

New!

PowerLogic PM8000 Power and Energy Meters

These compact meters help ensure the reliability and efficiency of your facility by making the management of power quality, availability, and reliability easy. Measure, understand, and act on insightful power and energy data gathered from your entire system.

The best choice for power management

PM8000 meters combine accurate 3-phase energy and power measurements with data logging, power quality analysis, alarming and I/O capabilities not typically available in such compact meters. Four-metered current inputs allow direct measurement of 3-phase currents and neutral current for enhanced view of harmonics. Dual Ethernet ports support daisy-chaining, removing need for an Ethernet switch inside power equipment, while redundant ring topology provides enhanced availability. Modular, field installable I/O provides expandable scalability. Patented ION technology combines convenient, pre-configured functionality with the ability to customize the meter configuration to meet unique requirements. This embedded capability can save the expense and complexity of additional equipment, both today and tomorrow. Plus, simple installation and networking make energy information quickly accessible, while integration with StruxureWare™ software and your energy management system make it immediately actionable.



Address power issues before they cause problems

- Monitor harmonics to mitigate excessive heating and premature failure of transformers
- Use trending and alarming to detect fluctuations in current pull of critical equipment to prevent motor failure
- Utilize millisecond time stamping to analyze sequence of events
- Identify root cause by analyzing electrical faults with patented disturbance direction detection
- Identify power quality issues per EN 50160, including frequency inconsistency, voltage fluctuations and unbalance, and harmonic contribution
- Allocate costs for water, air, gas, electricity, and steam (WAGES) across departments, phases of industrial process, or cost centers
- Utilize time-of-use calendar to capture electrical consumption for specific times, including on/off peak and holidays

Table 4.8: PM8000 Power and Energy Meter Catalog Numbers

Description	Catalog Number
PM8000 Panel Mount Meter with Integrated Display	METSEPM8240
PM8000 DIN Rail Mount Meter without Display	METSEPM8243
PM8000 DIN Rail Mount Meter + Remote Display	METSEPM8244
Remote Display, Color LCD, 96 x 96	METSEPM89RD96
I/O module, 2 relay outputs, 6 digital inputs	METSEM89M2600
I/O module, 2 analog outputs, 4 analog inputs	METSEM89M0024
Display Cable, 10 meters	METSECAB10
Display Cable, 3 meters	METSECAB3
Display Cable, 1 meters	METSECAB1
Sealing kit	METSEPM8000SK
Mounting adapter kit (ANSI 4")	METSEPM8000MAK
Replacement hardware kit, PM8000 meter	METSEPM8000HWK
Replacement hardware kit, PM8000 remote display	METSEPM8000RDHWK

Table 4.9: PM8000 Series Features

Intermediate meter		
General		
Use on LV and MV systems		■
Current accuracy (5A Nominal)		0.1 % reading
Voltage accuracy (57 V LN/100 V LL to 400 V LN/690 V LL)		0.1 % reading
Active energy accuracy		0.2 %
Number of samples/cycle or sample frequency		256
Instantaneous rms values		
Current, voltage, frequency		■
Active, reactive, apparent power	Total and per phase	■
Power factor	Total and per phase	■
Current measurement range (autoranging)		0.05–10 A
Energy values		
Active, reactive, apparent energy		■
Settable accumulation modes		■
Demand values		
Current	Present and max. values	■
Active, reactive, apparent power	Present and max. values	■
Predicted active, reactive, apparent power		■
Synchronization of the measurement window		■
Setting of calculation mode	Block, sliding	■
Power quality measurements		
Harmonic distortion	Current and voltage	■
Individual harmonics	Via front panel and web page	63
	Via StruxureWare software	127
Waveform capture		■
Detection of voltage swells and sags		■
Fast acquisition	1/2 cycle data	■
EN 50160 compliance checking		■
Customizable data outputs (using logic and math functions)		■
Data recording		
Min/max of instantaneous values		■
Data logs		■
Event logs		■
Trending/forecasting		■
SER (Sequence of event recording)		■
Time stamping		■
GPS synchronization (+/- 1 ms)		■
Memory (in Mbytes)		512
Display and I/O		
Front panel display		■
Wiring self-test		■
Pulse output		1
Digital or analog inputs(max)		27 digital 16 analog
Digital or analog outputs (max, including pulse output)		1 digital 8 relay 8 analog
Communication		
RS 485 port		1
Ethernet ports		2
Serial port (Modbus, ION, DNP3)		■
Ethernet port (Modbus/TCP, ION TCP, DNP3 TCP, IEC 61850)		■
Ethernet gateway		■
Alarm notification via email		■
HTTP web server		■
SNMP with custom MIB and traps for alarms		■
SMTP email		■
NTP time synchronization		■
FTP File transfer		■