



# FieldMaxII-TOP

The FieldMax™II-TOP, a next-generation laser measurement system that replaces the original FieldMax, features a new PC host interface, LabView drivers, ActiveX DLL server component, analog output and expanded pyroelectric sensor capability. This combination of features makes FieldMaxII the most powerful and versatile laser meter in its price range.

The value of FieldMaxII-TOP is strengthened by the broad range of thermopile, optical and pyroelectric sensors available. Together, these sensors enable FieldMaxII to measure UV, visible and IR laser output from the nanowatt to the kilowatt range, and to work with CW and pulsed lasers with repetition rates of up to 300 Hz.

FieldMaxII-TOP features a large, easy-to-read backlit LCD and an intuitive user interface with front panel buttons to access all features for simple operation.

To facilitate laser tuning, FieldMaxII-TOP provides a unique tuning feature that is fast and effective. Statistics are supported, including max., min., mean, and standard deviation. Long pulse energy measurements are supported when using thermal sensors.

FieldMaxII-TOP features SmartProbe™ compatibility, which lets users store sensor responsivity, the serial number, and other important information in an EEPROM that automatically loads into the power and energy meter.

This general-purpose meter is designed to accommodate a broad range of users, including developers, production testers, service technicians and general scientific users, as well as laser-based instrumentation builders. For production test applications, a LabView Instrument driver and ActiveX DLL server component facilitate the development of custom testing routines and simplify integration with other test equipment. Field service applications will benefit from the meter's small size, rechargeable battery pack (optional), and responsive tuning indicator for peaking laser output. For general laboratory use, the FieldMaxII offers versatility, accuracy, and easy access to statistics and features, such as wavelength compensation and attenuation correction.



## Laser Power/ Energy Meter

### FEATURES

- **Large, bright, backlit LCD display**
- **Digital accuracy with analog-like movement for laser tuning**
- **Works with thermopile, optical, and pyroelectric sensors**
- **Measures energy up to 300 pps**
- **Intuitive button-driven user interface**
- **USB 1.1 interface with complete host control capability**
- **Analog output with selectable full-scale voltage (1, 2, and 5V)**
- **LabView drivers, applications software, ActiveX DLL server components**
- **Portable AC/DC operation**
- **Rechargeable battery pack (optional)**
- **Compact, rugged enclosure with stand**

### COMPATIBILITY

- **PowerMax® thermal sensors**
- **Optical sensors**
- **Pyroelectric sensors**

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Laser Power/Energy Meter

		FieldMaxII-TOP
<b>Specifications</b>	Maximum Measurement Power - Thermopile Power - Optical Energy - Pyroelectric	(sensor-dependent) 30.0 kW 300.0 mW 300.0J (up to 18.3V input from sensor)
	Minimum Measurement Power - Thermopile Power - Optical Energy - Pyroelectric	(sensor-dependent) 10 μW 1 nW 1 nJ
	Displayable Full-Scale Power Ranges Thermopile Optical Pyroelectric	(sensor-dependent) 3.000 mW to 30.00 kW (auto or manual ranging, selectable) 3.000 μW to 300.0 mW (auto or manual ranging, selectable) 3.000 nJ to 300.0J (manual ranging)
	Measurement Resolution	0.1% of full-scale
	Max. Rep. Rate (pulsed energy measurement)	300 Hz (every pulse)
	Power Sampling Rate	10 Hz
	Accuracy Digital Meter System	±1.0% of reading Meter accuracy + sensor accuracy
	Display	58 x 73 mm, fixed-segment LCD with backlight
	Digital Tuning Needle	100 ms time constant
	Statistical Analysis	Min., max., mean, and standard deviation
	Computer Interface	USB 1.1
	Analog Output	1V, 2V, 5V, 100 Ohm source impedance
	Internal Trigger	2 to 20% of full-scale, selectable
	Instrument Power	90 to 260 VAC, 50/60 Hz, AC power adapter (incl.) Six 1.5V alkaline batteries (incl.) 7.2V, 750 mAh rechargeable battery pack (optional)
	Temperature Operating Storage	5°C to 40°C (41°F to 104°F) -20°C to 70°C (-4°F to 158°F)
	Regulations Met	CE
	Size (H x W x D)	200 x 100 x 40 mm (7.87 x 3.94 x 1.57 in.)
Weight (including batteries)	0.5 kg (1.1 lb.)	
<b>Controls &amp; Connections</b>	Front Panel PWR/BL Hz J/W ZERO AUTO STAT AVG WAVE ATTN AREA TRIG SETUP/LOCAL ARROW KEYS	Toggle power switch and backlight Display rep. rate Select joules or watts mode Reset ambient offset for thermal and optical sensors Engage auto-ranging for power sensors Display statistics: max., min., mean, standard deviation Engage averaging Enter wavelength and engage wavelength compensation Enter attenuation factor and engage attenuation Enter area and engage area correction to display W/cm <sup>2</sup> or J/cm <sup>2</sup> Select trigger level from 2 to 20% of full scale (for energy sensors) Enters setup mode and accepts selections; cancels PC host control Manually control range Select STAT value (min., max., mean, standard deviation) Select and change numerical values
	Left Side Panel	Power jack connector, RCA analog output jack (RCA-to-BNC converter incl.)
	Right Side Panel	USB connector DB-25 smart probe connector
	Part Number*	1072788

\*Supplied with six alkaline AA batteries, power cord, AC power adapter, 6 ft. USB cable, user manual, soft carrying case, and certificate of calibration.



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

Coherent offers a limited warranty for all FieldMaxII-TOP systems. For full details of this warranty coverage, please refer to the Service and Support section at [www.Coherent.com](http://www.Coherent.com) or contact your local Sales and Service Representative.

