

CEWE Prometer

precision metering

IEC 61850 is a worldwide standard for the design of electrical substation automation systems. Our solution, Cewe Prometer with an external converter, provides metering data using IEC 61850 standard protocol. An easy-to-use software tool enables configuration of protocol attributes, mapping data, IP address and functions such as firmware updating and diagnostics.



Application

- Grid and feeder metering
- Substation automation systems
- Online monitoring

Benefits

- Provides connectivity with SCADA and other tools supporting IEC61850
- Simple and quick to configure, commission and maintain
- Functional interoperability with potential for future system expansion

Features

- Rack or wall-mounted meter, DIN-rail mounted IEC 61850 protocol converter
- Integration of up to eight meters with a single converter
- Instantaneous values (voltage, current, power, energy etc.) with high accuracy
- Transparent channel functionality support
- Easy to configure



Technical specifications

Electrical

Voltage range	3x100-240 V (3-wire system), 3x57/99-240/415 V (4-wire system)
Max. overload voltage	1.3xUn continuously, 2xUn for 0.5s
Current range	1(2)/5(10) A, user programmable
Max. overload current	2 × In -continuously, 10 × In for 10 sec., 40 x In for 1 sec.
Frequency	50 Hz (45-55) or 60 Hz (55-65)
Accuracy	0.2s, 0.5s
Auxiliary Supply	40-276 V AC/DC

CewePrometer-R can be equipped with 2 power supplies
CewePrometer-W can either have internal or external supply

Compliance

Standard	IEC 62052-11, IEC 62053-22, IEC 62053-23 (for Class 0.2s, 0.5s)
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Environmental

Ingress protection	IP 51
Temperature	-20 °C to +55 °C (working) -40 °C to +70 °C (operating) -40 °C to +80 °C (storage)

Communication

Optical port	IEC62056-21 optical communication port (IEC62056-21 Protocol)
Serial port	RS232 or RS422/RS485 serial communication port (IEC62056-21, DLMS Protocol)
Ethernet port	Ethernet communication port (IEC6205621, DLMS Protocol)

IEC 61850 converter	
Processor	ARM9 32-bit CPU, 180 MHZ
System memory	32 MB SD RAM, 256 MB Flash
Serial ports	COM1-2, RS232/RS485
Network support	1 Ethernet 10-Base T/100 Base T with 1.5 kV magnetic isolation protection
LED	Serial (TxD & RxD), Ready, LAN10/100X2
Power input	Nominal 24 V DC (19 V to 29 V DC)
Power consumption	15 W
Dimension	165 (Height) x 70 mm (Width) x 135 mm (Depth)
Mounting	DIN-Rail
Weight	0.65 kg (approx.)
Operating temperature	-20° to +60°C
Certifications/tests	IEC 61850-3 with exceptions, IEC 61000-4 (2, 3, 4, 5, 6, 8, 29, 12, 17)