

ION6200 series

Technical Data Sheet

The PowerLogic ION6200 is a multi-function, cost-attractive, feature-rich flush or DIN rail-mounted multi-function meter that offers all the measurement capabilities required to monitor an electrical installation.

Complete with four-quadrant power, demand, energy, power factor, and frequency measurements, this versatile unit is easy to wire and mount. It offers an excellent upgrade path that lets you start with a low-cost base model and add enhanced functionality over the long term.

Applications

Cost management applications

- Basic metering
- Class 0.5S metering and sub-metering
- Replace multiple analogue meters
- Cost allocation
- Substation monitoring



PE86127

The solution for

All markets that can benefit from a solution that includes PowerLogic ION6200 series meters:

- Buildings
- Industry
- Data centres and networks
- Infrastructure (e.g. airports, road tunnels, telecom)

Benefits

Optimise your energy consumption & enable energy efficiency practices

- Collect and analyse energy consumption data from each area for each type of load or circuit
- Gain an accurate understanding of business expenses by allocating the energy-related costs
- Identify savings opportunities
- Use information to implement actions designed to reduce energy consumption

Competitive advantages

Connectivity advantages

- High visibility front display panel
- Megawatt option for all power and energy values
- Complete communications - optional RS-485 port, standard Modbus RTU, data rates 1200-19200 baud
- Modular construction allows for easy retrofit and planned upgrades
- Fast, easy setup via display or software
- IEC 60687 Class 0.5s accuracy for tariff metering
- Certified for revenue metering
- Multiple installation options - direct 4-wire Wye, 3-wire Wye, 3-wire Delta, Direct Delta, and single phase

Power management solutions

Schneider Electric provides innovative power management solutions to increase your energy efficiency and cost savings, maximise electrical network reliability and availability, and optimise electrical asset performance.

Conformity of standards

- | | |
|----------------|-----------------|
| • EN 61000-4-2 | • IEC 61000-4-2 |
| • EN 61000-4-3 | • IEC 61000-4-3 |
| • EN 61000-4-4 | • IEC 61000-4-4 |
| • EN 61000-4-5 | • IEC 61000-4-5 |
| • EN 61000-4-6 | • IEC 61000-4-6 |
| • EN 61010-1 | • IEC 61000-6-2 |
| • IEC 61010-1 | |

ION6200

ION6200 feature selection

ION6200 feature selection							
				ION6200 Standard	ION6200 EP1	ION6200 EP2	
Performance standard							
IEC61557-12 PMD/Sx/K55/0.5					■	■	■
General							
Use on LV and HV systems					■	■	■
Current and voltage accuracy					0.3%	0.3%	0.3%
Energy and power accuracy					0.5%	0.5%	0.5%
Number of samples per cycle					64	64	64
Instantaneous rms values							
Current and voltage					■	■	■
Frequency						■	■
Active, power		Total				■	■
		Per phase					■
Reactive and apparent power		Total					■
		Per phase					■
Power factor		Total				■	■
		Per phase					■
Energy value							
Active energy						■	■
Reactive, apparent energy							■
Demand value							
Current		Present and max				■	■
Active power	Present						■
	Max					■	■
Reactive and apparent power		Present and max					■
Power quality measurements							
Harmonic distortion		Current, voltage					■
Display and I/O							
LED display					■	■	■
Pulse output					■	■	■
Direct voltage connection (V AC)					400/690	400/690	400/690
Communication							
RS-485 port					■	■	■
ION compatibility					■	■	■
Modbus RTU protocol					■	■	■

See your Schneider Electric representative for complete ordering information.

