

# PM300 Series Dual Channel Power and Energy Meters

- Detectors
- Power Meters
- CCD Cameras
- Optical Chopper
- Beam Profilers & Extensions Sets
- Spectrometers
- Temperature Controller & Shutter
- Filter Wheels

## Specifications

| Power Meter Model                 | PM300  | PM300E  |
|-----------------------------------|--|---|
| Detector Compatibility            | Photodiode Sensors S100 Series<br>Thermal Sensors S200 Series<br>Photodiodes (Max 10mA)<br>Thermopiles (Max 100mV) | Photodiode Sensors S100 Series<br>Thermal Sensors S200 Series<br>Pyroelectric Sensors ES100/ES200 Series<br>Photodiodes (Max 10mA)<br>Thermopiles (Max 100mV) |
| Display                           | Graphical LCD 240 x 128 pixels (3.7" x 2.4")   |   |
| Display Format                    | Numerical, Bar Graph, Trend Graph  |   |
| Dimensions (H x W x D) Overall    | 220 x 122 x 325 mm   |   |
| <b>Photodiode Input</b>           | <b>CH1 &amp; CH2</b>   | <b>CH1 &amp; CH2</b>  |
| Units                             | W, dBm, A  | W, dBm, A, W/cm <sup>2</sup>  |
| Measurement Ranges                | 7 Decades; 10nA to 10mA<br>Ranges Selectable in W, Sensor Dependent  | 6 Decades; 100nA to 10mA<br>Ranges Selectable in W, Sensor Dependent  |
| Display Resolution                | 1pA per Responsivity Value (A/W)   | 10pA per Responsivity Value (A/W)   |
| Accuracy                          | ±0.2% Full Scale (1µA - 10mA)<br>±0.5% Full Scale (10nA - 100nA)   | ±0.2% Full Scale (1µA - 10mA)<br>±0.5% Full Scale (100nA)   |
| Polarity                          | AG, CG   |   |
| Bias Voltage                      | 0 to -10V (CG), 0 to +10V (AG)   |   |
| <b>Thermopile Power Input</b>     | <b>CH1 ONLY</b>  | <b>CH1 &amp; CH2</b>  |
| Units                             | W, dBm, (V)  | W, dBm, W/cm <sup>2</sup> , V   |
| Measurement Ranges                | 4 Decades; 100µV to 100mV<br>Ranges Selectable in W, Sensor Dependent  | 3 Decades; 1mV to 100mV<br>Ranges Selectable in W, Sensor Dependent   |
| Display Resolution                | 100nV per Responsivity Value (V/W)   | 1µV per Responsivity Value (V/W)  |
| Accuracy                          | ±0.5% Full Scale (1mV to 100mV range)  | ±0.5% Full Scale  |
| <b>Pyroelectric Energy Input</b>  | <b>N/A</b>   | <b>CH1 &amp; CH2</b>  |
| Units                             | N/A  | J, J/cm <sup>2</sup> , W  |
| Measurement Ranges                | N/A  | 4 Decades; 100mV to 100V<br>Ranges Selectable in J, Sensor Dependent  |
| Display Resolution                | N/A  | 100µV per Responsivity Value (V/J)  |
| Accuracy                          | N/A  | ± 0.5% Full Scale   |
| Maximum Repetition Rate           | N/A  | 3 kHz   |
| <b>External Trigger</b>           |  |   |
| Connector                         | N/A  | BNC Rear  |
| <b>Programmable Analog Output</b> |  |   |
| Signal                            | Selectable: CH1, CH2, CH1-CH2, CH1/CH2   |   |
| Voltage Range                     | 0 to ±10V; Programmable Gain and Offset  |   |
| Bandwidth                         | Up to 500Hz, Dependent on Sensor and Settings  |   |
| <b>Analog Outputs</b>             |  |   |
| Signal                            | CH1, CH2 Amplified Input Signal  |   |
| Voltage Range                     | 0 to ±10V  |   |
| Bandwidth                         | Up to 100kHz, Dependent on Sensor and Settings   |   |

<sup>1</sup> Channel 2 can be used for a second photodiode based power meter sensor. Please refer to the following 4 pages.

**Compatible With All Thorlabs' Sensors. Please Refer to the Following 4 Pages.**

### PM300 Benchtop Power Meter Without Sensor

| ITEM#     | \$          | £          | €          | RMB         | DESCRIPTION                                       |
|-----------|-------------|------------|------------|-------------|---|
| PM300     | \$ 1,800.00 | £ 1,134.00 | € 1,674.00 | ¥ 17,190.00 | Dual Channel Power Meter Console                  |
| PM300E    | \$ 2,200.00 | £ 1,386.00 | € 2,046.00 | ¥ 21,010.00 | Dual Channel Power and Energy Meter Console       |
| CAL-PM300 | \$ 200.00   | £ 126.00   | € 186.00   | ¥ 1,910.00  | Calibration Service for the PM300 Series Consoles |