



Main

Range	PowerLogic
Product name	PowerLogic PM5000
Device short name	PM5580
Product or component type	Power meter

Complementary

Power quality analysis	Up to the 63rd harmonic
Metering type	Measured neutral current Calculated ground current
Device application	Gateway WAGES metering Power monitoring Multi-tariff
Type of measurement	Current Voltage Frequency Power factor Energy Active and reactive power
Supply voltage	24 V DC
Network frequency	60 Hz 50 Hz
[In] rated current	1 A 5 A
Type of network	3P + N 3P 1P + N
Maximum power consumption in VA	10 VA at 480 V
Ride-through time	35 Ms 120 V AC typical 129 ms 230 V AC typical
Display type	Backlit LCD
Display resolution	128 x 128 pixels
Sampling rate	128 samples/cycle
Measurement current	5...10000 mA
Analogue input type	Voltage (impedance 5 MOhm) Current (impedance 0.3 mOhm)
Measurement voltage	20...400 V AC 45...65 Hz between phase and neutral 20...690 V AC 45...65 Hz between phases
Frequency measurement range	45...65 Hz
Number of inputs	4 digital

Measurement accuracy	Apparent power +/- 0.5 % Frequency +/- 0.05 % Active energy +/- 0.2 % Reactive energy +/- 1 % Active power +/- 0.2 % Voltage +/- 0.1 % Power factor +/- 0.005 Current +/- 0.15 °C
Accuracy class	Class 0.2S active energy conforming to IEC 62053-22
Number of outputs	2 digital
Information displayed	Tariff (8)
Communication port protocol	Modbus RTU and ASCII at 9.6, 19.2 and 38.4 kbauds even/odd or none - 2 wires, insulation 2500 V JBUS Modbus TCP/IP at 10/100 Mbit/s, insulation 2500 V Ethernet Modbus TCP/IP daisy chain BACnet IP
Communication port support	RS485 Ethernet
Communication gateway	Ethernet/serial
Data recording	Event logs Maintenance logs Min/Max of instantaneous values Data logs Alarm logs Time stamping
Memory capacity	1.1 MB
Web services	Alarm notification by e-mail Web server Diagnostic via predefined web pages Real time viewing of data
Ethernet service	SNTP client SNMP-Traps
Connections - terminals	Voltage circuit: screw terminal block4 Control circuit: screw terminal block2 Current transformer: screw terminal block6 RS485 link: screw terminal block4 Digital input: screw terminal block8 Digital output: screw terminal block4 Ethernet network: RJ45 connector2
Mounting mode	Flush-mounted
Mounting support	Framework
Standards	EN 50470-3 IEC 61557-12 IEC 62053-22 IEC 62053-24 IEC 60529 EN 50470-1 UL 61010-1
Product certifications	CE conforming to IEC 61010-1 CULus conforming to UL 61010-1
Width	96 mm
Depth	72 mm
Height	96 mm
Net weight	450 g

Environment

Electromagnetic compatibility	Limits for harmonic current emissions class A conforming to IEC 61000-3-2 Conducted RF disturbances level 3 conforming to IEC 61000-4-6 Magnetic field at power frequency level 4 conforming to IEC 61000-4-8 Conducted and radiated emissions class B conforming to EN 55022 Limitation of voltage changes, voltage fluctuations and flicker in low-voltage conforming to IEC 61000-3-3 Electrostatic discharge - test level: 8 kV level 4 conforming to IEC 61000-4-2 Radiated radio-frequency electromagnetic field immunity test conforming to IEC 61000-4-3 Electrical fast transient/burst immunity test level 4 conforming to IEC 61000-4-4 Surge immunity test level 4 conforming to IEC 61000-4-5 Voltage dips and interruptions immunity test conforming to IEC 61000-4-11
IP degree of protection	IP52 front: conforming to IEC 60529 IP30 body: conforming to IEC 60529
Relative humidity	5...95 % at 50 °C
Pollution degree	2
Ambient air temperature for operation	-25...70 °C
Ambient air temperature for storage	-40...85 °C
Operating altitude	3000 m

Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	REACH Declaration
EU RoHS Directive	Compliant EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS Declaration
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End Of Life Information