ION6200

ION6200 feature selection		
Electrical characteristics		
Type of measurement		True rms electrical parameters Up to 64 samples per cycle
Measurement accuracy	Current	≥5 % of full scale 0.3 % reading
		<5 % of full scale 0.3 % reading + 0.5 % full scale
	I4 derivation	0.6 % reading + 0.5 % full scale
	Voltage	L-N 0.3 % reading, L-L 0.5 % reading
	Power	IEC 60687 Class 0.5, ANSI 12.20 Class 0.5
	Frequency	0.1 % reading
	Power factor	1.0 % reading
	Energy	IEC 60687 Class 0.5, ANSI 12.20 Class 0.5
	Harmonic distortion	Total harmonic distortion + 1.0 %
Input-voltage characteristics	Measurement range	60-400 L-N (103.5-690 L-L) V AC RMS (3 phase) 60-400 L-N V AC (single phase)
	Impedance	2 MW /phase
	Inputs	V1, V2, V3, Vref
	Overload	1500 V AC RMS continuous
	Dielectric withstand	>3250 V AC RMS; 60 Hz for 1 minute
Input-current characteristics	Rated inputs	5 A nominal /10 A full scale RMS (+20% overrange with full accuracy, 300 V RMS to ground)
	Permissible overload	120 A RMS for 1 second, non-recurring
	Starting current	0.005 A RMS
	Burden	0.05 VA (typical) @ 5 A RMS
	Inputs	I1, I2, I3
	Dielectric withstand	3000 V RMS for 1 minute
Power supply	AC	Standard: 100-240 V AC, 50-60 Hz
	DC	Standard: 110-300 V DC, Low Voltage DC: 20-60 V DC
Inputs/outputs	Digital outputs	2 optically isolated digital outputs for KY pulsing or control Max forward current: 150 mA Max voltage: 200 V Max current: 150 mA
	RS-485 port	Optically isolated
Mechanical characteristics		
Weight		0.68 kg
IP degree of protection (IEC 60529)		Meter with display: front IP 65, back IP 30; Transducer unit (no integrated display): IP 30 Remote display unit: front IP 65; back IP 30
Dimensions		Basic unit installed depth: 106.7x106.7x40.6 mm Remote display: 106.7x106.7x22.9 mm
Environmental conditions		
Operating temperature		-20° C to 70° C ambient air
Storage temperature		-40° C to 85° C
Humidity rating		5 % to 95 % non-condensing
Pollution degree		2
Installation category		III (Distribution)
Electromagnetic compatibility industrial environments		

