



# LabMax Meters

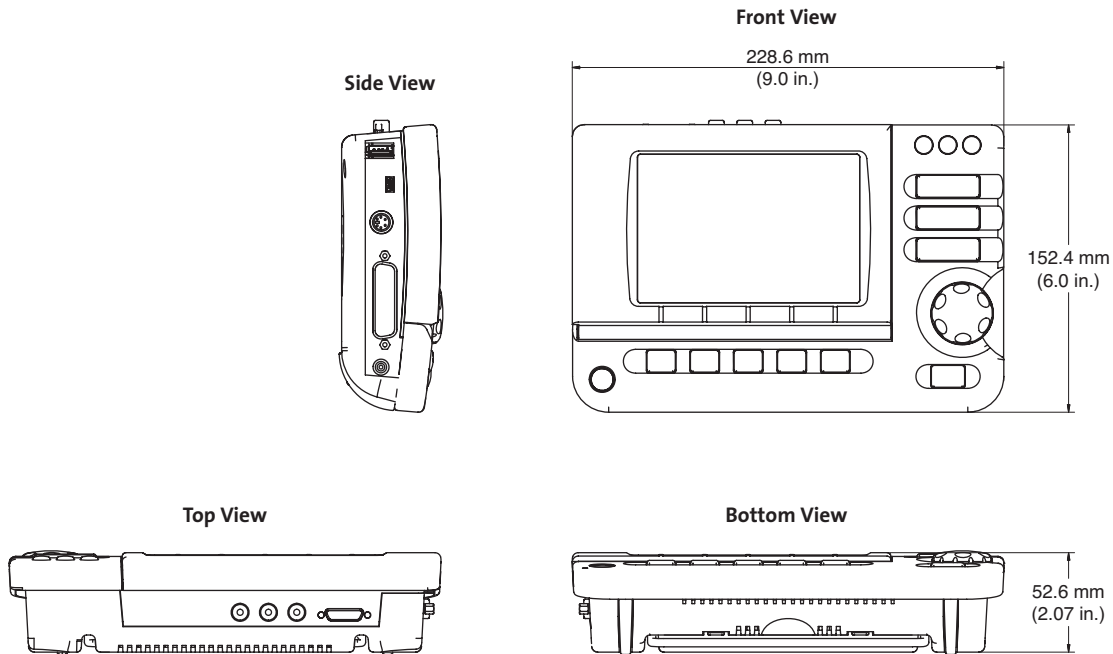
## Laser Power and Energy Meters



### Features

- Compatible with all LM-model and PM-model thermopile and optical sensors
- Beam position display with quadrant thermopiles (LM-model)
- Pulse energy from single shot to 10 kHz with energy sensors
- PC interfacing via USB or RS-232, plus analog output
- Datalog to onboard memory or USB flash stick, or directly to PC
- Advanced interface with tiltable display and 0 to 180-degree kickstand for flexible positioning
- Li-ion rechargeable battery
- Installable applications software and full LabView\* drivers for remote control

### Mechanical Specifications



\* LabView is a registered trademark of National Instruments.

**Superior Reliability & Performance**

# LabMax™ Meters

## Laser Power and Energy Meters

### Device Specifications<sup>1</sup>

Input Range	
Thermopile Sensors (LM Model)	50 $\mu$ V to 2V
Thermopile Sensors (PM Model)	20 $\mu$ V to 2V
Optical Sensors	1 nA to 20 mA
Pyroelectric Sensors (-TOP only)	1 mV to 16V
Noise	
Thermopile Sensors (LM Model)( $\mu$ V)	1.2
Thermopile Sensors (PM Model)(nV)	500
Optical Sensors (pA)	4.6
Pyroelectric Sensors (-TOP only)( $\mu$ V)	20
Measurement Resolution (% of full scale)	0.1 <sup>2</sup>
Minimum Positional Resolution (mm)	0.1
Repetition Rate Error (%)	<1
Maximum Repetition Rate (Hz)	10,000 sampling (1,000 Hz every pulse)
Pulse Triggering	Internal and external (selectable)
Power Sampling Rate (Hz)	10
Uncertainty	
Instrument	$\pm$ 1% of reading
System	meter + sensor
Analog Output	$\pm$ 2%
Display	112 x 78 mm backlight graphic LCD, 480 x 320 pixels Adjustable contrast and viewing angle
Measurement Analysis	Min., max., mean, range, standard deviation, energy dose, and stability. Trend charting, tuning, positional display, and analysis of beam stability.
Computer Interface	USB and RS-232 (-TOP and -TO models)
Analog Output (VDC)	0 to 1, 2, or 4 VDC (selectable)
Analog Output Update Rate	Up to 1,000 Hz for pyroelectric; 10 Hz for thermopile and optical
Instrument Power	90 to 260 VAC, 50/60 Hz AC power adapter (incl.)
Instrument Batteries	4400 mAh Li-ion battery (incl.) 8800 mAh Li-ion battery (optional)
Temperature	
Operating	5°C to 40°C (41°F to 104°F)
Storage	-20°C to 70°C (-4°F to 158°F)
Regulations Met	
Instrument	CE, RoHS, WEEE
AC Adapter and Cord	PSE and UL
Size (H x W x D)	152 x 229 x 53 mm (6.0 x 9.0 x 2.1 in.)
Weight (including 4400 mAh battery)	1.04 kg (2.3 lbs.)
Part Numbers	
LabMax-TOP (power and energy)	1104622
LabMax-TO (power only)	1104619

<sup>1</sup> Meter supplied with 4400 mAh Li-ion battery, AC power adapter, power cord, 6-ft. USB cable, RS-232 adapter, 256 MB USB flash stick, three RCA-to-BNC adapters, user manual, software and driver CD, soft carrying case, and certificate of calibration.

<sup>2</sup> User selectable display resolution (3, 4, or 5 digits).

Coherent follows a policy of continuous product improvement. Specifications are subject to change without notice.

Coherent's LabMax meters are compliant with the EU Restriction of Hazardous Substances (RoHS) and Waste Electrical and Electronic Equipment (WEEE) Directives. They also meet the intent of Directive 89/336/EEC for Electromagnetic Compatibility (CE). CE compliance was demonstrated per testing to EN61326 Electromagnetic Compatibility Product Family Standard for Measurement, Control and Laboratory Equipment.

Coherent offers a Limited Warranty for all LabMax meters. For full details of this warranty coverage, please refer to the "Warranty Information for Instruments" webpage under the Service section of our website at [www.Coherent.com](http://www.Coherent.com) or contact your local Sales or Service representative.



[www.Coherent.com](http://www.Coherent.com)

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