Bulletin 1408 PowerMonitor™ 1000

Minimize Your Energy Costs

Benefits & Features

Benefits

- Track demand and consumption over time
- Multiple price points for cost-effective monitoring
- Easily integrated into existing information networks
- Integration with FactoryTalk®EnergyMetrix® and FactoryTalk View®
- View data and configure through integrated web page

Features

- Available EtherNet/IP™, Serial DF1, Modbus RTU, Modbus TCP communications
- Integrated LCD display
- Panel or DIN rail mounting
- UL, cUL, CE certifications
- Wiring diagnostics
- Time of Use (On-Peak, Off-Peak)
- Logs – Energy, Min/Max, Status, and Load
- Revenue Meter Accuracy
- Two Status Inputs
- Configurable KYZ Output
- Compact Size
- Power Factor
- Alarms

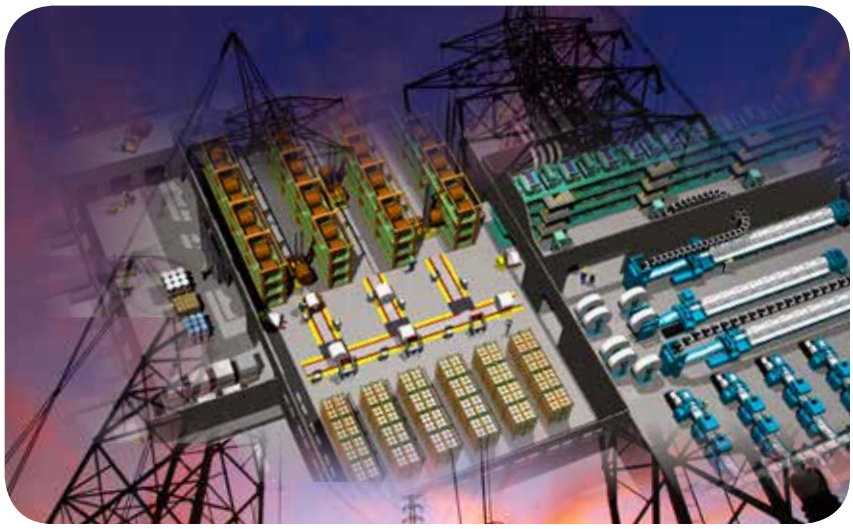
PowerMonitor 1000 EM3 and TS3A

PowerMonitor 1000 BC3

Energy management and understanding energy costs are a major focus today in the industrial market. The Allen-Bradley® Bulletin 1408 PowerMonitor 1000 is a cost-effective energy monitor that is ideal for your applications where load profiling, cost allocation, or energy optimization is required. It also provides seamless integration to optimize your existing energy monitoring systems where sub-metering is required. The PowerMonitor 1000 is available in three models with features and a price point to meet your application.

The basic model (BC3) features entry level data collection like consumption and power. The mid-range model (TS3) collects voltage and current as well as the basic model data set. The EM3 model gathers all data for consumption, demand, power factor reporting.

The PowerMonitor 1000 integrates into your existing energy monitoring systems, featuring FactoryTalk View or FactoryTalk®EnergyMetrix to further enhance the view into energy costs. Your existing Allen-Bradley PLCs (PLC-5®, SLC™, ControlLogix® Compact/Control family) can also easily communicate to the PowerMonitor 1000 to allow energy data to be used in control systems.



Measured Parameters	1408-BCA	1408-TS3A	1408-EM3A
kW	X	X	X
kVAR	X	X	X
kVA	X	X	X
True Power Factor	X	X	X
kWh	X	X	X
kVARh	X	X	X
kVAR	X	X	X
Voltage		X	X
Current		X	X
Frequecy		X	X
Voltage Unbalance		X	X
Current Unbalance		X	X
kW Demand			X
kVAR Demand			X
kVA Demand			X
Projected kW Demand			X
Projected kVAR Demand			X
Projected kVA Demand			X
Demand Power Factor			X
Logs			
Time of Use Log	X	X	X
Energy Log	X	X	X
Minimum.Maxinum Log	X	X	X
Load Factor Log			
Status Log	X	X	X
Other Parameters			
Display		X	X
Web Configuration	X	X	X
RS-485	X	X	X
Ethernet/IP	O	O	O
Modbus TCP/IP	O	O	O
Alarms			X
CIP Energy Object	X	X	X
Status Input		X	X
Digital Output		X	X
Digital Accuracy	Class1	Class1	Class1

Catalog Number	
1408-BC3A-485	Basic consumption meter w/ Serial
1408-BC3A-ENT	Basic consumption meter w/ EtherNet
1408-TS3A-485	Consumption + Volt/Current w/ Serial
1408-TS3A-ENT	Consumption + Volt/Current w/
1408-EM3A-485	Energy management meter w/ Serial
1408-EM3A-ENT	Energy management meter w/

Input and Output Ratings	
Parameter	Rating
Control Power	85V …264V AC 47…63 Hz 2.5VA maximum loading
Voltage Sense Inputs: V1, V2, V3	Input Impedance: 5 M ohm minimum input current: 2 mA maximum
Current Sense Inputs: I1, I2, I3	Overload Withstand: 15 Amps Continuous, 200 Amps for one-half second Burden: 0.05VA Impedance: 0.002 ohms Maximum Crest Factor at 5 A is 3.0 Starting Current: 5 mA
Status Inputs	Contact Closure (Internal 24V DC)
KYZ Output	30 mA at 240V AC / 300V DC

General Specifications		
Parameter	Rating	
Dielectric Withstand	Control Power	2500V
	Voltage Inputs	2500V
	Status Inputs	2500V
	KYZ Output	2500V
Terminal Blocks	22…14 AWG (0.34…2.5 mm2, 75 °C (167 °F Minimum Copper Wire only) Recommended torque 0.8 Nm (7 lb-in)	
Operating Temperature	-10…60 °C (14…140 °F)	
Storage Temperature	-40…85 °C (-40…185 °F)	
Humidity	5%…95%, Noncondensing	
Vibration	2.0 g 10…500 Hz	
Shock	30 g peak each axis (operating) 50 g peak each axis (non-operating)	

Accuracy and Range		
Parameter	Accuracy in % of Full Scale at +25 °C (77 °F) 50/60 Hz Unity Power Factor	Nominal Range
Voltage Sense Inputs: V1, V2. V3	±0.5%	Line-neutral RMS: 347V / 15…399 V Line-line RMS: 600V / 26…691V
Current Sense	±0.5%	5A RMS
Frequency		50 or 60 Hz / 40…75 Hz
Power Functions: kW, kVAR, kVA	EN62053-21:20 03 Accuracy Requirement Class 1	
Demand Functions		
Energy Functions		
Metering Update Rates	100 mS V, I, Hz 200 mS Power	
Agency Approval	UL aUL CE	

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