

PMU

Power Meter Unit



Device Description

Inavitas PMU (Power Meter Unit) is a new generation network analyzer that measures and enables real time monitoring of energy parameters. Inavitas PMU (Power Meter Unit) monitors up to 5 channel three phase circuits or 15 channel single phase circuits or any combination of single or three phase circuits. This flexibility makes Inavitas PMU perfect for multi-tenant facilities such as distribution substations, office buildings, data centers and shopping malls. The user can monitor all energy parameters in real time and configure current and voltage polarities, transformer ratios and serial communication settings easily via Inavitas PMU user interface software.

Device Specifications

Supply Voltage Range	9-18 V _{DC} / 18-36 V _{DC}
Nominal Supply Voltage	12 V _{DC} / 24 V _{DC}
CPU	ARM Cortex-M4 32 Bit
Flash	128 kB
RAM	64 kB
Watchdog Timer	System Reset / 5 sec
Power Consumption	5W @ 24 V _{DC}
Real Time Clock	Available
Configuration	Inavitas PMU Configuration Software

Communication Specifications

Communication Protocols	802.11 b/ Modbus-RTU (Slave) g/n
Serial Interfaces	RS-485 (Isolated), Micro USB C Type 2.0
Serial Communication Speed	1200bps – 115200bps
Connection Type	3-Wired (A, B, GND), Semi Duplex
Data Type	8 Bit Data, No Parity, 1 Bit Stop
Insulation	2.5 kV _{AC} RMS 1 Minute
Usb Data Transfer Speed	480 Mbit/s

Power Measurement Specifications

Voltage Measurement Range	0 - 275 V _{AC,RMS} (L - N), 0 - 500 V _{AC,RMS} (L - L)
Current Measurement Range	1 - 4000 A _{AC,RMS} (Split Type)
Frequency	50 / 60 Hz ±5%
Voltage Channels	3P + N (3 Phase Voltage and Neutral)
Current Channels	5 x 3P (Either 15 Phases or 6 Single Phases)
Sampling Frequency	128 Sample / Cycle
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
Detailed Measurements	Outage / Maximum Voltage, Current and Power Demand
Programmable Alarms	Under Voltage / Over Voltage / Low Current / High Current

Environment Conditions

Operating Temperature	-25°C / +85°C
Storage Temperature	-40°C / +70°C
Operating Humidity	25% - 95% RH
Protection Class	IP20

Mechanical Specifications

Device Dimensions (W x H x D)	35mm x 100mm x 115mm
Weight	230gr

