PMC-660 Advanced Power Quality Monitor





- **Advanced PQ Monitoring**
- **Sag/Swell and Transient Capture**
- WF Recording @ 256 samples/cycle
- IEC 62053-22 Class 0.2S Compliant
- **4MB Log Memory**
- **High-speed Data Recording**
- **Setpoint Alarms**
- **Energy Log, PQ Log, SOE Log**
- **Standard Dual RS-485 ports**
- **14 Monitoring**

- Large, Bright, Backlit LCD Display with Wide Viewing Angle
- **Extensive I/O Capabilities**
- **Extended Warranty**
- **Extended Temperature Range**
- **Industrial Grade Components**
- **Standard Tropicalization**
- **Metal Enclosure with No Openings**
- **IP52** Rated
- **DIN96x96**







The PMC-660 is CET's latest offer for the advanced power quality monitoring of incomers and critical feeders for utilities, data centers, high-tech manufacturing facilities and heavy industries. Housed in an industry-standard DIN form factor measuring 96mmx96mmx125mm, the PMC-660's compact size is perfectly suited for today's space restricting installations. The PMC-660 features quality construction with metal enclosure, advanced power quality and revenue-accurate measurements, high-resolution waveform recording capabilities, comprehensive data logging, extensive I/O and an easy-to-read LCD display, capable of displaying 3-phase measurements at once. With standard dual RS-485 ports and Modbus protocol support, the PMC-660 becomes a vital component of an intelligent Power Quality Monitoring System.

Typical Applications

- Class 0.2S Revenue Metering
- Power quality monitoring of main incomer or critical feeder
- Waveform recording at 256 samples per cycle
- Extensive logging capability with 4MB on-board memory
- Utility, industrial and commercial metering
- Substation, building and factory automation
- Low, medium and high voltage applications
- Analog meter replacement
- 14 monitoring

Features Summary

Ease of use

- Large, backlit, easy to read LCD display with wide viewing angle
- Password protected setup via front panel or free PMC Setup software
- Easy installation with mounting slide bar, no tools required

Basic Measurements (1 second update)

- 3-phase voltage, current and power measurements
- Neutral current (I4) and Frequency
- Bi-directional energy measurements
- Voltage and Current phase angles

High-speed Measurements

- 3-phase voltage @ 1/2 cycle
- 3-phase current, neutral current (I4) @ 1 cycle
- 3-phase power and power factor @ 1 cycle

Power Quality

- Fundamental RMS measurements for 3-phase voltage, current, power, PF, and I4
- Voltage and Current Unbalance based on Sequence Components
- Voltage and Frequency Deviation
- THD, TOHD, TEHD, K-Factor and Displacement PF
- Individual harmonics to 63rd on-board, 127th via communications
- Sag/Swell Detection and Transient Capture
- PQ LOG with 1000 entries

Sliding Window and Predicted Demands

- 3-phase voltage, current, power, PF, I4, Frequency, V and I Unbalance,
- Max/Min values per demand interval
- Demand synchronization with DI
- Peak Demands for This Month and Last Month

Advanced Power Quality Monitor

Setpoints

- 16 standard setpoints with extensive monitoring sources
- 8 high-speed setpoints with high-speed measurements and DI
- Configurable thresholds and time delays
- 6 Logical Modules supporting AND/OR/NAND/NOR operations
- WF Recording, Data Recorder, DO, and Email Alarm trigger

Log memory

- 4MB on-board memory
- Dynamic allocation for Data Recorder Logs, Waveform Recorder Logs and Interval Energy and Demand Logs

Waveform Recorder Log

- 2 independent groups of waveform recorders with a combined total of 32 entries
- Simultaneous capture of 3-phase voltage and current signals
- Programmable formats and pre-fault cycles from 256X20 to 16X320
- Support FIFO recording mode

Interval Energy and Demand Log

- TOU capability without complicated tariff programming
- Interval recording of kWh, kvarh Import/Export and kVAh Total
- Interval recording of Demands and associated Min/Max values per demand interval
- Support FIFO or stop-when-full recording mode

Data Recorder Log

- 12 standard Data Recorder Logs
- 4 high-speed Data Recorder Logs (1 cycle interval)
- Recording interval from 1s to 40 days for standard and 1 to 60 cycles for high-speed
- Programmable sources include almost all real-time, harmonics, unbalance and demand values
- Configurable depth and recording offset
- Support FIFO or stop-when-full recording mode

