Product data sheet
Characteristics

METSEPM5580
power meter PowerLogic PM5580, 2 ethernet, up to 63th Harmonic, 1,1MB, 24VDC, 4DI/2DO 52 alarms



Main

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

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
[Us] rated supply voltage	24 V DC
Network frequency	60 Hz 50 Hz
[In] rated current	1 A 5 A
Poles description	3P + N 3P 1P + N
Maximum power consumption in VA	16 VA at 480 V
Ride-through time	35 Ms 120 V AC typical 129 Ms 230 V AC typical 50 Ms 125 V DC typical
Display type	Monochrome graphic LCD
Display resolution	128 x 128 pixels
Sampling rate	128 samples/cycle
Measurement current	50…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…828 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 % Reactive power +/- 1 %
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 JBUS Modbus TCP/IP at 10/100 Mbit/s, insulation 2500 V Ethernet Modbus TCP/IP daisy chain BACnet IP DNP3 over ethernet
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 61557-12:2015 IEC 62053-22:2020 IEC 62053-24 IEC 60529 EN 50470-1 UL 61010-1 IEC 62053-23:2020 IEC 62052-11:2020 IEC 62052-31:2015
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 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	IP54 display: conforming to IEC 60529 IP30 rear: conforming to IEC 60529
Relative humidity	5…95 % at 50 °C non-condensing
Pollution degree	2
Ambient air temperature for operation	-25…70 °C
Ambient air temperature for storage	-40…85 °C
Operating altitude	<= 3000 m

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	11.500 Cm
Package 1 Width	12.500 Cm
Package 1 Length	13.000 Cm
Package 1 Weight	575.000 G
Unit Type of Package 2	S03
Number of Units in Package 2	12
Package 2 Height	30.000 Cm
Package 2 Width	30.000 Cm
Package 2 Length	40.000 Cm
Package 2 Weight	7.440 Kg

Offer Sustainability

Recyclability potential, in %	11
Total lifecycle Carbon footprint	478 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	79.869
Carbon footprint of the manufacturing phase [A1 to A3]	80 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.065027
Carbon footprint of the distribution phase [A4]	0.1 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.0095935
Carbon footprint of the installation phase [A5]	0 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	398.04
Carbon footprint of the use phase [B2, B3, B4, B6]	398 kg CO2 eq.
Sustainable packaging	No
Carbon footprint of the end-of-life phase [C1 to C4]	0.30827
Carbon footprint of the end-of-life phase [C1 to C4]	0.3 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile
Total lifecycle Carbon footprint	478
Packaging made with recycled cardboard	No
Packaging without single use plastic	No
SCIP Number	A7ebbabc-caf1-4cb4-a60a-4e5e23907d1f
REACh Regulation	Reference contains Substances of Very High Concern above the threshold
EU RoHS Directive	Compliant By Exemption
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, w
End of life manual availability	End Of Life Information

Take-back	No
WEEE Label	The product must be disposed on European Union markets following specific waste collection and

Contractual warranty

Warranty (in months)	18

Product Life Status : Commercialised