

MultiCube 950V

Saves space, time and money



3 x 3 ϕ Multi-function Sub-Meter

- Plug & Play CT connections
- Auto CT rotation
- Auto CT Primary Configuration
- Commissioning Test Pages
- Any mix of 1 ϕ & 3 ϕ meter points
- Energy Management and Power Quality Applications
- Comprehensive MODBUS map
- ND Metering Solutions 5 year 'Fit & Forget' warranty
- Options
 - ✓ Class 0.2 Accuracy
 - ✓ THD & Harmonics to the 63rd
 - ✓ Virtual Meter OR Residual Meter

Standard Specification for each of the 3 x 3 ϕ Meter Points

- kW, kWh, Volts, Amps, PF, Frequency, kvar, kVA, kVAh, kVAh
- 4 Digital Outputs — Pulses or Alarms
- Export Energy Kvarh, kWh (with CT auto rotation off)
- Max/Min Demands

Also Available

- Custom Wall Mount Enclosure
- MODBUS RS485
- BACNET (June 2015)
- M-BUS
- ETHERNET (June 2015)

ndmeter.co.uk

Designed and made in the UK

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TECHNICAL SPECIFICATIONS

PARAMETERS

INPUTS

System	3 Phase 3 or 4 Wire Unbalanced Load or Single Phase
Voltage U_n	480/277V. 3 Phase 3 or 4 Wire. Others to order.
Current I_n	0.33V From Custom Smart CTs
Measurement Range	Voltage 20% to 120% U_n , Current 0.2% to 120% I_n
Frequency Range	Fundamental 45 to 65Hz THD to 80 th

AUXILIARY SUPPLY

Input	100-240Vac (+10% / -15%)
Frequency	45-65Hz
Load	4 Watt Max

ACCURACY

kWh	Better than Class 0.5 per EN 62053-22 & BS 8431
kVAh	Better than Class 1 per EN 62053-23 & BS 8431
kW & kVA	Better than Class 0.25 IEC 60688
kVAR	Better than Class 0.5 IEC 60688
Amps & Volts	Class 0.1 IEC 60688 (0.01 I_n – 1.2 I_n or 0.1 U_n – 1.2 U_n)
PF	±0.2° (0.05 I_n – 1.2 I_n and 0.2 U_n – 1.2 U_n)
Neutral Current	Class 0.5 IEC 60688 (0.05 I_n – 1.2 I_n)

PULSE OUTPUTS

Function	1 Pulse per unit of energy
Scaling	Settable between 1 & 1000 counts of energy register
Pulse Period	0.1 sec. default; Settable between 0.1 and 20 sec
Rise & Fall Time	< 2.0ms
Type	N/O Volt free contact. Optically isolated BiFET
Contacts	100mA ac/dc max ; 100V ac/dc max ; 5W maximum load
Isolation	3.5kV 50Hz 1 minute

GENERAL

Temperature	Operating -10°C to +55°C (14°F to 131°F)
	Storage -25°C to +70°C (-13°F to 158°F)
Humidity	< 75% non-condensing
Environment	IP54 (when correctly mounted, as described, in a panel) – Indoor Use. Altitude <2000m (6561ft)

MECHANICAL

Dimensions	96 x 96 mm x 83.5 mm (72 mm behind panel) 3.78" x 3.78" x 3.29" (2.83" behind the panel)
Weight	~ 250 gms
Enclosure	Mablex® UL94-V-O. Self-extinguishing
Terminals	Rising Cage. 4mm ² (12 AWG) cable max

Accreditations

Safety	Conforms to EN 61010-1 Ed3 2010, CAT III UL, cUL, CB, CE
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Standard Parameters

Volts, L-N & L-L Amps
Neutral Amps
kW, kVA & kvar, Power Factor
Import kWh, kVAh, kvarh, Export kWh, kvarh
Frequency
Peak Volts L-N, Peak Amps
kW, kVA & kvar Demand with max/min
Amp Demand & Peak
Average Volt & Peak

Add Virtual/Residual Meter:

Virtual : Meter1+ Meter2 + Meter3
Residual: Meter1 – (Meter2 + Meter3)

Add THD and Individual Harmonics:

Volt & Amp THD to the 80th (at 50Hz)
Individual Harmonics to 63rd
9 x Current and 3 x Voltage

Add Communications

RS485 MODBUS RTU
M-Bus
BacNet (June 2015)
Ethernet (June 2015)

Add Class 0.2

kWh: Better than Class 0.2 per EN 62053-22 & BS 8431

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E & O Excepted