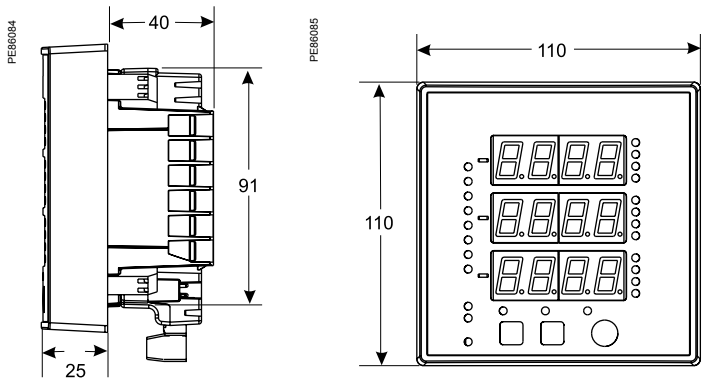
ION6200

ION6200 feature selection

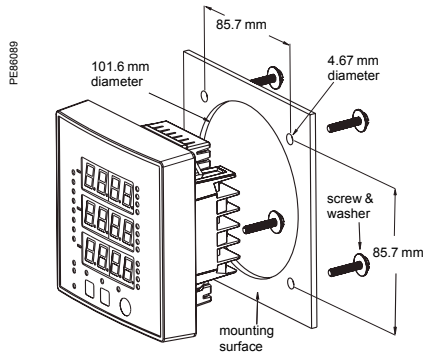
Electromagnetic compatibility		
Electrostatic discharge		IEC 61000-4-2 (EN61000-4-2/IEC801-2)
Immunity to radiated fields		IEC 61000-4-3 (EN61000-4-3/IEC801-3)
Immunity to fast transients		IEC 61000-4-4 (EN61000-4-4/IEC801-4)
Surge immunity		IEC 61000-4-5 (EN61000-4-5/IEC801-5)
Conducted immunity		IEC 61000-4-6 (EN61000-4-6/IEC801-6)
Electromagnetic compatibility for industrial environments		IEC 61000-6-2
Safety		
Standards		cUL compliant to CSA C22.2 No. 1010-1
		IEC1010-1 (EN61010-1)
		UL 3111-1
Communications		
RS-485 port		Up to 19 200 bps, Modbus RTU, ION compatible protocol
Display		
Bright LED display		19 mm high digits
		Displays all basic power parameters
		Easy setup for common configuration parameters
		Password protection on setup parameters
		Password protection for demand reset
Megawatt options		
MegaWatt option on meter base with integrated display. Not available for RMICAN or RMICAN-sealed meters		MO
MegaWatt option on Transducer model with DIN rail mount, Remote Display and 4.2 m cable (RJ11, 6 conductor, 26 gauge). Not available with Security options RMICAN or RMICAN-SEAL.		N1
MegaWatt option on Transducer model with DIN rail mount, Remote Display and 2 m cable (RJ11, 6 conductor, 26 gauge). Not available with Security options RMICAN or RMICAN-SEAL.		N2
MegaWatt option on Transducer model with DIN rail mount, Remote Display and 9 m cable (RJ11, 6 conductor, 26 gauge). Not available with Security options RMICAN or RMICAN-SEAL.		N3
Options card		
1 Standard Measurements		Z0A0N
2 Enhanced Package #1		Z0A0P
3 Enhanced Package #2		Z0A0R
4 Standard Measurements, two pulse outputs		Z0B0N
5 Enhanced Package #1, two pulse outputs		Z0B0P
6 Enhanced Package #2, two pulse outputs		Z0B0R
7 Standard Measurements, RS-485		A0A0N
8 Enhanced Package #1, RS-485		A0A0P
9 Enhanced Package #2, RS-485		A0A0R
10 Standard Measurements, two pulse outputs, RS-485		A0B0N
11 Enhanced Package #1, two pulse outputs, RS-485		A0B0P
12 Enhanced Package #2, two pulse outputs, RS-485		A0B0R
Remote modular display (RMD)		
Model		M620D
Display type	Standard display	R
	For use with Transducer meter base with MegaWatt option	N
Cable length	No Cable	0
	4.2 m cable connecting RMD to Transducer meter base	1
	2 m cable connecting RMD to Transducer meter base	2
	9 m cable connecting RMD to Transducer meter base	3

ION6200 feature selection		
Part numbers		
Part	Code	Description
1 Model	M6200	A
2 Form factor	A0	Integrated display model
	R1	Transducer model with DIN rail mount, Remote Display and 4.2 m cable (RJ11, 6 conductor, 26 gauge)
	R2	Transducer model with DIN rail mount, Remote Display and 2 m cable (RJ11, 6 conductor, 26 gauge)
	R3	Transducer model DIN rail mount, Remote Display and 9 m cable (RJ11, 6 conductor, 26 gauge)
	T1	Transducer model with DIN rail mount (requires Comms or pulse outputs)
3 Current inputs	A	10 Amp current inputs (12 A max)
4 Voltage inputs	0	Autoranging (57-400 V AC L-N / 99-690 V AC L-L)
6 System frequency	0	Calibrated for use with 50 Hz or 60 Hz systems
7 Communications	Z0	No communications
	A0	Single RS-485 port (supports Modbus RTU protocol and ION-compatible PML protocol)
8 I/O	A	No I/O
	B	This option activates the two Form A digital outputs for kWh, kvarh energy pulsing
9 Security	0	No hardware lock (setup is password protected)
	2	RMANSI: Revenue Meter approved for use in the United States (ANSI C12.16 approved; meets ANSI C12.20 class 0.5 accuracy at 23° C; 10 A current inputs only)
	3	RMICAN: Measurement Canada approved revenue meter for use in Canada (10A current inputs only)
	4	RMICAN-SEAL: Factory-sealed and Measurement Canada approved revenue meter
10 Measurement package	N	Standard Measurements (Volts/Amps per phase and avg)
	P	Enhanced Package #1 (Standard Measurements plus Energy/Power total, Frequency, Power Factor total, Neutral Current)
	R	Enhanced Package #2 (all measurements)
Power supply	P620PB	Standard plug-in power supply (100-240 V AC / 50-60 Hz or 110-300 V DC)
	P620PC	Low voltage DC plug-in power supply (20-60 V DC)

