

Metering Protection – Selector Guide

Power Quality Meters



EPM 2200



EPM 6000



EPM 6010



PQMII



EPM 7000

Features	EPM 2200	EPM 6000	EPM 6010	PQMII	EPM 7000
ENERGY & MEASUREMENT ACCURACY					
Active Energy Measurement Accuracy	0.50%	0.2%	0.2%	0.4%	0.2%
Energy Accuracy Meets or Exceeds ANSI Class	C12.20/Class 0.5	C12.20/Class 0.2	C12.20/Class 0.2		C12.20/Class 0.2
Energy Test Pulse for Accuracy Certification	•	•	•		•
POWER & ENERGY MEASUREMENT					
Multi-circuit Measurement					
Voltage, Current, Frequency, Power Factor	•	•	•	•	•
Power (kW, kVAR, kVA)	•	•	•	•	•
Bi-Directional Power	•	•	•	•	•
Energy (kWh, kVARh, kVAh)	•	•	•	•	•
Demand	•	•	•	•	•
Demand-Time-of-Use Support				•	
Auto-calibrating					
Constant Calibration					
POWER QUALITY					
Measurement sampling (samples/cycle)				64	512
Harmonics/THD		3rd/•	•	63rd/•	40th/•
Harmonics-Spectrum Analysis				•	•
Sags & Swells				•	•
Crest-Factor				•	•
Subcycle Transient Detection					
K-Factor					
IEC 61000-4-15 Flicker					
IEC 61000-4-30 Class A/EN50160 Reporting					
DATA LOGGING					
Historical Logging				•	•
Event Logging				•	•
Maximum Logging Memory				192KB	4MB
Event-Driven Waveform Capture				•	•
Transient Recorder (MHz)					
Time Synchronization via Modbus				•	•
Time Synchronization via IRIG-B					
Time Synchronization via NTP					•
AUTOMATION & I/O					
Configurable alarm thresholds		•	•	•	•
Custom boolean alarms					
KYZ Pulse Output	•	•	•	•	•
Alarm Annunciation via Relay				•	•
Analog Input (Max)				1	0
Analog Output (Max)				4	8
Digital Input (Max)				4	8
Digital Output (Max)				4	4
Control Relay (Max)				4	4
Relay outputs / status inputs					
COMMUNICATIONS & PROTOCOLS					
Communication Ports (Max)	2	2	2	2	4
Modbus Serial	•	•		•	•
Modbus Ethernet	•	•	•		•
DNP 3.0		•	•	•	•
IEC 61850					•
BACnet	•		•		
Embedded Web Server			•		•
WiFi Capable					
Front Communication Port		•	•	•	•
USB Port					
Modem					
DISPLAYS & MOUNTING					
Multifunction Touch Screen Display					
Enclosure	•	•	•	•	•
Low Voltage Power Supply Option		•	•		•

Power Quality Meters (continued)