SOE Log

- 512 events time-stamped to ±1ms resolution
- Setup changes, Setpoint events and I/O operations

PQ Log

- 1000 entries time-stamped to ±1ms resolution
- Sag/Swell and Transient detection or other PQ events

Logging of Max/Min values for real-time measurements such as Voltage, Current, Frequency, kW, kvar, kVA, PF, Freq, Unbalance, K-factor, THD of This Month and Last Month

Digital Inputs

- 6 channels, volts free dry contact, 24VDC internally wetted
- External status monitoring with programmable debounce
- Pulse counting with programmable weight for each channel for collecting WAGES information
- **Demand Synchronization**
- 1000Hz sampling

Digital Outputs

- 3 channels standard without the optional AO
- 2 channels only with the optional AO
- Form A Mechanical relays

Analog Input (Optional)

- 0-20 / 4-20mA DC input
- Can be used to measure external transducer signal
- Programmable zero and full scales

Analog Output (Optional)

- 0-20 / 4-20mA DC output
- Can be "keyed" to any measured quantity
- Programmable zero and full scales



Communications

Port 1 and Port 2

- Optically isolated RS485 port
- Baud rate from 1200 to 38400bps
- Modbus RTU protocol

Ethernet (Optional)

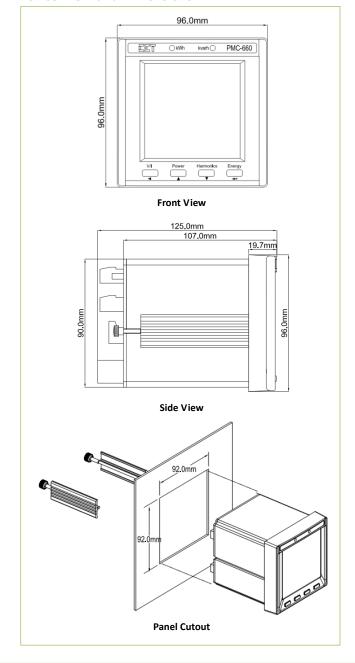
- 10/100BaseT Ethernet with RJ45 connection
- Modbus RTU over TCP/IP, Modbus TCP, Ethernet Gateway, HTTP, SMTP. SNTP

Real-time clock

6ppm battery-backed real-time clock (<0.5s per day)

- Supported by our PecStar® iEMS and iPQMS
- Easy integration into other Automation or SCADA systems via Modbus RTU and Modbus TCP protocols

Device View and Dimensions



Advanced Power Quality Monitor

Accuracy

Parameters	Accuracy	Resolution
Voltage	±0.1% reading	0.01V
Current	±0.1% reading + 0.05% F.S.	0.001A
I4 Measured	±0.1% reading + 0.05% F.S.	0.001A
14 Calculated	0.5% F.S.	0.001A
kW, KVA	IEC 62053-22 Class 0.2S	0.001k
kWh, kVAh	IEC 62053-22 Class 0.2S	0.01kXh
kvar, kvarh	IEC 62053-23 Class 2	0.001k / 0.01kvarh
P.F.	IEC 62053-22 Class 0.2S	0.001
Frequency	±0.01 Hz	0.01Hz
Harmonics	IEC 61000-4-7 Class A	0.01%
K-Factor	IEC 61000-4-7 Class A	0.1
Phase angles	±1°	0.1°
Al	±0.5% F.S.	-
AO	±0.5% F.S.	-

