

CASCADE LASER CORPORATION

FieldMaster™ Laser Power & Energy Meter

Product Information



Figure 1: *Coherent's FieldMaster*

Notable Features:

- Choice of over 30 power and energy SmartSensors™
- CW power measurements from 10nW-5kW
- Pulse energy measurements from 0.5mJ-20J
- Sensors for wavelengths from 190nm-20μm

Coherent's FieldMaster is a versatile power and energy meter which supports thermal, pyroelectric and semiconductor photodiode sensor technologies and operates with a choice of over 30 Coherent SmartSensor detector heads. It measures virtually any pulsed or CW laser. CW beam powers can be measured with thermal and semiconductor sensors. The energies of pulsed beams can be measured with pyroelectric sensors from single shot up to 50Hz with a display update rate of 0.3 Hz. The average power of repetitively pulsed beams (>10 Hz) can be measured and displayed as Watts with thermopile sensors. FieldMaster combines both analog and digital displays. The digital readout provides high resolution and accuracy, while the analog meter provides the speed and real time feedback you need for laser tuning. The display features auto ranging for power or energy readings with the ability to select any range manually for ease of laser tuning. All ranges, except the top range, can be offset by one full range.

FieldMaster performs sophisticated internal corrections for wavelength, sensor linearity and operating conditions prior to displaying the measured value. When first using the FieldMaster with a new SmartSensor, simply scroll to the wavelength, then switch to the reading mode. Upon shutting off the meter, all of the customized settings that you have set are retained in the memory and reset upon turning on again. AC power operation (with screen backlighting) is standard, but internal batteries (~8 hours life) can be used for field use. There are visual and audible over range indicators, and FieldMaster will even warn you if the battery is running low.

FieldMaster is CE certified and has been developed with low EMI noise sensitivity for use in real laser environments. The design is lightweight, compact (193 x 117 x 46mm) and the adjustable-angle base folds across the face of the instrument to form a protective cover for transport. The unit is built in Coherent's ISO 9002 Certified plant in the United States and is supplied complete with NIST-traceable Certificate of Calibration, AC power adapter and user manual.



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Part #	Description
33-0506	FieldMaster Readout with AC Adapter
33-0514	Signal Latch Module for FieldMaster
33-0548	Analog out Module for FieldMaster

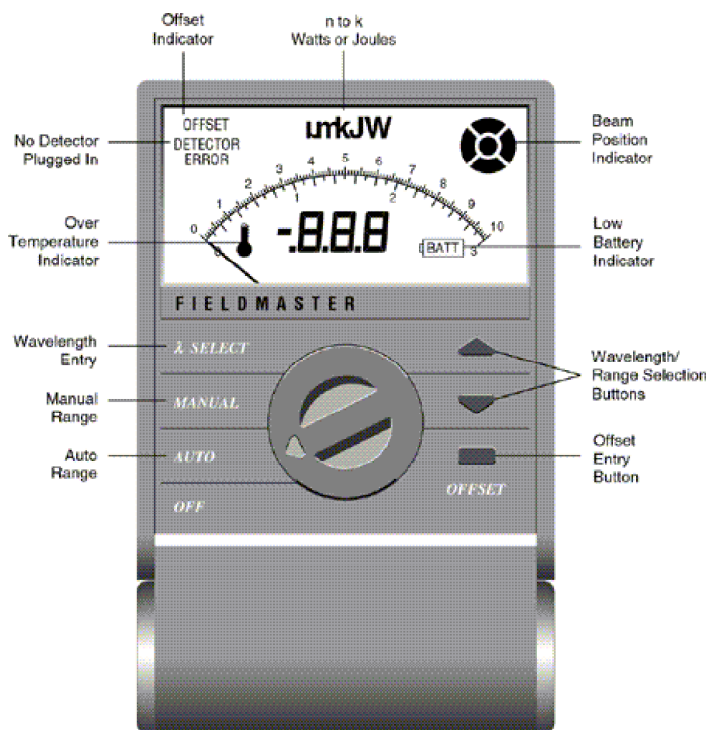


Figure 2: *Coherent's FieldMaster Features*

Thermal SmartSensors™



Figure 3: *Coherent's Thermal SmartSensors*

Cascade Laser Corp. also distributes Coherent's Thermal SmartSensors to be used with the FieldMaster (see photo above). For more information see the Thermal SmartSensors product information sheet.

Contact Cascade Laser Corporation for ordering information or to request a quotation on any of these products.

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