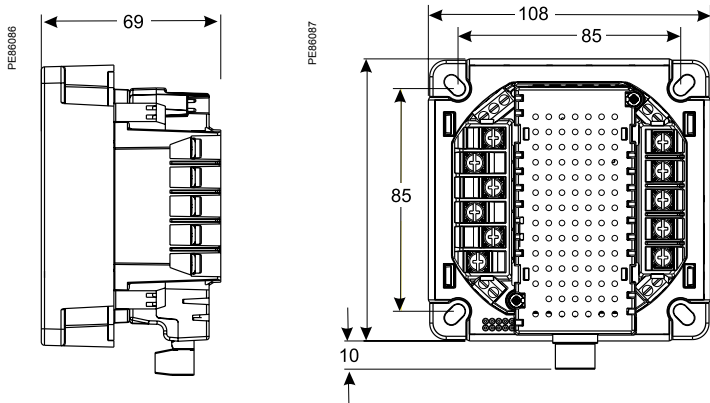
ION6200 integrated model dimensions



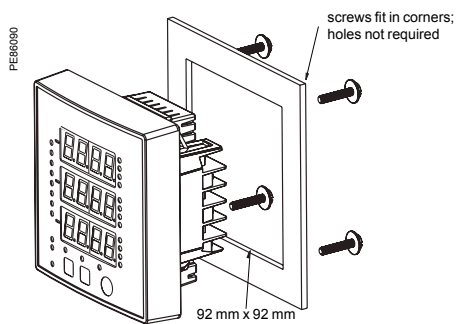
Mounting integrated model - ANSI 4" (4 1/2" Switchboard)



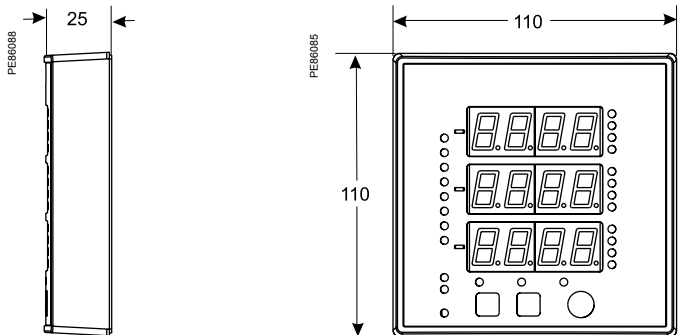
ION6200 TRAN model dimensions



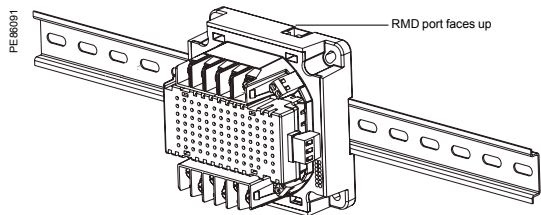
Mounting integrated model - DIN 96



ION6200 RMD dimensions



Mounting the TRAN model



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Product name
PLSED306008EN

As standards, specifications and designs develop from time to time, please ask for confirmation of the information given in this document.

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