Standard (Un)	Technical Specifications					
Optional (Un) 69VLN/120VLL, 400VLN/690VLL Range 10% to 120% Un PT Ratio 1-10,000 Overload 1.2xUn continuous, 2xUn for 10s Burden <0.5VA @ 240V Frequency 45-65Hz Current Input (I11, I12, 121, I22, I31, I32, I41, I42) Standard (In / Imax) 5A / 10A Optional (In / Imax) 1A / 2A Range 0.1% to 200% In CT Ratio 1-6,000 (SA) or 1-30,000 (1A) Overload 2xln continuous, 20xln for 1s Burden <0.25VA @ 5A Power Supply (L+, N-) Standard 95-415VAC/VDC ± 10%, 47-440Hz Burden <5W Digital Inputs (D11, D12, D13, D14, D15, D16, D1C) Type Dry contact, 24VDC internally wetted Sampling 1000Hz Hysteresis Dry contact, 24VDC internally wetted Sampling 1000Hz Pype Digital Outputs (b11, D012, D021, D022, D031, D032) Form A Mechanical Relay	Volt	age Inputs (V1, V2, V3, VN)				
Range 10% to 120% Un PT Ratio 1-10,000 Overload 1.2xUn continuous, 2xUn for 10s Burden < <0.5VA @ 240V Frequency 45-65Hz	Standard (Un)	240VLN/415VLL				
PT Ratio 1-10,000 1-2xUn continuous, 2xUn for 10s 1-2xUn continuous, 2xUn for 1s 1-2xUn for 1s	Optional (Un)	69VLN/120VLL, 400VLN/690VLL				
Overload Surden	Range	10% to 120% Un				
Surden 45-65Hz	PT Ratio	1-10,000				
Frequency 45-65Hz Current Inputs (I11, I12, I21, I22, I31, I32, I41, I42) Standard (In / Imax) 5A / 10A Optional (In / Imax) 1A / 2A Range 0.1% to 200% In CT Ratio 1-6,000 (5A) or 1-30,000 (1A) Overload 2xIn continuous, 20xIn for 1s Burden <0.25VA @ 5A	Overload	1.2xUn continuous, 2xUn for 10s				
Current Inputs (I11, I12, I21, I22, I31, I32, I41, I42) Standard (In / Imax) 5A / 10A Optional (In / Imax) 1A / 2A Range 0.1% to 200% In CT Ratio 1-6,000 (5A) or 1-30,000 (1A) Overload 2xIn continuous, 20xIn for 1s Burden 95-415VAC/VDC ± 10%, 47-440Hz Burden 595-415VAC/VDC ± 10%, 47-440Hz Sampling 1000Hz 1000Hz Burden 1000Hz 1000Hz Sampling 1000Hz 1000Hz Pype Form A Mechanical Relay Loading 8A@250VAC / 8A@24VDC, 5A@30VDC for DO1 5A@250VAC / 5A@30VDC for DO2 and DO3 LED Pulse Outputs (kWh, kvarh) Type 0-100 / 3200/5000 imp/kxh Analog Input (I41, I42) Type 0-20 / 4-20 mA Overload 24 mA maximum	Burden	<0.5VA @ 240V				
Standard (In / Imax)	Frequency	45-65Hz				
Optional (in / Imax) 1A / 2A Range 0.1% to 200% in CT Ratio 1-6,000 (5A) or 1-30,000 (1A) Overload 2xln continuous, 20xln for 1s Burden <0.25VA @ 5A	Current Input	s (I11, I12, I21, I22, I31, I32, I41, I42)				
Range 0.1% to 200% In CT Ratio 1-6,000 (5A) or 1-30,000 (1A) Overload 2xln continuous, 20xln for 1s Burden <0.25VA @ 5A	Standard (In / Imax)	5A / 10A				
CT Ratio	Optional (In / Imax)	1A / 2A				
Overload Burden 2xin continuous, 20xin for 1s	Range	0.1% to 200% In				
Standard	CT Ratio	1-6,000 (5A) or 1-30,000 (1A)				
Power Supply (L+, N-) Standard 95-415VAC/VDC ± 10%, 47-440Hz Burden <5W Digital Inputs (DI1, DI2, DI3, DI4, DI5, DI6, DIC) Type Dry contact, 24VDC internally wetted 1000Hz Hysteresis 20-2,000ms programmable Digital Outputs (DO11, DO21, DO22, DO31, DO32) Type Form A Mechanical Relay 8A@250VAC / 8A@24VDC, 5A@30VDC for DO1 5A@250VAC / 5A@30VDC for DO2 and DO3 LED Pulse Outputs (kWh, kvarh) Type Optical 1000/3200/5000 imp/kxh Analog Input (I41, I42) Type 0-20 / 4-20 mA 24 ma maximum Analog Output (AO+, AO-) Type 0-20 / 4-20 mA 500 Ω maximum Overload 24 mA maximum Coverload 500 Ω maximum Overload 24 mA maximum Environmental Conditions Operating Temp. 300 Ω maximum Overload 24 mA maximum Environmental Conditions Operating Temp. 40°C to 85°C Humidity 5% to 95% non-condensing 70 kPa to 106 kPa 2	Overload	2xIn continuous, 20xIn for 1s				
