



# APM Power Meter

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

## Advanced Panel Meter (APM)

**Programmable dynamic backlight color**

**Warning flash**

**1% Accuracy**

**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

**Combined digital and bar graph display**

**Ten user configurable alarms**

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

**2 Digital Outputs**  
**1 Analog Output**

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

**Front panel navigation buttons**

**Less than 75mm deep**

**Modbus® RTU Connectivity**

**UL LISTED** **CE** **RoHS**

### 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

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
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### 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

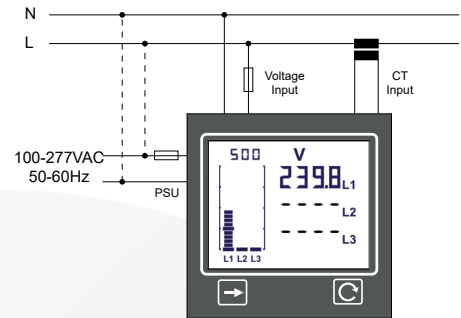
### COMMUNICATION

CERTIFICATION	Modbus® RTU CE, RoHS, UL
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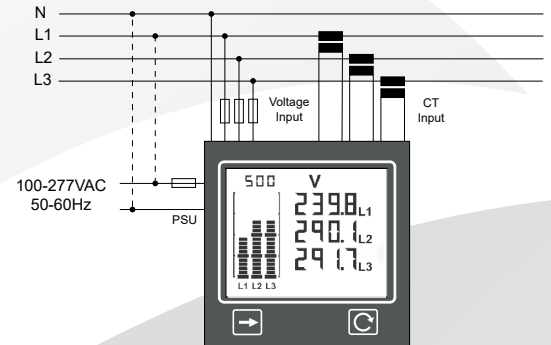
1P2W, 1P3W, 3P3W, 3P4W,

## Wiring Diagrams and Isolation

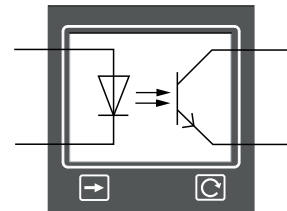
### Single phase 2-wire (1P2W)



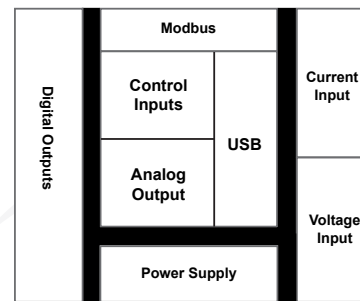
### 3 phase 3-wire (3P3W)



### Control Outputs

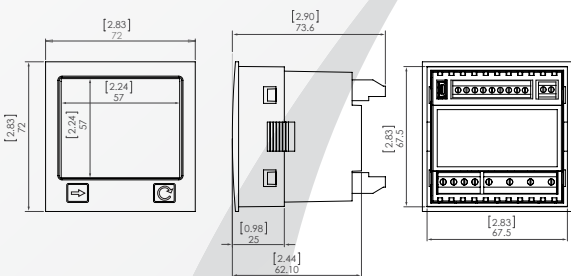


### Isolation



Isolation barriers:  
Galvanic Isolation Barrier

## 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

