

User Manual
LabMax™-Pro SSIM
Laser Power Meter



APPENDIX A: SPECIFICATIONS

Meter Specifications

This appendix lists specifications for the LabMax-Pro SSIM Laser Power Meter.

Table A-1. Specifications (Sheet 1 of 2)

Parameter	Description
Measurement Resolution (%) (full-scale) at 10 Hz speed at 20 kHz high-speed	0.1 0.2
Sensor Compatibility	PM Model Thermopile, PowerMax-Pro, LM Model Thermopile, OP-2 & LM-2 Optical, and DB25 EnergyMax pyroelectric
Measurement Range	Sensor dependent (reference sensor specifications)
Accuracy (%) Digital Meter System Analog Output	± 1 Meter + sensor ± 1
Calibration Uncertainty (%) (k = 2)	± 1
Power Sampling Rate Thermopile (Hz) PowerMax-Pro - Standard-Speed (Hz) PowerMax-Pro - High-Speed (Hz) PowerMax-Pro - Snapshot Mode (kHz) Pyroelectric (Hz) LM-2/OP-2 Optical (Hz)	10 10 20 kHz 625 10000 10
Analog Output (VDC)	0 to 1, 2, or 4V (selectable)
Analog Output Resolution (mV)	1
Analog Output Update Rate (kHz)	19
Measurement Analysis	Trending, tuning, histogram, data logging, statistics (min., max., mean, range, std. dev., dose, stability), pulse shape and pulse energy (with PowerMax-Pro in High-Speed and Snapshot mode), beam position with LM Model thermopiles
Computer Interface	USB and RS-232
Pulse Triggering	Internal and External
Temperature Operating Range Storage Range	5 to 40°C (41 to 104°F) -20 to 70°C (-68 to 158°F)
Instrument Power (external supply)	90 to 260 VAC, 50/60 Hz
Compliance	CE, RoHS, WEEE
Dimensions	105 x 105 x 32 mm (4.1 x 4.1 x 1.3 in.)
Weight	0.3 kg (0.6 lb.)

Table A-1. Specifications (Sheet 2 of 2)

Parameter	Description
Front Panel	Power switch USB high-speed port (mini-B connector) Trigger output (SMB connector) Analog output (SMB connector) RS-232 port (DB-9F connector)
Rear Panel	DB-25 sensor port External trigger input (SMB connector, 3 to 5 V _{in} , 2 to 10 mA, 50 ohm AC, 300 ohm DC impedance) Power jack (12 VDC - center positive)
Part Number ^a	1268881

a. Meter supplied with AC power adapter, power cord, USB cable, trigger cable, software and driver CD, and certificate of calibration.

Persistent Parameters

Refer to “Persistent Parameters” (p. 4-28).