



Series  
PMA

# Panel Meter Accessories

For PPM, APM, MPM, and LTI Series Panel Meters

## PMA-01 RS-232 Serial Adapter



PMA-01

### SPECIFICATIONS

**Compatibility:** EIA-232.  
**Connectors:** PC compatible 9-pin D subminiature connector (DB9) and RJ11 (adapter to meter).  
**Cable:** 3 ft (0.9 m) standard CAT5e cable provided with adapter.  
**Distance:** Adapter to panel meter: 6 ft (1.8 m) max; Adapter to computer: 50 ft (15 m) max; Serial interface cable not provided.  
**Power:** Powered by panel meter M-LINK connection.  
**Status Indication:** Separate LEDs for power (P), transmit (TX), and receive (RX).

## PMA-02 Meter Copy Cable



PMA-02

### SPECIFICATIONS

**Cable:** 3 ft (0.9 m) standard modular cable.

## PMA-03 RS-422/485 Serial Adapter



PMA-03

### SPECIFICATIONS

**Compatibility:** EIA-422 and EIA-485.  
**Connectors:** Removable screw terminal connector and RJ11 (adapter to meter).  
**Cable:** 3 ft (0.9 m) standard CAT5e cable provided with adapter.  
**Distance:** Adapter to panel meter: 6 ft (1.8 m) max; Adapter to computer: 3937 ft (1200 m) max.  
**Power:** Powered by panel meter M-LINK connection.  
**Status Indication:** Separate LEDs for power (P), transmit (TX), and receive (RX).

## PMA-04, PMA-05 RS-232 to RS-422/485 Converters



PMA-04, Isolated  
PMA-05, Non-Isolated

### SPECIFICATIONS

**Compatibility:** EIA-232, EIA-422, and EIA-485.  
**Connectors:** Screw terminal connector and DB9.  
**Distance:** RS-232 connection: 50 ft (15 m) max; RS-422/485 connection: 3937 ft (1200 m) max.  
**Number of Units:** Up to 31 RS-485 compatible devices.  
**Power:** 9 to 12 VDC; 115 VAC/12 VDC adapter included.  
**Isolation:** PMA-04: 1500 VAC between data lines; 700 VDC input/output-to-power; PMA-05: 1500 VAC between data lines only.

## PMA-06 USB to RS-232 Non-Isolated Converter



PMA-06

### SPECIFICATIONS

**Compatibility:** USB 1.1, USB 2.0, EIA-232.  
**Connectors:** PC compatible 9-pin D subminiature connector (DB9) and USB type A.  
**Drivers:** Windows® 98/2000/Me/XP operating systems.  
**Distance:** USB connection: 10 ft (3 m) max; RS-232 connection: 50 ft (15 m) max.  
**Power:** USB port.

## PMA-07, PMA-08 USB to RS-422/485 Converters



PMA-07, Isolated  
PMA-08, Non-Isolated

### SPECIFICATIONS

**Compatibility:** USB 1.1, USB 2.0, EIA-422, and EIA-485.  
**Connectors:** Screw terminal connector and USB Type B.  
**Drivers:** Windows® 98/2000/ME/XP operating systems, Linux 2.4 & greater.  
**Distance:** USB connection: 10 ft (3 m) max; RS-422/485 connection: 3937 ft (1200 m) max.  
**Number of Units:** Up to 31 RS-485 compatible devices.  
**Power:** USB port.  
**Isolation:** PMA-07: 1500 VAC between data lines, 700 VDC input/output-to-power; PMA-08: 1500 VAC between data lines only.

## PMA-09 Snubber

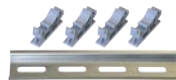


PMA-09

### SPECIFICATIONS

**Capacitance Value:** 0.01 µF.  
**Resistor Value:** 470 Ω.  
**Voltage:** 250V.

## PMA-10 DIN Rail Mounting Kit for Two Expansion Modules



PMA-10

### SPECIFICATIONS

**Rail:** 6 in (15.24 cm) long.  
**Mounting Clips:** 4 plastic mounting clips with adhesive strips.  
**Total Capacity:** 2 expansion modules.

## PMA-11 4 Relay Expansion Module



PMA-11

### SPECIFICATIONS

**Relays:** Four form A (SPST); Rated 3 A @ 30 VDC and 125/250 VAC for resistive loads 1/14 HP @ 125/250 VAC for inductive loads.  
**Cable:** Standard CAT5e cable; provided with module.  
**Connectors:** RJ45.  
**Tightening Torque:** Screw terminal connectors: 5 lb-in (0.56 Nm).  
**Enclosure:** ABS-94HB material, UL94HB.  
**Overall Dimensions:** 2.286 in x .924 in x 3.624 in (58.06 mm x 23.47 mm x 92.05 mm) (w x h x d).  
**Power:** Panel meter M-LINK connection.  
**Weight:** 2.4 oz (68 g).

## PMA-12 4 Digital Inputs and 4 Digital Outputs Module



PMA-12

### SPECIFICATIONS

**System:** Up to 2 modules for a total of 8 inputs, outputs.  
**Digital Input Logic:** High: 3 to 5 VDC; Low: 0 to 1.25 VDC.  
**Digital Output Logic:** High: 4.75 to 5 VDC; Low: 0 to 0.4 VDC.  
**Current:** Source: 10 mA max.; Sink: 1.5 mA min..  
**Cable:** Standard CAT5e cable; Provided with module.  
**Connectors:** RJ45.  
**Tightening Torque:** Screw terminal connectors: 5 lb-in (0.56 Nm).  
**Enclosure:** ABS-94HB material, UL94HB.  
**Power:** Panel meter M-LINK connection.  
**Weight:** 2.2 oz (62 g).