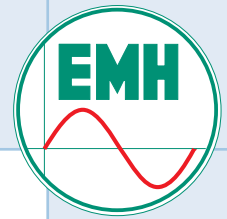


Technical Specification



- ✓ Design accord. to VDEW-Specifications 2.1
- ✓ Measuring accuracy in Cl. 0.2
- ✓ Auxiliary voltage input 48-300 V AC/DC
- ✓ Long-range version and certification relevant logbook
- ✓ DCF-connection
- ✓ Optical fibre interface
- ✓ Detection of momentary values



Precision Meter 0.2 for 19" Module Carrier



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Voltage	4-wire meter 3-wire meter 2-wire meter	3x58/100 V...3x240/415 V, optional up to 3x400/690 V 3x100 V...3x415 V, optional up to 3x690 V 1x58 V...1x240 V
Current		5I11 A, 1 A, 1(2) A, 5 A
Frequency		50 Hz, 60 Hz, optional 16 ² / ₃ Hz
Accuracy	active energy reactive energy	Cl. 0.2 0.5% (Cl. 2)
Measuring system	designation	compensated current transformer
Measuring types	active energy reactive energy others	P+, P- Q+, Q-, Q1, Q2, Q3, Q4 S, Ah, U ² h, I ² h
Meter constants	LED (Imp./kWh[kvarh]) Output (Imp./kWh[kvarh]) configuration ability	10 000...100 000 (depending on meter type) 5 000...50 000 (depending on meter type) after certification by means of the certification relevant logbook
Energy registers	maximum number	32 tariff registers + 8 tariffless registers, each with 15 historical values
Maximum registers	maximum number measuring period	32 maximum registers, each with 15 historical values 1, 5, 10, 15, 30, 60 min, adjustable
Load profile	maximum number of channels typical memory depth at 1 channel registering period registering type	32 317 days 1, 5, 10, 15, 30, 60 min, adjustable power, energy, energy feed
Real Time Clock	accuracy synchronization running reserve battery running reserve capacitor	within ± 5 ppm via data interfaces, control input or DCF-module > 20 years > 10 days
Control inputs	S0-input/system voltage	max. 5 / max. 7
Data retention time		without voltage in the FLASH-ROM, at least 20 years
Display	display version alternative display version height of digits	VDEW-display 84 mm x 24 mm alphanumeric display 4 x 20 characters 8 mm
Operation	mechanical buttons optical sensor	for operation of display and reset (sealable) for operation of display
Data interface	optical data interface electrical data interface data protocols maximum transmission rate	optical data interface D0 RS485, CLO or RS232 IEC 62056-21 or DLMS 9600 Baud (fixed or Mode C)
Outputs	maximum number Opto-MOSFET relays	8 max. 250 V AC/DC, 100 mA, make contact or break contact max. 250 V AC/DC, 100 mA (max. 2 relays)
Energy supply	switched-mode power supply mains buffering time	3-phase > 500 ms, optional > 1 s
Auxiliary voltage supply	long-range	48...300 V AC/DC
Power consumption per phase (Basic meter)	voltage path with auxiliary voltage without auxiliary voltage current path auxiliary voltage	< 0.02 VA / < 0.01 W (3x58/100 V) < 0.45 VA / < 0.45 W (3x58/100 V) < 0.008 VA < 2.9 VA
EMV-characteristics	isolation resistance surge voltage resistance against HF-fields	isolation: 4 kV AC, 50 Hz, 1 min surge voltage: 8 kV, impulse 1,2/50 µs, 2 Ω (measuring path, aux. voltage) 6 kV, impulse 1,2/50 µs, 500 Ω (Output: Opto-MOSFET, relays) 30 V/m (with load)
Temperature range	operating/limit and storage	-25°C...+55°C / -40°C...+70°C
Relative humidity		90% at 40°C, non-condensing
Housing	dimensions class of protection class of protection: housing housing material fire characteristics weight	accord. to DIN 43862 / IEC 297-3 (42 TE) class of protection 1 IP 50 aluminium, polycarbonate flame-inhibiting (without halogen) 2.1 kg
Terminals		ESSAILEC-plug-in system or Phoenix-screw terminals
Further features	detection of momentary values installation control optical fibre connection	P, Q, S (per phase and sum), U, I, power factor (per phase), line frequency, phase failure via momentary values (service data) possible for connection of up to 4 optical fibre separation boxes