Standard Burden95-415VAC/VDC ± 10%, 47-440Hz <5WDigital Inputs (DI1, DI2, DI3, DI4, DI5, DI6, DIC)TypeDry contact, 24VDC internally wettedSampling Hysteresis1000Hz 20-2,000ms programmableDigital Outputs (DO11, DO12, DO22, DO31, DO32)TypeForm A Mechanical Relay 8A@250VAC / 8A@24VDC, 5A@30VDC for DO1 5A@250VAC / 5A@30VDC for DO2 and DO3LED Pulse Outputs (kWh, kvarh)TypeOptical 1000/3200/5000 imp/kxhAnalog Input (I41, I42)Type0-20 / 4-20 mAOverload24 mA maximumAnalog Output (AO+, AO-)Type0-20 / 4-20 mALoading500 \Omega maximumOverload24 mA maximumEnvironmental ConditionsOperating Temp25°C to 70°CStorage Temp40°C to 85°CHumidity5% to 95% non-condensingAtmospheric Pressure Pollution Degree2Measurement CategoryCAT IIIMechanical CharacteristicsEnclosure Panel CutoutAluminum Alloy 92x92 mm (3.62"x3.62") Unit DimensionsAluminum Alloy 92x92 mm (3.62"x3.78"x4.92") 170x145x155 mm (6.69"x5.71"x6.10") 170x145x155 mm (6.69"x5.71"x6.10")Shipping Dimensions IP Rating52	Burden	<0.25VA @ 5A				
Digital Inputs (DI1, DI2, DI3, DI4, DI5, DI6, DIC)		Power Supply (L+, N-)				
Digital Inputs (DI1, DI2, DI3, DI4, DI5, DI6, DIC) Type Dry contact, 24VDC internally wetted Sampling 1000Hz Hysteresis 20-2,000ms programmable Digital Outputs (DO11, DO12, DO21, DO22, DO31, DO32) Type Form A Mechanical Relay Loading 8A@250VAC / 8A@24VDC, 5A@30VDC for DO1 5A@250VAC / 5A@30VDC for DO2 and DO3 LED Pulse Outputs (kWh, kvarh) Type Optical Pulse Constant 1000/3200/5000 imp/kxh Analog Input (I41, I42) Type 0-20 / 4-20 mA Overload 24 mA maximum Analog Output (AO+, AO-) Type 0-20 / 4-20 mA Loading 500 Ω maximum Overload 24 mA maximum Environmental Conditions Operating Temp. -25°C to 70°C Storage Temp. -40°C to 85°C Humidity 5% to 95% non-condensing Atmospheric Pressure 70 kPa to 106 kPa Pollution Degree 2 Measurement Category CAT III	Standard	95-415VAC/VDC ± 10%, 47-440Hz				
Type Dry contact, 24VDC internally wetted 1000Hz 1000Hz 20-2,000ms programmable 20-2,0	Burden	<5W				
Sampling Hysteresis1000Hz 20-2,000ms programmableDigital Outputs (D11, D012, D021, D022, D031, D032)Type LoadingForm A Mechanical Relay 8A@250VAC / 8A@24VDC, 5A@30VDC for D01 5A@250VAC / 5A@30VDC for D02 and D03LED Pulse Outputs (kWh, kvarh)Type Pulse ConstantOptical 1000/3200/5000 imp/kxhAnalog Input (I41, I42)Type Overload0-20 / 4-20 mA 24 mA maximumArabig Output (A0+, A0-)Type Loading Overload0-20 / 4-20 mA 24 mA maximumEndoing Overload500 Ω maximum 24 mA maximumDerating Temp. Storage Temp. Humidity Atmospheric Pressure Pollution Degree Pallution Degree Measurement Category-25°C to 70°C -40°C to 85°C -40°C to 85°CHumidity Atmospheric Pressure Pollution Degree Measurement Category70 kPa to 106 kPaEnclosure Panel Cutout Unit Dimensions Shipping Dimensions IP RatingAluminum Alloy 92x92 mm (3.62"x3.62") 170x145x155 mm (6.69"x5.71"x6.10") 170x145x155 mm (6.69"x5.71"x6.10") 170x145x155 mm (6.69"x5.71"x6.10")	Digital Inputs (DI1, DI2, DI3, DI4, DI5, DI6, DIC)					
Hysteresis 20-2,000ms programmable Digital Outputs (DO11, DO12, DO21, DO22, DO31, DO32) Type Form A Mechanical Relay	Туре	Dry contact, 24VDC internally wetted				
Type Form A Mechanical Relay 8A@250VAC / 8A@24VDC, 5A@30VDC for DO1 5A@250VAC / 5A@30VDC for DO2 and DO3 5A@250VAC / 5A@30VAC	Sampling	1000Hz				
Type Loading Reapond Name A Mechanical Relay Loading Reapond Name Optical Pulse Constant Analog Input (I41, I42) Type Overload Overload Overload Description Type O-20 / 4-20 mA Overload Overload Overload Overload Overload Overload Type O-20 / 4-20 mA Sou Output (AO+, AO-) Type O-20 / 4-20 mA Loading Overload Type O-20 / 4-20 mA Loading Overload Overload Type O-20 / 4-20 mA Coverload Overload Type O-20 / 4-20 mA Coverload Overload Overload Type O-20 / 4-20 mA Coverload Overload Overload Overload Type O-20 / 4-20 mA Coverload Overload	Hysteresis	20-2,000ms programmable				
