

In-Line Power Meter (ILPM)



Power Monitoring and Switching

16A and 32A in-line power meters with optional Relay.

The power meter goes between the electrical source and the PDU or individual appliance, monitoring the voltage (V), current (A) and Kilowatt Hours (kWh) being consumed. Identify power hungry equipment with billable grade accuracy and remotely switch devices on and off. Relays are either Normally Closed, Normally Open or Bi-Stable Latched relay, which retains it's state regardless of whether it is receiving power or not.



In-Line Power Meter is essential for :-

- Checking how close you are to tripping your circuit breaker
- Ensure sufficient power overhead when adding equipment to a circuit
- Billing individual clients in co-located services
- Monitoring up to 16 appliances from a single IP address

Choice of plug types to match your power train



C13 / C14



U.K



AUS



Nema 5-15



Shuko



C19 / C20



Nema L5-20
Nema L6-30



Nema 5-20



IEC P+N+E

ILPM - Technical Specification

Measurements	
Power Rating	Input Voltage rating : - 1 phase - 100V~250V AC Current Rating : - 16A - 32A
Power Measurements	- Voltage (V) - Current (A) - Active Power (kW) - Total Active Energy (kWh) - Leakage current (A) - Power Factor
Environment monitoring	Optional Cabinet Thermal Map (-CTM or -CTHM) - Temperature sensor *range -40°C to +75°C - Humidity sensor * 0 to 100% Relative humidity
Control	
Switching Relay	Latched Relay Contacts rating : 40 Amp Mechanical Life : 1×10 ⁷ times Electrical Life : 3×10 ⁴ times Class B
Status Indication	LED indication for power LED Relay status (with optional relay)
Inputs	1x sensor RJ45 Port Hardwired with following plugs : - IEC 60320 C20 - IEC 60320 C14 - Nema 5-15P - Nema 5-20P - Nema 5-30P - Nema L5-15P - Nema L5-20P - Nema L5-30P - UK BS - Shuko CEE 7/7 plug - IEC60309 2P+E blue
Outputs	Outlet types : - IEC 60320 C13 - IEC 60320 C19 - Nema 5-15R - Nema 5-20R - Nema 5-30R - Nema L5-15R - Nema L5-20R - Nema L5-30R - UK BS1363 - Shuko CEE 7/3 Socket - IEC 60309 2P+E Blue
Interface	
Communications cable	RJ-45 jack to sensor using UTP CAT5e/6 cable
Power source	Powered by the sensorProbe+ family units. No additional power needed
Power Consumption	Typical 800 mWatt, 160 mA Peak 1.75 Watt, 350 mA
Maximum Cable Length	Run length is 32 feet (10 meters) with approved low capacitance shielded cable or UTP
Dimensions	170 x 85 x 52 mm
Mounting	Keyhole mounting
Components	Manufactured using highly integrated, low power surface mount technology to ensure long term reliability.
Operating Environment	Temperature : Min. -35° C – Max.80° C Humidity: Min. 20% – Max. 80% (Non-Condensing)
MTBF	1,400,000 Hours based on field experience with sensorProbe units.
Important Note	sensorProbe+ units auto detects the presence of the ILPM sensor - The ILPM sensor is only compatible with the sensorProbe+ platform units. - When plugging the first time or after upgrading a sensorProbe+ unit, the sensor's firmware might be upgraded by the unit and not be available right away. - On the sensorProbeX+, the sensor can be used only on the main module sensor ports
Sensor count	ILPM : 5 ILPM-LR : 6 -CTM : +9 -CTHM : +11

ILPM - Technical Specification

Options and Product Codes

In-line Power Meters come with a variety of options, relays, thermal maps, connection types. Refer to the table below for the available options.

Order individual code options, or combine into a single part number :-

16A In-line Power Meter with Latched Relay

ILPM-16A-LR

or

ILPM-16A

LR

Product Name	Product Code
Inline Power Meter 32A (25cm power in / out cable bare ends)	ILPM-32A
Inline Power Meter 16A (25cm power in / out cable bare ends)	ILPM-16A
OPTIONS	
Relays	
Normally Closed Relay	NCR
Normally Open Relay	NOR
Latched Relay	LR
Cabinet Thermal Maps	
Cabinet Thermal Map Temperature Only	ILPM-CTM
Cabinet Thermal Map Temperature & Humidity	ILPM -CTHM
10A Connections	
IEC C13 (Power Out)	C13
IEC C13 Locking (Power Out)	C13L
IEC C14 (Power In)	C14
13A Connections	
UK Plug (Power In)	UKP
15A Connections	
AUS (Power In)	AUS
Nema 5-15R (Power Out)	5-15R
Nema 5-15P (Power In)	5-15P

Product Name	Product Code
16A Connections	
EUR Plug (Power in)	EURP
C19 (Power Out)	C19
C19 Locking (Power Out)	C19L
C20 (Power In)	C20
IEC 2P+E (Power In)	2PEP
IEC 2P+E (Power Out)	2PEO
20A Connections	
Nema 5-20R (Power In)	5-20R
Nema L6-20P (Power Out)	L6-20P
Nema 5-20P (Power Out)	5-20P
30A Connections	
Nema 5-30P (Power Out)	5-30P
Nema L6-30P (Power Out)	L6-30P
32A Connection	
IEC 2P+E (220V Power In)	2PEP-32
IEC 2P+E (220V Power Out)	2PEO-32

ILPM - Technical Drawing

