Product data sheet Characteristics

METSEPM5111

PM5111 powermeter w modbus - upto 15th H - 1DO 33alarms - flush - MID



Main

Range	PowerLogic
Product name	PowerLogic PM5000
Device short name	PM5111
Product or component type	Power meter

Complementary

Device application Power monitoring Type of measurement Active and reactive power Energy Power factor Frequency Voltage Current Supply voltage 125250 V DC 100415 V AC (4565 Hz) Network frequency 50 Hz 60 Hz In) rated current 1 A 5 A Type of network 1P + N 3P 3P 3P 3P N Power consumption in VA 10 VA at 415 V Display type Backlit LCD Display resolution 128 x 128 pixels Sampling rate 64 samples/cycle Measurement current 10 mA9 A Analogue input type Voltage (impedance 5 MOhm) Current (impedance 0.3 mOhm) Measurement voltage 20400 V AC 4565 Hz between phase and neutral 35690 V AC 4565 Hz between phases Frequency measurement range 4565 Hz between phase and neutral 4565 Hz between phases Measurement accuracy 4565 Hz between phase and neutral 4565 Hz between phases Frequency measurement range 4565 Hz between phase and neutral 4565 Hz between phases Frequency measurement range 4565 Hz between phase and neutral 4565 Hz between phases Frequency measurement range 4565 Hz between phase and neutral 4565 Hz between 4565 Hz between 4565 Hz betwee	Power quality analysis	Up to the 15th harmonic
Energy Power factor Frequency Voltage Current Supply voltage 125250 V DC 100415 V AC (4565 Hz) Network frequency 50 Hz 60 Hz 10 Hz 1	Device application	Power monitoring
100415 V AC (4565 Hz) Network frequency	Type of measurement	Energy Power factor Frequency Voltage
[In] rated current 1 A 5 A Type of network 1P + N 3P 3P + N Power consumption in VA 10 VA at 415 V Display type Backlit LCD Display resolution 128 x 128 pixels Sampling rate 64 samples/cycle Measurement current 10 mA9 A Analogue input type Voltage (impedance 5 MOhm) Current (impedance 0.3 mOhm) Measurement voltage 20400 V AC 4565 Hz between phase and neutral 35690 V AC 4565 Hz between phases Frequency measurement range 4565 Hz Measurement accuracy +/- 0.5 % current +/- 0.05 % power factor +/- 0.05 % power factor +/- 0.05 % apparent power +/- 0.5 % active power +/- 0.5 % active power +/- 0.5 % active energy +/- 0.5 % active energy Accuracy class Class 0.5S (active energy according to IEC 62053-22) Number of outputs Communication port protocol JBUS Modbus RTU and ASCII 2 wires, : 9.6, 19.2 and 38.4 kbauds, even/odd or none, insulation: 2500 V	Supply voltage	
Type of network	Network frequency	
SP 3P + N	[In] rated current	
Display type Backlit LCD Display resolution 128 x 128 pixels Sampling rate 64 samples/cycle Measurement current 10 mA9 A Analogue input type Voltage (impedance 5 MOhm) Current (impedance 0.3 mOhm) Measurement voltage 20400 V AC 4565 Hz between phase and neutral 35690 V AC 4565 Hz Frequency measurement range 4565 Hz Measurement accuracy 4/- 0.5 % voltage 4/- 0.5 % current 4/- 0.005 % power factor 4/- 0.05 % power factor 4/- 0.05 % frequency 4/- 0.5 % active power 4/- 0.5 % active energy 4/- 0.5 % active energy 4/- 0.5 % active energy 1/- 0.5 % active energy according to IEC 62053-22) Number of outputs 1 digital Communication port protocol JBUS Modbus RTU and ASCII 2 wires, : 9.6, 19.2 and 38.4 kbauds, even/odd or none, insulation: 2500 V	Type of network	3P
