

# PMU

## Power Meter Unit

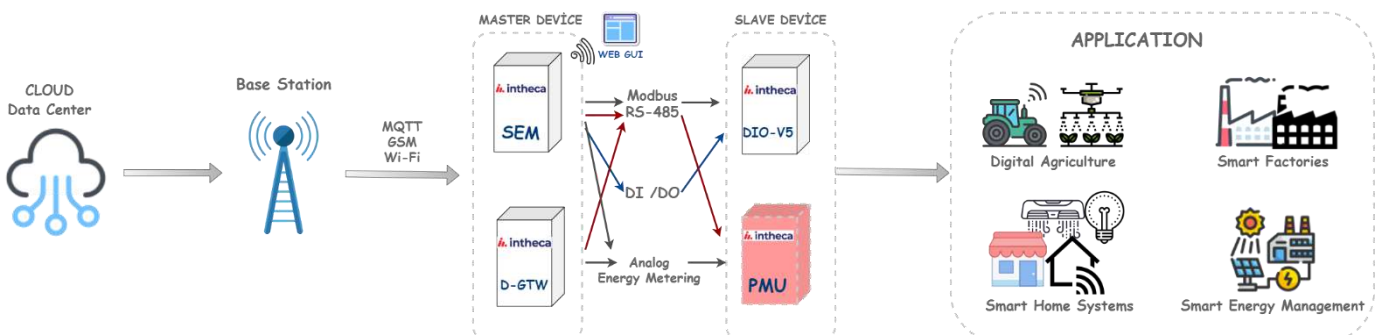


### KEY FEATURES

- 3 phase 5 channel or 15 channel single phase, power and energy measurement up to 32nd harmonic
- Modbus RTU Support
- User Interface Software
- DIN rail mounted

The PMU series meter is a new generation energy and power meter that offers all the measurement features needed to monitor an electrical installation in a single unit. The PMU monitors up to 5 channels of three-phase circuits, or up to 15 channels of single-phase circuits, or any combination of single or three-phase circuits. This flexibility makes the PMU perfect for facilities such as distribution substations, office buildings, data centers and shopping malls. With the user interface software, energy parameters can be monitored in real time, current and voltage polarities, transformer ratios and serial communication settings can be easily configured. It has a DIN rail mountable design. With its compact design and innovative concept, the PMU fits directly into the protective device.

### APPLICATION



## TECHNICAL SPECIFICATIONS

<b>Device Specifications</b>	
Supply Voltage Range	4.5V- 6V
Supply Current Range	0.3A
Nominal Supply Voltage	5V
CPU	ESP32 (Tensilica Xtensa 32-bit LX6)
Flash	16 MB
RAM	8 MB
Storage	Internal
Power Consumption	1.5 W
Watchdog Timer	System Reset / 5 sec
<b>Communication Specifications</b>	
Communication Protocols	Modbus-RTU (Slave)
Serial Interfaces	RS-485 (Isolated)
RS-485 BaudRate	1200bps – 115200bps
Connection Type	3 wired (A,B,Gnd), Half Dublex
Data Type	8 bit data, No parity, 1 bit stop
Isolation	2.5 kVAC, 1 minute
USB Connector	Micro USB
<b>Power Measurement Specifications</b>	
Type of measurement	True rms up to the 15th harmonic on three-phase (3P,3P+N) and single-phase
Voltage Measurement Range	0-665 V AC (Shoud be defined on order) 45-65 Hz Phase to neutral
Current Measurement Range	130A
Frequency	3 Hz
Voltage Channels	3P + N (3 Phase Voltage and Neutral)
Current Channels	2 x 3P + 1N (Either 3 Phases or 6 Single Phases)
Harmonic Analysis	Up to 32nd Harmonic
Voltage Accuracy	±0.5%
Current Accuracy	±0.5%
Active Energy Accuracy	IEC 62053-22 Class 0.5S
Accuracy Class	IEC 61000-4-30 Class S
Basic Measurements	V, I, f, P, Q, S / kWh, kVArh, kVAh (Four Quadrant) / PF, cos φ / THD-I, TDD-I, THD-U, THD-V / K-Factor / Ih(1-13)- Vh(1-13)
Detailed Measurements	Outage / Maximum Voltage, Current and Power Demand
Programmable Alarms	Under Voltage / Over Voltage / Low Current / High Current
<b>Environment Conditions</b>	
Standards	IEC 61326-1, EN 301489-1, IEC 61010-1, EN 60950-1
Operating Temperature	-25°C / +70°C
Storage Temperature	-40°C / +70°C
Operating Humidity	25%- 95% RH
Protection Class	IP20
<b>Mechanical Specifications</b>	
Device Dimensions (W x H x D)	35 x 102 x 117 mm
Weight	210 gr
Notification LEDs	Modbus (RX) Modbus (TX) User Led (5)