Features

EPM 9450

EPM 9650

EPM 9700

EPM 9800

EPM 9900P

Features	EPM 9450	EPM 9650	EPM 9700	EPM 9800	EPM 9900P
ENERGY & MEASUREMENT ACCURACY					
Active Energy Measurement Accuracy	0.04%	0.04%	0.06%	0.06%	0.06%
Energy Accuracy Meets or Exceeds ANSI Class	C12.20/Class 0.2	C12.20/Class 0.2	C12.20/Class 0.2	C12.20/Class 0.2	C12.20/Class 0.2
Energy Test Pulse for Accuracy Certification	•	•	•	•	•
POWER & ENERGY MEASUREMENT					
Multi-circuit Measurement					
Voltage, Current, Frequency, Power Factor	•	•	•	•	•
Power (kW, kVAR, kVA)	•	•	•	•	•
Bi-Directional Power	•	•	•	•	•
Energy (kWh, kVARh, kVAh)	•	•	•	•	•
Demand	•	•	•	•	•
Demand-Time-of-Use Support	•	•	•	•	•
Auto-calibrating	•	•	•	•	•
Constant Calibration					•
POWER QUALITY					
Measurement sampling (samples/cycle)	512	512	1024	512	1024
Harmonics/THD	256th/•	256th/•	512th/•	256th/•	512th/•
Harmonics-Spectrum Analysis	•	•	•	•	•
Sags & Swells	•	•	•	•	•
Crest-Factor	•	•	•	•	•
Subcycle Transient Detection	•	•	•	•	•
K-Factor	•	•	•	•	•
IEC 61000-4-15 Flicker		•	•	•	•
IEC 61000-4-30 Class A/EN50160 Reporting			•		•
DATA LOGGING					
Historical Logging	•	•	•	•	•
Event Logging	•	•	•	•	•
Maximum Logging Memory	512KB	4MB	1.2GB	4MB	4GB
Event-Driven Waveform Capture	•	•	•	•	•
Transient Recorder (MHz)					50
Time Synchronization via Modbus	•	•	•	•	•
Time Synchronization via IRIG-B	•	•	•	•	•
Time Synchronization via NTP					•
AUTOMATION & I/O					
Configurable alarm thresholds	•	•	•	•	•
Custom boolean alarms	•	•	•	•	•
KYZ Pulse Output	•	•	•	•	•
Alarm Annunciation via Relay	•	•	•	•	•
Analog Input (Max)	32	32	32	32	32
Analog Output (Max)	32	32	32	32	32
Digital Input (Max)	40	40	40	40	40
Digital Output (Max)	16	16	16	16	4
Control Relay (Max)	16	16	16	16	12
Relay outputs / status inputs					
COMMUNICATIONS & PROTOCOLS					
Communication Ports (Max)	4	4	6	4	6
Modbus Serial	•	•	•	•	•
Modbus Ethernet	•	•	•	•	•
DNP 3.0	•	•	•	•	•
IEC 61850					•
BACnet					
Embedded Web Server	•	•	•	•	•
WiFi Capable					
Front Communication Port	•	•	•	•	•
USB Port	•	•	•		•
Modem	•	•		•	
DISPLAYS & MOUNTING					
Multifunction Touch Screen Display	•	•			•
Enclosure	•	•	•	•	•
Low Voltage Power Supply Option	•	•	•	•	•

Submetering



Features

EPM 4600

EPM 6100

EPM 7100

Features	EPM 4600	EPM 6100	EPM 7100
ENERGY & MEASUREMENT ACCURACY			
Active Energy Measurement Accuracy	0.5%	0.2%	0.2%
Energy Accuracy Meets or Exceeds ANSI Class	C12.20/Class 0.5	C12.20/Class 0.2	C12.20/Class 0.2
Energy Test Pulse for Accuracy Certification	•	•	•
POWER & ENERGY MEASUREMENT			
Multi-circuit Measurement	24		
Voltage, Current, Frequency, Power Factor	•	•	•
Power (kW, kVAR, kVA)	•	•	•
Bi-Directional Power	•	•	•
Energy (kWh, kVARh, kVAh)	•	•	•
Demand	•	•	•
Demand-Time-of-Use Support	•		•
Auto-calibrating			
Constant Calibration			
POWER QUALITY			
Measurement sampling (samples/cycle)			
Harmonics/THD			
Harmonics-Spectrum Analysis			
Sags & Swells			
Crest-Factor			
Subcycle Transient Detection			
K-Factor			
IEC 61000-4-15 Flicker			
IEC 61000-4-30 Class A/EN50160 Reporting			
DATA LOGGING			
Historical Logging	•		•
Event Logging			
Maximum Logging Memory	32MB		2MB
Event-Driven Waveform Capture			
Transient Recorder (MHz)			
Time Synchronization via Modbus	•	•	•
Time Synchronization via IRIG-B			
Time Synchronization via NTP			
AUTOMATION & I/O			
Configurable alarm thresholds			
Custom boolean alarms			
KYZ Pulse Output		•	•
Alarm Annunciation via Relay			
Analog Input (Max)			
Analog Output (Max)			
Digital Input (Max)			
Digital Output (Max)			
Control Relay (Max)			
Relay outputs / status inputs	2 / 4		
COMMUNICATIONS & PROTOCOLS			
Communication Ports (Max)	3	2	2
Modbus Serial	•	•	•
Modbus Ethernet	•	•	•
DNP 3.0			
IEC 61850			
BACnet			
Embedded Web Server			
WiFi Capable	•	•	•
Front Communication Port	•	•	•
USB Port	•		
Modem			
DISPLAYS & MOUNTING			
Multifunction Touch Screen Display	•		
Enclosure	•	•	•
Low Voltage Power Supply Option			

Metering Protection

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