Display resolution 128 x 128 pixels Sampling rate 64 samples/cycle Measurement current 10 mA9 A Analogue input type Voltage (impedance 5 MOhm) Current (impedance 0.3 mOhm) Measurement voltage 20400 V AC 4565 Hz between phase and neutral 35690 V AC 4565 Hz between phases Frequency measurement range 4565 Hz Measurement accuracy +/- 0.5 % voltage +/- 0.5 % current +/- 0.005 % power factor +/- 0.05 % frequency +/- 0.5 % active power +/- 0.5 % active power +/- 0.5 % active energy Accuracy class Class 0.5S (active energy according to IEC 62053-22) Number of outputs Communication port protocol JBUS Modbus RTU and ASCII 2 wires, : 9.6, 19.2 and 38.4 kbauds, even/odd or none, insulation: 2500 V	Power consumption in VA	10 VA at 415 V
Sampling rate 64 samples/cycle Measurement current 10 mA9 A Analogue input type Voltage (impedance 5 MOhm) Current (impedance 0.3 mOhm) Measurement voltage 20400 V AC 4565 Hz between phase and neutral 35690 V AC 4565 Hz between phases Frequency measurement range 4565 Hz Measurement accuracy +/- 0.5 % voltage +/- 0.5 % current +/- 0.05 % frequency +/- 0.5 % active power +/- 0.5 % apparent power +/- 0.5 % active energy +/- 0.5 % active energy Accuracy class Class 0.5S (active energy according to IEC 62053-22) Number of outputs 1 digital Communication port protocol JBUS Modbus RTU and ASCII 2 wires, : 9.6, 19.2 and 38.4 kbauds, even/odd or none, insulation: 2500 V	Display type	Backlit LCD
Measurement current 10 mA9 A Analogue input type Voltage (impedance 5 MOhm) Current (impedance 0.3 mOhm) Measurement voltage 20400 V AC 4565 Hz between phase and neutral 35690 V AC 4565 Hz between phases Frequency measurement range 4565 Hz Measurement accuracy +/- 0.5 % voltage +/- 0.5 % current +/- 0.005 % power factor +/- 0.05 % frequency +/- 0.5 % apparent power +/- 0.5 % active power +/- 0.5 % active energy +/- 0.5 % active energy Accuracy class Class 0.5S (active energy according to IEC 62053-22) Number of outputs 1 digital Communication port protocol JBUS Modbus RTU and ASCII 2 wires, : 9.6, 19.2 and 38.4 kbauds, even/odd or none, insulation: 2500 V	Display resolution	128 x 128 pixels
Analogue input type Voltage (impedance 5 MOhm) Current (impedance 0.3 mOhm) Measurement voltage 20400 V AC 4565 Hz between phase and neutral 35690 V AC 4565 Hz between phases Frequency measurement range 4565 Hz Measurement accuracy +/- 0.5 % voltage +/- 0.5 % current +/- 0.005 % power factor +/- 0.05 % frequency +/- 0.5 % apparent power +/- 0.5 % active power +/- 0.5 % active energy Accuracy class Class 0.5S (active energy according to IEC 62053-22) Number of outputs 1 digital Communication port protocol JBUS Modbus RTU and ASCII 2 wires, : 9.6, 19.2 and 38.4 kbauds, even/odd or none, insulation: 2500 V	Sampling rate	64 samples/cycle
Current (impedance 0.3 mOhm) Measurement voltage 20400 V AC 4565 Hz between phase and neutral 35690 V AC 4565 Hz between phases Frequency measurement range 4565 Hz Measurement accuracy +/- 0.5 % voltage +/- 0.5 % current +/- 0.005 % power factor +/- 0.05 % frequency +/- 0.5 % apparent power +/- 0.5 % active power +/- 0.5 % active energy +/- 0.5 % active energy +/- 0.5 % active energy Accuracy class Class 0.5S (active energy according to IEC 62053-22) Number of outputs 1 digital Communication port protocol JBUS Modbus RTU and ASCII 2 wires, : 9.6, 19.2 and 38.4 kbauds, even/odd or none, insulation: 2500 V	Measurement current	10 mA9 A
