



# LabMax Meters

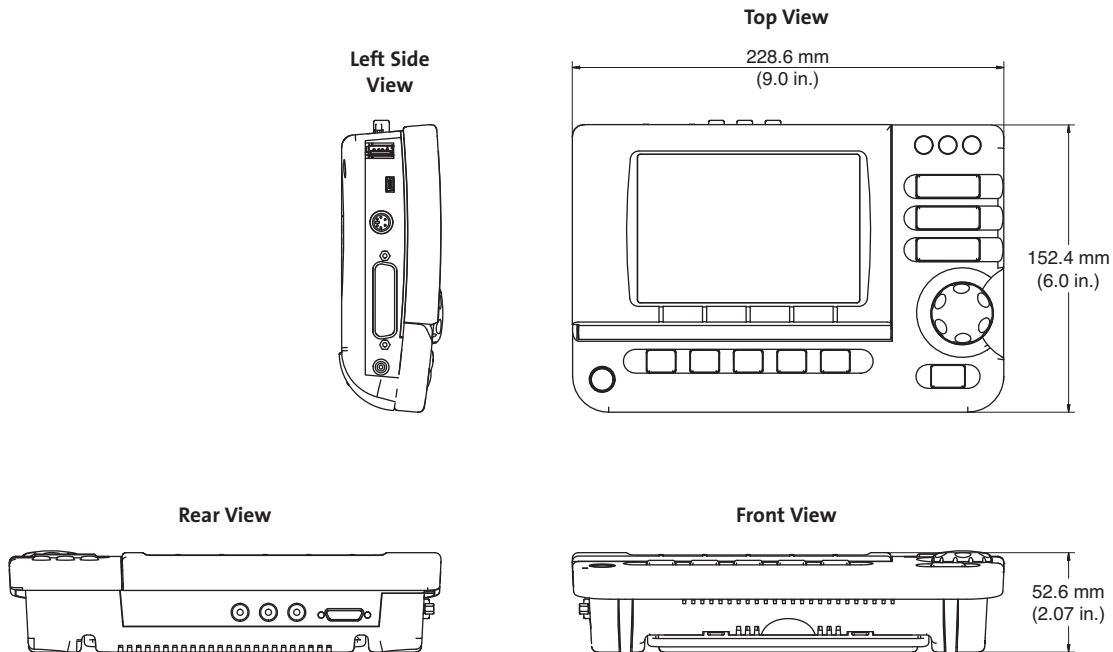
## Laser Power and Energy Meters



### 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, GPIB or RS-232, plus analog output
- Datalog to onboard memory, USB flash stick or directly to PC
- Advanced interface with tiltable display and 0° to 180° 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>

	LabMax-TOP w/GPIB	LabMax-TOP	LabMax-TO
Measurement Resolution	0.1 % of full-scale		
Displayable Resolution	3 or 4 digits pyroelectric; 3, 4, or 5 digits thermopile and optical (selectable)		3, 4, or 5 digits (selectable)
Measurement Range	Sensor dependent (reference sensor specifications)		
Accuracy			
Digital Meter System	±1.0% ±2LSD		
Analog Output	Meter accuracy + sensor accuracy ±1.0%		
Uncertainty	±1.0%		
Power Sampling Rate (Hz)	10		
Maximum Repetition Rate (Hz)	10,000 sampling (1000 Hz every pulse)		
Minimum Positional Resolution (mm)	0.1		
Display	112 x 78 mm backlight graphic LCD, 480 x 320 pixels. Adjustable contrast and viewing angle		
Measurement Analysis	Min., max., mean, range, std. dev., dose, stability; trending, tuning, beam position		
Computer Interface	GPIB, USB and RS-232	USB and RS-232	
Pulse Triggering	Internal and external (selectable)		–
Analog Output (VDC)	0 to 1, 2 or 4 (selectable)		
Analog Output Update Rate	Up to 1000 Hz for pyroelectric; 10 Hz for thermopile and optical		10 Hz
Temperature			
Operating Range	5° to 40°C (41° to 104°F)		
Storage Range	-20° to 70°C (-4° to 158°F)		
Instrument Power	90 to 260 VAC, 50/60 Hz		
Instrument Batteries	4400 mAh rechargeable Li-ion pack		
Regulations Met	CE, RoHS, WEEE		
Dimensions (H x W x D)	152 x 229 x 53 mm (6.0 x 9.0 x 2.1 in.)		
Weight	1.04 kg (2.3 lbs.)		
Front Panel			
PWR	Turn meter on and off		
ZERO	Reset ambient offset for thermal and optical sensors		
MEASURE	Main measure mode including statistics		
TUNE	View tuning features		
TREND	Display measured values over a period of time and log data to file		
SETUP	Set up meter parameters		
HELP	Onboard context - sensitive help available from any screen		
BACKLIGHT	Toggle backlight on and off		
KNOB	Turn knob to change settings; press knob to save settings		
Left Side Panel	USB flash drive port, USB PC interface port, RS-232 PC interface port, DB-25 sensor port, power jack		
Rear Panel	Analog output		
	External trigger input		–
	GPIB PC interface port	–	
Part Number (RoHS)*	1104620	1104622	1104619

\* Meter supplied with 4400 mAh Li-ion battery, AC power adapter, power cord, 1.8-meter USB cable, RS-232 adapter, USB flash drive, three RCA-to-BNC adapters, user manual, software and driver CD, soft carrying case, and certificate of calibration. LabMax-TOP w/GPIB also includes a GPIB cable.

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.



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