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Find the *Coherent FieldMaster GS* at our website: *Click HERE*

CASCADE LASER CORPORATION

Laser Accessories - Power & Energy Meters

FieldMaster-GS™ Laser Power & Energy Meter

Product Information



Figure 1: *Coherent's FieldMaster-GS*

Notable Features:

- Choice of over 30 SmartSensors™ for wavelengths from 190nm - 20um
- CW power measurements from 10nW-5kW
- Pulse energy measurements from 1uJ-95J
- 70x60mm digital display with analog tuning needle
- Beam statistics and position displays
- RS-232 control and analog out

The FieldMaster-GS is the newest Laser Power and Energy Analyzer from Coherent. This analyzer can be used with over 30 SmartSensors allowing measurement and analysis of the output of virtually any laser. With detector specific data stored in the SmartSensor and setup data retained in the FieldMaster-GS, ease of use is combined with features and reliability that set a new standard. The FieldMaster-GS has a large graphical display and true analog tuning needle. When fine tuning a laser, the analog needle swings in to view and the graphical display tracks the peak reading while autoranging as necessary. When not needed, the needle rests out of view so that the entire screen is available for display and analysis of the readings that are acquired.

CW beam powers can be measured with the thermal and semiconductor SmartSensors. The energies of pulsed lasers can be measured with both pyroelectric and thermopile sensors. With pyroelectric SmartSensors, the repetition rate can be as high as 400 Hz and the thermopile SmartSensors can read single pulses and average power of repetition rates greater than 8 Hz.

While the FieldMaster-GS has many powerful analytic functions - statistics, position, stability - it is easy to use. The most common functions have “hot” keys on the front for HOME, TUNE, TREND, and MENU selections, while there are four “soft” keys for specific control within each screen. To move around in the control screens the cursor pad allows intuitive navigation. Designed and built from concept to completion with CE requirements for EMI and RFI, the FieldMaster-GS delivers reliable and accurate measurements in all laser environments.

CASCADE LASER CORP.

Connectivity

SmartSensors simply plug in and download all sensor parameters for instant set up and measurement capability. The FieldMaster-GS can extend the range and usefulness of SmartSensors with:

- Selectable averaging of 1-200 readings for accurate readings of noisy source.
- Offset selection that allows the subtraction of background noise and signals that are not of interest.
- Programmable attenuation factors from 100,000:1 to 0.01:1 - for attenuators, beam splitters, etc.

The FieldMaster-GS has RS-232 communication and control for integration into test setups to record test results, or provide feedback for system control.

The 0-1 volt analog out is software assignable to any manual range. It updates at a 5Hz rate with +/-2% accuracy over 4096 steps.

The AC adapter comes supplied with plugs for US, UK, Europe, Australia, and Japan. The adapter auto switches for any worldwide voltage or frequency. In addition to powering the FieldMaster-GS the AC adapter also charges the internal high energy Ni-Cd battery.



Figure 2: *Coherent's FieldMaster-GS Conectivity Features*

Specifications

Accuracy - Display Unit:	+/- 1% of reading, +/-2 LCD
Accuracy - System:	sum of display and sensor accuracies
Pulse Capture Rate:	10 Hz max.
CW Sample Rate:	10 Hz max.
Tuning Needle Rate:	10 Hz
Digits Update Rate:	2 Hz
Size:	190 x 117 x 46 mm
Weight:	784 g
Operating Temperature:	5-40 degrees C
Analog Out:	0-1 V +/-2%, 5 Hz
Battery Life:	8 hours continuous use (4 hours with backlight)
Order No.	33-0498

Thermal SmartSensors™



Figure 3: *Coherent's Thermal SmartSensors*

Cascade Laser Corp. also distributes Coherent's Thermal SmartSensors to be used with the FieldMaster-GS (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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