

POWERLOGIC

Power Meter Series 700



POWERLOGIC Systems help you control the Cost, Quality and Reliability of Electric Power. They provide savings through reduced utility costs, effective power equipment management, increased power system reliability and downtime avoidance.

The **POWERLOGIC PM700** series is a high-performance power monitoring unit, providing all the measurement capabilities required to monitor an electrical installation in a single 96 x 96 mm unit extending only 50mm behind the mounting surface. With its large, easy-to-read display, you can monitor all three phases and neutral at the same time. The anti-glare display features large 11 mm high characters and powerful backlighting for easy reading even in extreme lighting conditions and viewing angles.

The Power Meter Series 700 is available in three versions:

- PM700MG, basic version with THD and min/max readings
- PM700PMG, basic version plus two pulse outputs for energy metering
- PM710MG, basic version plus an RS 485 port for Modbus communication

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Applications

- Panel instrumentation
- Sub-billing and cost allocation
- Remote monitoring of an electrical installation
- Harmonic monitoring (THD)

Characteristics

Requires only 50 mm behind mounting surface

The Power Meter Series 700 can be mounted on switchboard doors to maximise free space for electrical devices.

Large back lit display with integrated bar charts

Displays 4 measurements at a time for fast readings.

Intuitive use

Easy navigation using context-sensitive menu.

Power and current demand, THD and min/max reading in basic version

A high-performance solution for trouble-free monitoring of your electrical installation.

Energy class 1 as defined by IEC 61036

Suitable for sub-billing and cost-allocation applications.

Selection guide		PM700MG	PM700PMG	PM710MG
General				
Use on LV and HV systems		■	■	■
Current and voltage accuracy		0.5%	0.5%	0.5%
Energy and power accuracy		1.0%	1.0%	1.0%
Instantaneous rms values				
Current	Phases and neutral	■	■	■
Voltage	Ph-Ph and Ph-N	■	■	■
Frequency		■	■	■
Active, reactive, apparent power	Total and per phase	■	■	■
Power factor	Total	■	■	■
Energy values				
Active, reactive, apparent energy		■	■	■
Demand values				
Current	Present and max.	■	■	■
Active, reactive, apparent power	Present and max.	■	■	■
Setting of calculation mode	Block, sliding	■	■	■
Power quality measurements				
Harmonic distortion	Current and voltage	■	■	■
Data recording				
Min/max of instantaneous values		■	■	■
Display and I/O				
Backlit LCD display		■	■	■
Pulse output		-	2	-
Communication				
RS 485 port		-	-	■
Modbus protocol		-	-	■
Electrical characteristics				
Measurement accuracy	Current and voltage	0.5%		
	Power	1%		
Mechanical characteristics				
Weight		0.37 kg		
IP degree of protection (IEC 60529)		IP52 front display, IP30 meter body		
Dimensions		96 x 96 x 69 mm (meter with display) 96 x 96 x 50 mm (behind mounting surface)		
Environmental conditions				
Operating temperature	Meter	0 °C to +60 °C		
	Display	0 °C to +50 °C		
Pollution degree		2		
Dielectric withstand		As per EN61010, UL508		
Electromagnetic compatibility				
Electrostatic discharge		Level III (IEC 61000-4-2)		
Immunity to radiated fields		Level III (IEC 61000-4-3)		
Immunity to fast transients		Level III (IEC 61000-4-4)		
Immunity to impulse waves		Level III (IEC 61000-4-5)		
Conducted immunity		Level III (IEC 61000-4-6)		
Immunity to magnetic fields		Level III (IEC 61000-4-8)		
Immunity to voltage dips		Level III (IEC 61000-4-11)		
Conducted and radiated emissions		CE commercial environment / FCC part 15 class B EN55011		
Harmonics emissions		IEC 61000-3-2		
Flicker emissions		IEC 61000-3-3		
Safety				
Europe		CE, as per IEC 61010-1		
U.S. and Canada		UL508		
Communication				
RS 485 port (PM710)		2-wire, up to 19200 bauds, Modbus RTU, SELV circuit, 6 kV impulse (double insulation)		
Display characteristics				
Dimensions 73 x 69 mm		Back-lit green LCD (6 lines total, 4 concurrent values)		
Firmware characteristics				
Min./max.		Worst min. and max. with phase indication for voltages, currents and THD. Min. and max. values for power factor, power (P, Q, S) and frequency		