 m^3/hod, DN150, L=300 mm, PN16	1 034,-
WOLTEX-M DN200-Q400-L350	Water meter Qn=400 m^3/hod, DN 200, L=350 mm, PN16	1 456,-
WOLTEXM DN250-Q1000-L450	Water meter Qn=1000 m^3/hod, DN 250, L=450 mm, PN16	2 512,-
WOLTEXM DN300-Q1600-L500	Water meter Qn=1600 m^3/hod, DN 300, L=500 mm, PN16	4 790,-

B W

Remote meter reading – inductive speed sensors for water meters

Inductive speed sensors for FLOSTAR and FLODIS water meters

Inductive water meter speed sensor, output constant 1 l/pulse, sensing principle ensures absolute compliance with the water meter counter, non-magnetic non-contact principle - cannot be affected by external magnetic field, sensor does not generate false pulses in case of vibrations, etc.

CYBLE	Inductive speed sensors for FLOSTAR and FLODIS water meter	Page 22

B W

Inductive speed sensors for ELSTER water meters

Inductive speed sensors for ELSTER water meters, built-in battery for up to 10 years of operation, IP68 protection, cable length 2 m, output load 30 VDC / 30 mA, frequency max 75 Hz, pulse width CH 1P = 5 ms, CH 2P = 50 ms.

FALCON	Inductive speed sensors for ELSTER water meters	Page 22

B W

Remote meter reading - OPTO speed sensors for water meters

OPTO sensors

OPTO sensor for water meters ABB, Hydrometer, Sensus Metering System (formerly Meinecke), Schlumberger, etc.

OPTO VC, VLC	OPTO sensors for the water meter	Page 22

Other accessories for water meters

W

Brass fitting with seal (delivery only with water meter)

WAAI-012	Water meter brass fitting DN15, price for 1 pair including seals	5,-
WAAI-013	Water meter brass fitting DN20, price for 1 pair including seals	7,-
WAAI-014	Water meter brass fitting DN25, price for 1 pair including seals	13,-
WAAI-015	Water meter brass fitting DN30, price for 1 pair including seals	20,-
WAAI-016	Water meter brass fitting DN40, price for 1 pair including seals	27,-

W

Spring-loaded non-return valve

ZK-DN15	Spring-loaded non-return valve for domestic and industrial water meters DN15	4,-
ZK-DN20	Spring-loaded non-return valve for domestic and industrial water meters DN20	5,-
ZK-DN25	Spring-loaded non-return valve for domestic and industrial water meters DN 25	9,-
ZK-DN32	Spring-loaded non-return valve for domestic and industrial water meters DN32	18,-

