APM Power Meter

For single-phase, split-phase & 3-phase mains networks

trumeter
innovation by design

THREE YEAR **3** WARRANTY

Advanced Panel Meter (APM)

Programmable dynamic backlight color

Warning flash

Combined digital and bar graph display

1% Accuracy

Ten user configurable alarms

Programmable scale
Measure **single-, split-** and **3-phase**

2 Digital Outputs
1 Analog Output

PLC

USB port for custom user settings via the free easy-to-use software

500   V
239.8 L1
290.1 L2
291.7 L3
3605 KVAH
L1 L2 L3

Front panel navigation buttons

Less than 75mm deep

Modbus®
RTU over RS485 Connectivity

Instantaneous:
- Voltage (L-L and L-N)
- Current (L-L and L-N)
- Reactive Power (VAr)
- Active Power (W)
- Apparent Power (VA)
- Frequency (Hz)
- Power Factor (PF)
- THD Voltage & Current
- % Max Load
- Alarm Status (available on Modbus communication)
- Phase Angle (available on Modbus communication)
- Total Energy (kWh or kVAh)

Networks:
- Single phase, 2-wire
- Single phase, 3-wire (split-phase)
- 3-phase, 3-wire
- 3-phase, 4-wire

Key Features

- For single-, split- and 3-phase applications.
- Measures Active (W), Reactive (VAr) and Apparent (VA) power.
- Displays electrical parameters on large, backlit LCD display.
- Features two independent opto-isolated digital outputs plus one analog 4-20mA output.
- Includes MODBUS® RTU communication as standard.
- Provides clear indication of electrical circuit performance.
- User-programmable scale and custom alarm messages display critical parameters and immediately alerts operators when a parameter is out of range.
- Programmable Current Transformer (CT) and Potential Transformer (PT) ratios.

Specifications

NETWORKS

MEASUREMENT	1P2W, 1P3W, 3P3W, 3P4W,

MEASUREMENT

Frequency	45 - 65 Hz
Voltage measurement range	L-L 0 - 600VAC
	L-N 10 - 300VAC
Programmable PT range	1:1 to 1000:1
Current measurement range	0 - 5A
Programmable CT range	1:1 to 1000:1
Accuracy	1% (THD 5%) of full scale

ENVIRONMENTAL

Temperature - operating	-10 to +50°C
Temperature - storage	-40 to +70°C
IP rating (from the front)	IP65, NEMA type 4 and NEMA type 12

POWER SUPPLY

Input	100 - 277 VAC
Supply frequency	50-60Hz
Max power	2W

DISPLAY

Backlight colors	Red, Green, White

DIGITAL OUTPUTS

Number	2
Type	Opto-Isolated
Operating modes	Momentary
Max voltage	24VDC
Max sink current	15mA

ANALOG OUTPUTS

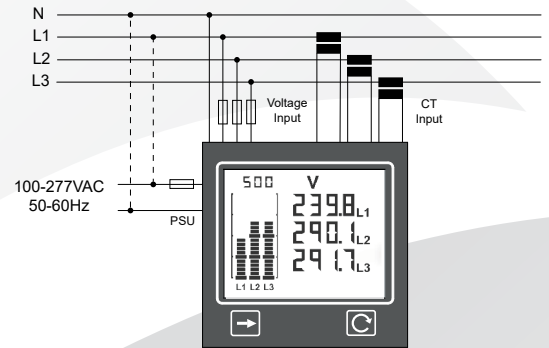|	
Number	1
Analog output	4-20mA
COMMUNICATION	Modbus® RTU over RS485
CERTIFICATION	CE, RoHS, UL, UKCA

Wiring Diagrams and Isolation

Single phase 2-wire (1P2W)
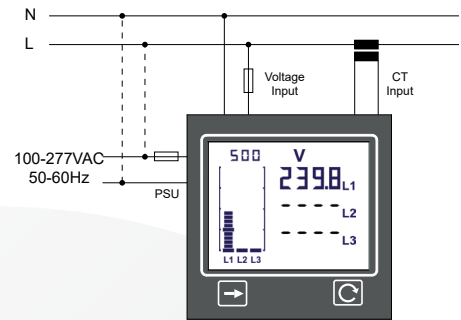
3 phase 3-wire (3P3W)

Control Outputs
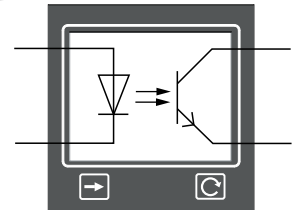
Isolation
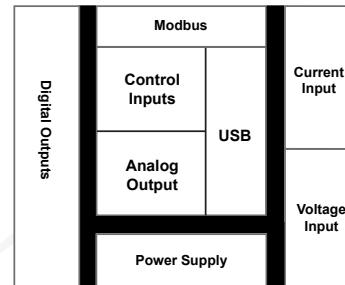
Dimensions:
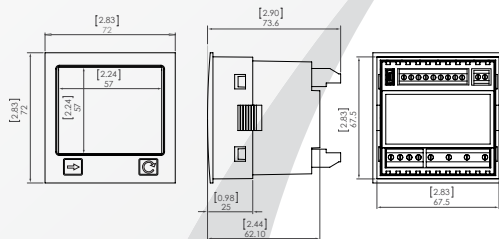
Panel Cutout:
68mm x 68mm
[2.68" x 2.68"] as per
DIN43700/IEC61554

Part Numbers

APM-PWR-APO	APM Power Meter, Positive LCD
APM-PWR-ANO	APM Power Meter, Negative LCD (subject to MOQ and extended lead time)
APM-PWR-XXX	Custom Option
029461-01	USB 2.0 (A-Male to Mini-B) Cable 1.8m
022615-01	Power Meter Evaluation Kit (N. America)
022616-01	Power Meter Evaluation Kit (RoW)

www.trumeter.com