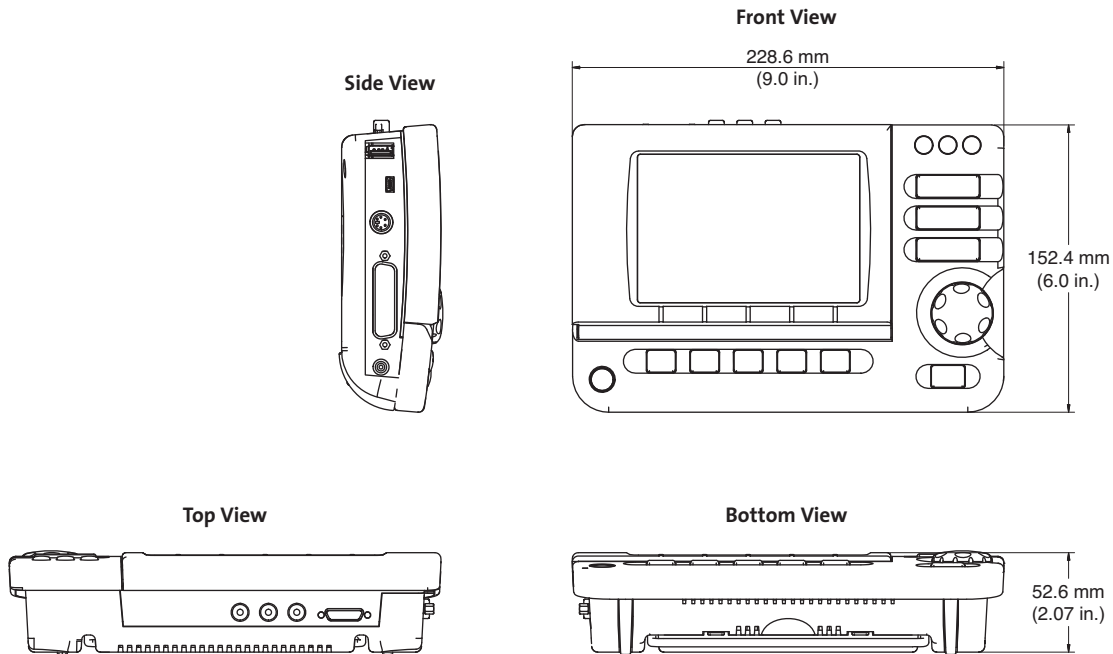# COHERENT®

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 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

Side View

Front View

228.6 mm
(9.0 in.)

152.4 mm
(6.0 in.)

Top View

Bottom View

52.6 mm
(2.07 in.)

* LabView is a registered trademark of National Instruments.

Superior Reliability & Performance

LabMax™ Meters
Laser Power and Energy Meters

Device Specifications[1]

	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 (user-selectable)		3, 4, or 5 digits (user-selectable)
Measurement Range	Sensor dependent - reference sensor specifications		
Accuracy			
Digital Meter	±1.0% ±2LSD		
System	Meter accuracy + sensor accuracy		
Analog Output	±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 VDC (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		
Storage Range	-20 to 70°C		
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	Setup meter parameters		
HELP	Onboard context sensitive help - available from any screen		
BACKLIGHT	Toggle backlight on and off		
KNOB	Turn knob to change settings; press the 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)*	1104619	1104620	1104622

* 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®

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