SOFTWARE AND SERVER SERVICES, SIM CARDS

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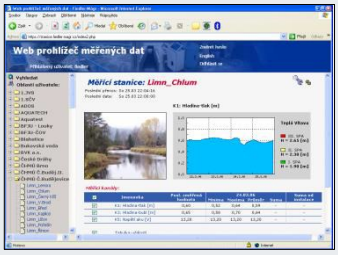
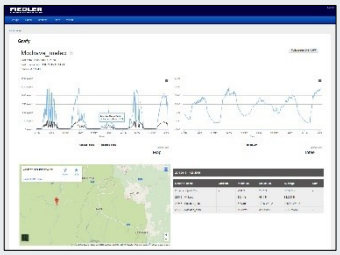
Display	Type	Description	Price EUR without VAT
	B W	**Datahosting - FMweb and ClouFM portal**	
		Online web services for registered users of FIEDLER AMS devices FMweb and CloudFM are online web services providing users with access to measured data, diagnostics and parameter settings of individual measuring stations and data loggers. The set of these services is called Datahosting. The service includes rental of space on a data server for data collection from stations equipped with a communication module, user-friendly creation of graphs, exports of measured data from the database on the server to the PC of an authorized client, etc. Access to archived data is allowed to authorized clients via web interface. The older FMweb service is intended for all types of FIEDLER devices, with the exception of devices for remote reading of utilities, and is available at **stanice.fiedler-magr.cz**. The newer CloudFM service is designed for all devices with a focus on new device types and remote and manual utility reading, and is available at **cloud.fiedler.company**. Both services differ graphically and also have different login details. The default functionality is similar, the visualization of the new version then adds several new features - for example, allows you to insert photos of the location of the devices, display the location or other important information written, for example, in the form of a note in the FIEDLER Connect mobile application. The cloud portal also offers a set of advanced graphic blocks for creating control rooms and surveillance systems such as map visualizations and technology screens. The services work with the same devices at the same time. In general, the devices are available in both services, only in the newer cloud, more options are available and functions such as data can be included in dispatch monitoring. If the user has established access to both services, he can choose which of the services he will use at any time. **Parameterization of devices** Key features of the portal include tools for managing measuring points and communication devices. The system allows full remote parameterization in devices from a web browser from almost anywhere. All changes made in the device parameterization are recorded and archived. The user can browse the change history and restore the settings in the device according to the older configuration. The alarm system allows you to set alerts associated with the monitoring of measured quantities and error conditions of physical devices in the field. Login and connection to the services is secured by a certificate and encrypted according to security standards. Charging for the service according to the type and number of devices / stations registered with the user: The **Datahosting** service is intended for users with the number of stations from 1 to 50. The **Datahosting+** service is intended for those users who own more than 50 stations. Prices are set for remote readings by design.	
Datahosting		Server services per station and month	3,80
Datahosting+		Server services per station and month	1,60





MOST2

Program for parameterization of devices and basic processing of measured data

MOST is a local desktop application designed for computers with the Windows operating system, which allows the configuration of FIEDLER measuring devices first launched on the market before 2015. The program is mainly used to set parameters of devices connected to the computer via communication cable or remotely via server service.

The program is also used to display the current measured values and states of the binary inputs / outputs. MOST2 is a suitable tool for basic evaluation of measured data in the field. An important function of the program is device diagnostics and the ability to perform unit connectivity tests.

Loading data into the program can be done either by cable from the connected station, by exporting a data file from the server or by dialing a data call. The program is useful for parameterizing units in places where there is no possibility of internet connection.

The measured data from the device can be visualized in the form of graphs and tables and possibly also downloaded to a computer and backed up.

The program supports Windows 7 and higher.

You can get the current version of the MOST2 program in the "Downloads" section of the manufacturer's website. Assuming you have purchased a license number, you will receive an unlimited version. Otherwise, the program serves as a DEMO version without the possibility of communication with the device.

The MOST program is not part of the standard delivery of the station.

The program can be purchased in the standard version for installation on one computer or in the version of volume licensing (ML), which allows installation on an unlimited number of computers within the organization.

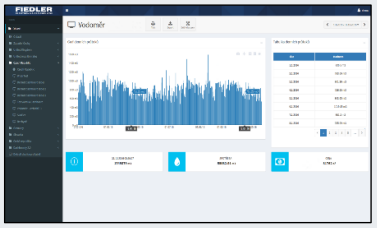
MOST2	Basic setting and evaluation program for FIEDLER AMS stations	240,-
MOST-NL	Second and additional program licenses within one organization	70,-
MOST-ML	Volume licensing program for an unlimited number of installations within one organization	310,-

MOST4

Program for setting the parameters of devices placed on the market after 2015

The application is primarily intended for use in a cloud environment where the user does not need to install any software and can parameterize the devices remotely using a web browser and server services within Datahosting.

For devices installed in locations without available connectivity or for devices without a communication module, a local off-line version of this product can be used, which is installed on a Windows or Linux operating system as a traditional desktop application. It is then possible to communicate with the device locally, eg via a connecting cable or wirelessly using Bluetooth communication, and to perform direct parameterization of the units.



The online version is implemented in the form of a module on the CloudFM platform. It allows you to directly view the measured data in the form of graphs and tables.

Different modes of visualization of set parameters.