Loading 8A@250VAC / 8A@24VDC, 5A@30VDC for DO1 5A@250VAC / 5A@30VDC for DO2 and DO3 LED Pulse Outputs (kWh, kvarh) Type Optical 1000/3200/5000 imp/kxh Analog Input (I41, I42) Type 0-20 / 4-20 mA 24 mA maximum Analog Output (AO+, AO-) Type 0-20 / 4-20 mA 500 maximum 500 maximum 600 maxim	Digital Outputs (DO11, DO12, DO21, DO22, DO31, DO32)				
SA@250VAC / SA@30VDC for DO2 and DO3 LED Pulse Outputs (kWh, kvarh) Type	Туре	Form A Mechanical Relay				
LED Pulse Outputs (kWh, kvarh) Type Optical Pulse Constant 1000/3200/5000 imp/kxh Analog Input (I41, I42) Type 0-20 / 4-20 mA Overload 24 mA maximum Analog Output (AO+, AO-) Type 0-20 / 4-20 mA Loading 500 Ω maximum Overload 24 mA maximum Environmental Conditions Operating Temp. -25°C to 70°C Storage Temp. -40°C to 85°C Humidity 5% to 95% non-condensing Atmospheric Pressure 70 kPa to 106 kPa Pollution Degree 2 Measurement Category CAT III Mechanical Characteristics Enclosure Aluminum Alloy Panel Cutout 92×92 mm (3.62″x3.62″) Unit Dimensions 96×96×125 mm (3.78″x3.78″x4.92″) Shipping Dimensions 170x145x155 mm (6.69″x5.71″x6.10″) IP Rating 52	Loading	8A@250VAC / 8A@24VDC, 5A@30VDC for DO1				
Type Pulse Constant Analog Input (I41, I42) Type Overload Overload Analog Output (AO+, AO-) Type O-20 / 4-20 mA 24 mA maximum Analog Output (AO+, AO-) Type O-20 / 4-20 mA Loading Soo Ω maximum Environmental Conditions Operating Temp. Storage Temp25°C to 70°C Storage Temp40°C to 85°C Humidity S% to 95% non-condensing Atmospheric Pressure Pollution Degree Pollution Degree Measurement Category Aluminum Alloy Panel Cutout Unit Dimensions Shipping Dimensions IP Rating Optical 1000/32000/5000 imp/kxh Analog Input (I41, I42) O-20 / 4-20 mA 24 mA maximum Conditions Operating Temp25°C to 70°C Conditions Operating Temp25°C to 70°C Conditions Operating Temp25°C to 70°C -40°C to 85°C -40°C		5A@250VAC / 5A@30VDC for DO2 and DO3				
Pulse Constant 1000/3200/5000 imp/kxh Analog Input (I41, I42) Type 0-20 / 4-20 mA Overload 24 mA maximum Analog Output (AO+, AO-) Type 0-20 / 4-20 mA Loading 500 Ω maximum Overload 24 mA maximum Environmental Conditions Operating Temp. -25°C to 70°C Storage Temp. -40°C to 85°C Humidity 5% to 95% non-condensing Atmospheric Pressure 70 kPa to 106 kPa Pollution Degree 2 Measurement Category CAT III Mechanical Characteristics Enclosure Aluminum Alloy Panel Cutout 92×92 mm (3.62″x3.62″) Unit Dimensions 96x96x125 mm (3.78″x3.78″x4.92″) Shipping Dimensions 170x145x155 mm (6.69″x5.71″x6.10″) IP Rating 52						
Analog Input (I41, I42) Type	Туре	Optical				
Type Overload 24 mA maximum Analog Output (AO+, AO-) Type 0-20 / 4-20 mA Loading 500 Ω maximum Overload 24 mA maximum Environmental Conditions Operating Temp25°C to 70°C Storage Temp40°C to 85°C Humidity 5% to 95% non-condensing Atmospheric Pressure Pollution Degree 2 Measurement Category CAT III Mechanical Characteristics Enclosure Aluminum Alloy Panel Cutout 92x92 mm (3.62″x3.62″) Unit Dimensions 96x96x125 mm (3.78″x3.78″x4.92″) Shipping Dimensions 170x145x155 mm (6.69″x5.71″x6.10″) IP Rating 52	Pulse Constant	1000/3200/5000 imp/kxh				
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Analog Output (AO+, AO-) Type	Туре	0-20 / 4-20 mA				
Type	Overload	24 mA maximum				
Loading 500 Ω maximum 24 mA maximum Environmental Conditions Operating Temp25°C to 70°C Storage Temp40°C to 85°C Humidity 5% to 95% non-condensing Atmospheric Pressure Pollution Degree 2 Measurement Category CAT III **Mechanical Characteristics** Enclosure Aluminum Alloy Panel Cutout 92x92 mm (3.62″x3.62″) Unit Dimensions 96x96x125 mm (3.78″x3.78″x4.92″) Shipping Dimensions 170x145x155 mm (6.69″x5.71″x6.10″) IP Rating 52	A	nalog Output (AO+, AO-)				