Frequency measurement range 4565 Hz Measurement accuracy +/- 0.5 % voltage +/- 0.5 % current +/- 0.005 % power factor +/- 0.05 % frequency +/- 0.5 % active power +/- 0.5 % active energy +/- 0.5 % active energy Accuracy class Class 0.5S (active energy according to IEC 62053-22) Number of outputs 1 digital Communication port protocol JBUS Modbus RTU and ASCII 2 wires, : 9.6, 19.2 and 38.4 kbauds, even/odd or none, insulation: 2500 V	Analogue input type	
Measurement accuracy +/- 0.5 % voltage +/- 0.5 % current +/- 0.005 % power factor +/- 0.05 % frequency +/- 0.5 % apparent power +/- 0.5 % active power +/- 0.5 % active energy +/- 0.5 % active energy Accuracy class Class 0.5S (active energy according to IEC 62053-22) Number of outputs 1 digital Communication port protocol JBUS Modbus RTU and ASCII 2 wires, : 9.6, 19.2 and 38.4 kbauds, even/odd or none, insulation: 2500 V	Measurement voltage	
+/- 0.5 % current +/- 0.005 % power factor +/- 0.05 % frequency +/- 0.5 % apparent power +/- 0.5 % active power +/- 0.5 % active energy +/- 0.5 % active energy Accuracy class Class 0.5S (active energy according to IEC 62053-22) Number of outputs 1 digital Communication port protocol JBUS Modbus RTU and ASCII 2 wires, : 9.6, 19.2 and 38.4 kbauds, even/odd or none, insulation: 2500 V	Frequency measurement range	4565 Hz
Number of outputs 1 digital Communication port protocol JBUS Modbus RTU and ASCII 2 wires, : 9.6, 19.2 and 38.4 kbauds, even/odd or none, insulation: 2500 V	Measurement accuracy	+/- 0.5 % current +/- 0.005 % power factor +/- 0.05 % frequency +/- 0.5 % apparent power +/- 0.5 % active power +/- 2 % reactive energy
Communication port protocol JBUS Modbus RTU and ASCII 2 wires, : 9.6, 19.2 and 38.4 kbauds, even/odd or none, insulation: 2500 V	Accuracy class	Class 0.5S (active energy according to IEC 62053-22)
Modbus RTU and ASCII 2 wires, : 9.6, 19.2 and 38.4 kbauds, even/odd or none, insulation: 2500 V	Number of outputs	1 digital
Communication port support RS485	Communication port protocol	Modbus RTU and ASCII 2 wires, : 9.6, 19.2 and 38.4 kbauds, even/odd or none,
	Communication port support	RS485

Data recording	Min/Max of instantaneous values	
	Time stamping	
Mounting mode	Flush-mounted	
Mounting support	Framework	
Standards	IEC 60529	
	IEC 61557-12	
	IEC 62053-22	
	EN 50470-1	
	EN 50470-3	
	IEC 62053-24	
Product certifications	MID conforming to EN 50470-3	
	MID conforming to EN 50470-1	
	CULus conforming to UL 61010-1	
	CE conforming to IEC 61010-1	
Width	96 mm	
Depth	72 mm	
Height	96 mm	
Product weight	380 g	

Environment

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Electromagnetic compatibility	 conducted and radiated emissions class class B, conforming to EN 55022 magnetic field at power frequency class level 4, conforming to IEC 61000-4-8 conducted RF disturbances class level 3, conforming to IEC 61000-4-6 electrostatic discharge class level 4, conforming to IEC 61000-4-2 limits for harmonic current emissions class class A, conforming to IEC 61000-3-2
IP degree of protection	IP30 (body) conforming to IEC 60529 IP52 (front) conforming to IEC 60529
Relative humidity	595 % 50 °C
Pollution degree	2
Ambient air temperature for operation	-2570 °C
Ambient air temperature for storage	-4085 °C
Operating altitude	2000 m

