

Cube Meter

ENPM350IP



Features

- Measures 3 3x 3 ϕ , 9x 1 ϕ circuits or any combination
- Modbus RTU Serial Communications
- RJ12 or RJ12 CT connections
- Only 1 voltage & 1 comms connection to make per MultiCube
- Combine CT types on a MultiCube
- Wide range of mV CTs & Rogowski Ropes
- Auto CT rotation
- Auto CT ratio recognition
- Crossed phase warning
- Wide range auxiliary supply -100-240vac
- Single voltage input range - 100V-480V
- Class 0.5
- CE, CB, UL, CUL \checkmark Tick
- 5 year Warranty

Benefits

- Lower cost per meter point
- Reduced installation time by up to 50%
- Space saving 3 in 1 panel mount case
- Reduced installation errors

3 in1 metering solution, designed to meet the requirements of both energy managers and electrical engineers and integrate seamlessly with Entuit's gateways IoT Platform. As well as measuring 3X the loads of a standard sub-meter, in any combination of 3ph/1ph, this also packs in market leading innovations, with Accuracy Class 0.5.

In addition to very attractive pricing per meter point is the reduced cost of just one voltage and comms connection per meter. Further savings come from the 'Plug & Play' RJ12 to RJ12 CT adaptor, with just one to plug in for each 3ph load or set of 3 X1ph loads making installs even quicker.

The meter features innovative, patented, Auto CT Recognition. This avoids errors from programming the CT primaries incorrectly by automatically recognising the CT's primary for you; plus Auto CT Rotation - to compensate for CTs installed the wrong way round; and Auto CT Accuracy Compensation - guaranteeing the accuracy of your data. This means that you will know the combined accuracy of the MultiCube 950mV and CTs because the meter can compensate for the phase angle of our CTs giving you peace of mind that your data will not contain any hidden inaccuracies.

Further safeguards against error are provided by the RJ12 plugs that cannot be installed the wrong way round. This just leaves the possibility of installing the CTs on the wrong phases, and for this the MultiCube950mV provides a warning on its large, backlit display so that costly returns to site can be avoided.

Covered by industry leading 5 year warranty, and accredited for CE, CB, UL, CUL and CTick this is the ultimate fit & forget submetering solution.

Technical Specifications

Multi-Parameter Available via Display & MODBUS	Phases	Sum
Volts, L-N & L-L	1-3	
Amps	1-9	
Power Factor	1-9	
Import kWh, kVAh, kvarh	1-9	
Export kWh, kvarh	1-9	
Peak Volts, L-N	1-3	
Peak Amps	1-9	
Neutral Amps		
kW, kVA & kvar	1-9	
kW, kVA & kvar Demand	1-9	
Peak kW, kVA, & kvar Demand	1-9	
Average Volt & Peak	1-3	
Amp Demand & Peak	1-9	
Frequency	1.	
True rms measurement of Volts & Amps and true Power Measurement to the 80th Harmonic at 50Hz (>70th @60Hz).		

INPUTS:

System: 3ø 3 or 4 Wire Unbalanced Load or 1ø
Voltage Un: 480/277V Line-Line
Current In: 0.333V from auto-setting CTs

MEASUREMENT RANGES:

Voltage: 20% to 120%
Current: 0.2% to 120%
Frequency (Fundamental): 45 to 65Hz

ACCURACY:

kWh: Class 0.5 -per EN 62053-22
ANSI C12.20: Class 0.5
kvarh: Class 1 per EN 62053-23 & BS 8431
kW & kVA: Class 0.25 IEC 60688
kvar: Class 0.5 IEC 60688
Amps & Volts: Class 0.1 IEC 60688
PF: ±0.2° (0.05In – 1.2In and 0.2Un – 1.2Un)
Neutral Current: Class 0.5 IEC 6068

AUXILIARY SUPPLY:

Standard 100-240V 45 - 65Hzat 4W max

DIGITAL OUTPUTS:

Function: 1 pulse per unit of energy
Configuration: Scaling and ON-Time
Type: N/O volt free contact. Optically isolated
Contacts: 100mA ac/dc max; 70Vdc/33Vac max; 5W maximum load
Isolation: 3.5kV 50Hz 1 minute

ENVIRONMENT:

Enclosure: IP54 rated
Operating: -10°C to +55°C (14°F to 131°F)
Storage: -25°C to +70°C (-13°F to 158°F)
Humidity: <75% RH non-condensing

MECHANICAL:

Enclosure: DIN 43700 96x96
Material: Mablex with fire protection to UL94-V-0. Self extinguishing
Dimensions: 96x96x83.5mm (3.8"x3.8"x3.3")
Weight: 250 gms (0.55lbs)

COMPLIANCE:

Safety: Conforms to EN 61010-1 Install Category III
Accreditations: CE, CB, UL, cUL, RCM/C-

COMMUNICATION

Modbus RTU:
Baud: 4800-38400
Parity: Selectable NONE/ODD/EVEN
IDs: Combined Master + Individual Mete
Isolation: 3.5kV