Overload 24 mA maximum Environmental Conditions Operating Temp. -25°C to 70°C Storage Temp. -40°C to 85°C Humidity 5% to 95% non-condensing Atmospheric Pressure 70 kPa to 106 kPa Pollution Degree 2 Measurement Category CAT III Mechanical Characteristics Enclosure Aluminum Alloy Panel Cutout 92×92 mm (3.62″x3.62″) Unit Dimensions 96×96x125 mm (3.78″x3.78″x4.92″) Shipping Dimensions 170x145x155 mm (6.69″x5.71″x6.10″) IP Rating 52	Туре	0-20 / 4-20 mA				
Comparison	Loading	500 Ω maximum				
Operating Temp. -25°C to 70°C Storage Temp. -40°C to 85°C Humidity 5% to 95% non-condensing Atmospheric Pressure 70 kPa to 106 kPa Pollution Degree 2 Measurement Category CAT III Mechanical Characteristics Enclosure Aluminum Alloy Panel Cutout 92×92 mm (3.62″x3.62″) Unit Dimensions 96×96×125 mm (3.78″x3.78″x4.92″) Shipping Dimensions 170x145x155 mm (6.69″x5.71″x6.10″) IP Rating 52	Overload	24 mA maximum				
Storage Temp. -40°C to 85°C Humidity 5% to 95% non-condensing Atmospheric Pressure 70 kPa to 106 kPa Pollution Degree 2 Measurement Category CAT III Mechanical Characteristics Enclosure Aluminum Alloy Panel Cutout 92x92 mm (3.62″x3.62″) Unit Dimensions 96x96x125 mm (3.78″x3.78″x4.92″) Shipping Dimensions 170x145x155 mm (6.69″x5.71″x6.10″) IP Rating 52	Environmental Conditions					
Humidity 5% to 95% non-condensing Atmospheric Pressure 70 kPa to 106 kPa Pollution Degree 2 Measurement Category CAT III Mechanical Characteristics Enclosure Aluminum Alloy Panel Cutout 92x92 mm (3.62"x3.62") Unit Dimensions 96x96x125 mm (3.78"x3.78"x4.92") Shipping Dimensions 170x145x155 mm (6.69"x5.71"x6.10") IP Rating 52	Operating Temp.	-25°C to 70°C				
Atmospheric Pressure Pollution Degree Measurement Category Enclosure Panel Cutout Unit Dimensions Pating PRating Atmospheric Pressure Pollution Degree 2 CAT III Aluminum Alloy 92x92 mm (3.62"x3.62") 96x96x125 mm (3.78"x3.78"x4.92") 170x145x155 mm (6.69"x5.71"x6.10")	Storage Temp.	-40°C to 85°C				
Pollution Degree 2 Measurement Category CAT III Mechanical Characteristics Enclosure Aluminum Alloy Panel Cutout 92x92 mm (3.62″x3.62″) Unit Dimensions 96x96x125 mm (3.78″x3.78″x4.92″) Shipping Dimensions 170x145x155 mm (6.69″x5.71″x6.10″) IP Rating 52	Humidity	5% to 95% non-condensing				
Measurement Category CAT III Mechanical Characteristics Enclosure Aluminum Alloy Panel Cutout 92x92 mm (3.62"x3.62") Unit Dimensions 96x96x125 mm (3.78"x3.78"x4.92") Shipping Dimensions 170x145x155 mm (6.69"x5.71"x6.10") IP Rating 52	Atmospheric Pressure	70 kPa to 106 kPa				
Mechanical Characteristics Enclosure Aluminum Alloy Panel Cutout 92x92 mm (3.62″x3.62″) Unit Dimensions 96x96x125 mm (3.78″x3.78″x4.92″) Shipping Dimensions 170x145x155 mm (6.69″x5.71″x6.10″) IP Rating 52		2				
Enclosure Aluminum Alloy Panel Cutout 92x92 mm (3.62"x3.62") Unit Dimensions 96x96x125 mm (3.78"x3.78"x4.92") Shipping Dimensions 170x145x155 mm (6.69"x5.71"x6.10") IP Rating 52	Measurement Category	CAT III				
Panel Cutout 92x92 mm (3.62″x3.62″) Unit Dimensions 96x96x125 mm (3.78″x3.78″x4.92″) Shipping Dimensions 170x145x155 mm (6.69″x5.71″x6.10″) IP Rating 52	М	echanical Characteristics				
Unit Dimensions 96x96x125 mm (3.78″x3.78″x4.92″) Shipping Dimensions 170x145x155 mm (6.69″x5.71″x6.10″) IP Rating 52	Enclosure	Aluminum Alloy				
Shipping Dimensions 170x145x155 mm (6.69"x5.71"×6.10") IP Rating 52	Panel Cutout					
IP Rating 52	Unit Dimensions	96x96x125 mm (3.78"x3.78"×4.92")				
	Shipping Dimensions					
Shipping Weight 1.1 kg	IP Rating	52				
· · · · · · · · · · · · · · · · · · ·	Shipping Weight	1.1 kg				