The user environment of the application is designed with regard to its use by experienced experts and professionals, as well as ordinary users without detailed knowledge of the structures of individual groups of parameters of the set device. The working environment of the application can be displayed in various visualization modes according to the user experience (tree mode and wizard mode).

How to get MOST4

The online version of the CloudFM MOST4 service is available to users of FIEDLER AMS devices via the CloudFM web portal. To access this portal, the user must first have an account set up in the cloud. After logging in to the account, the user will see the Device stations configuration tab, to which he has been assigned user rights for their parameterization.

An offline version of the MOST4 product is available in the software download center on the manufacturer's website.

The MOST4 program is not part of the standard delivery of the station.

MOST4	Program for setting parameters and viewing measured data	free

Hladiny.cz

Current levels of rivers and precipitation totals

The freely accessible server contains current water levels measured by FIEDLER AMS telemetry stations on the reporting profiles of CHMI and companies Povodí s.p. and levels of levels from local warning systems of cities and municipalities (LWS).

On the server, weekly level graphs and small two-day graphs for mobile phones are updated immediately after data transfer from the station to the database to the server.

FIEDLER Connect

Mobile application for data readings, device management and parameterization

FIEDLER Connect is a mobile application running on the Android OS designed for direct communication with FIEDLER AMS devices, primarily for the purpose of reading data from Smart metering modules, for their configuration and diagnostics. The extended version of the application also offers a user interface for manual consumption reading.

Features and functions

- Display of current data and device configuration locally and via the cloud
- Wireless communication with devices simply by attaching via NFC or Bluetooth
- Application usable with other FIEDLER devices without NFC and Bluetooth support
- Ability to read alarms and events from the device
- Unit diagnostics and support for manual readings
- Support for off-line work in the application
- High security and access control

The application is synchronized with the FIFLER AMS CloudFM web portal. In the case of manual readings, the data is recorded in the application and sent to the web portal at the same time.

FIEDLER Connect can be downloaded to a mobile phone on Google Play.

FIEDLER CONNECT	Mobile application for data readings, device management and parameterization	free

SIM CARD RENTAL AND DATA PACKAGES

Display	Type	Description	Price EUR without VAT
	W	**SIM cards**	
		**SIM card rental for FIEDLER AMS telemetry stations** One-time activation of the SIM from O2 with the M2M tariff and its subsequent long-term rental based on a contractual relationship only to FIEDLER AMS stations. The price of the monthly flat rate includes 1 MB of GSM / GPRS communication data. Any sending of an SMS from the station will be additionally charged with the amount of CZK 1.30. Invoicing together with data hosting quarterly (for less than 5 cards per user) or monthly (5 or more cards per user) according to the actually transferred data and the number of sent SMS. At the beginning of the rental, the SIM card supplier performs its one-time paid activation.	
flat rate		Monthly fee 40 CZK, included 1 MB of data	1,60
SIM O2-FM2M		One-time activation of SIM from O2, M2M tariff, flat rate CZK 40 / month / 1 MB of data	10,00
	W	**Data packages for level meter H531**	
		**Data transfers and cloud data hosting services for the H531 level meter** Data packages are used to extend data hosting services on the manufacturer's server (graphical and tabular display of measured data) and costs for GSM / GPRS data transmissions of the H531-G level meter over the basic 5-year period, which is already included in the purchase price of the level meter. After 5 years from the acquisition of the level meter, the prepaid operating costs for data hosting services will be exhausted and these services must be extended by purchasing one of the offered data packages or operating the H531-G level meter without using remote access services. The price advantage for data hosting services within the data package applies to the first two H531-G level meters operated by one customer.	
Datahosting H531 GSM 1D2Y		Two-year GSM data package, transfers once a day from H531 to the server, data hosting	28,00
Datahosting H531 GSM 1D5Y		Five-year GSM data package, transfers once a day from H531 to the server, data hosting	60,00

FIEDLER
ELEKTRONIKA PRO EKOLOGII

Price list · edition 1.03 · 3/2026 · new release will supersede the old issue of validity

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