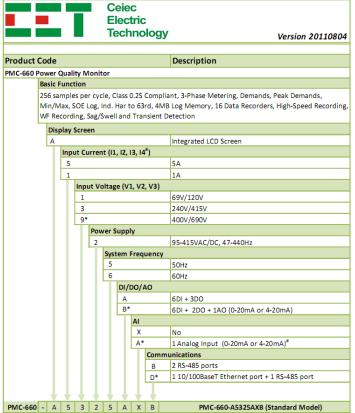


Standards of Compliance

Insulation Dielectric test Insulation Dielectric test Insulation resistance Impulse voltage Electromagnetic Compatibility EMC Directive 2004/108/EC (EN 61326: 2006) Immunity Tests Electrostatic discharge Electrostatic discharge IEC 61000-4-2: 2008 Level III Radiated fields IEC 61000-4-3: 2008 Level III Fast transients IEC 61000-4-5: 2005 Level IV Surges IEC 61000-4-6: 2005 Level IV Surges IEC 61000-4-6: 2005 Level IV Oscillatory waves IEC 61000-4-5: 2005 Level IV Oscillatory waves IEC 61000-4-12: 2006 Level III EN 65025-25: 2000 Emission Tests EN 55011: 2009 (CISPR 11) EN 55011: 2009 (CISPR 11) EN 55011: 2009 (CISPR 11) EN 61000-3-2: 2006+A1: 2007 (CISPR 22) EN 61000-3-2: 2006+A1: 2009 EN 61000-3-3: 2006 EN 61000-3-3: 2006 EN 61000-3-3: 2007 EN 61000-6-3: 2007 EN		Safety Requi	rements
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	Bump Test IE		IEC 60255-21-2:1998 Level I

Advanced Power Quality Monitor

Ordering Guide



^{*} Additional charges apply

Ceiec Electric Technology Inc.

8/F, WestSide, Building 201, Terra Industrial & Tradepark Che Gong Miao, Shenzhen, Guangdong, P.R.China 518040

+86.755.8341.5187 T:

F: +86.755.8341.0291

sales.international@ceiec-electric.com E:

W: www.ceiec-electric.com

Your Local Representative	

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With Al option A , I4 is not available