

J-10Si & J-10Ge EnergyMax Sensors

Silicon and Germanium
Laser Energy Sensors for
a Wide Variety of Uses

Quantum EnergyMax sensors enable low energy pulse measurements down to the 8 pJ level, as well as average power of pulsed systems from the nW to mW level, across a broad range of wavelengths. These models are not compatible with Field-MaxII meters because the response time is too fast. They are best suited for the LabMax-TOP meter. These sensors have a removable light shield on the front used to block stray light.

Models with USB or RS-232 connections have the meter built into the cable.

Features and Benefits

- Pulse energy measurement down to 8 pJ (model dependent)
- Average power measurement of pulsed sources from nW to mW
- Measures pulses from 1 to 10,000 Hz
- Calibrated spectral compensation
- 325 nm to 900 nm for Silicon
- 800 nm to 1700 nm for Germanium
- Robust and reliable construction
- Compatible with LabMax-Pro and LabMax-TOP meters
- DB-25, USB, and RS-232 interfaces available

Applications

- Medical
- Scientific
- Industrial



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SPECIFICATIONS

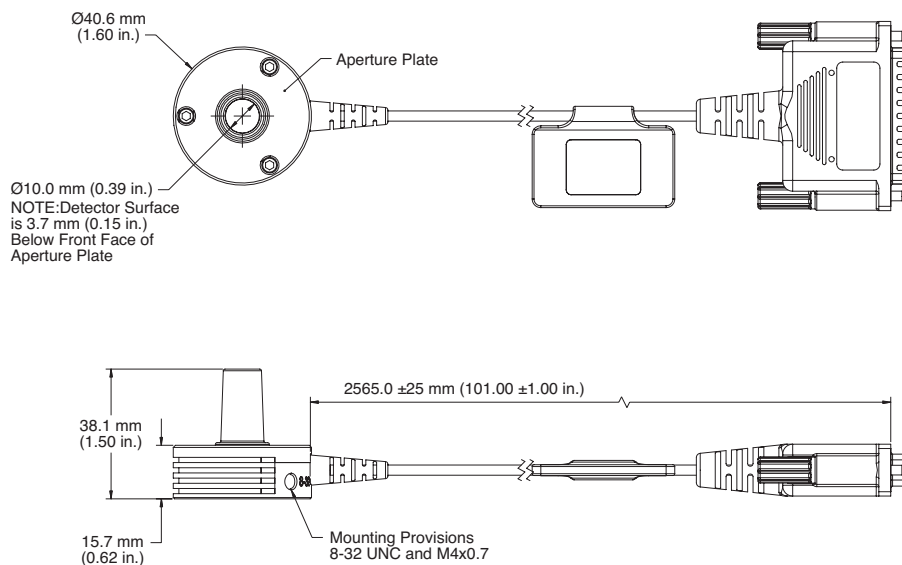
	J-10Si-LE	J-10Si-HE ¹	J-10Ge
Energy Range	8 pJ to 80 nJ (at 532 nm)	60 pJ to 775 nJ (at 532 nm)	200 pJ to 600 nJ (at 1064 nm)
Noise Equivalent Energy	<0.8 pJ (at 532 nm)	<6 pJ (at 532 nm)	<8 pJ (at 1064 nm)
Wavelength Range (nm)	325 to 900	325 to 900	800 to 1700
Active Area Diameter (mm)	10	10	10
Max. Avg. Power (mW)	6	6	15
Max. Pulse Width (μs)	1	1	1
Max. Rep. Rate (pps)	10,000	10,000	10,000
Sensor	Silicon	Silicon	Germanium
Diffuser	ND2	ND2	ND2
Calibration Wavelength (nm)	532	532	1064
Calibration Uncertainty (%) (k=2)	±3	±3	±3
Linearity (%)	±3	±3	±3
Cable Length ² (m)	3	3	3
Cable Type	J DB-25	J DB-25	J DB-25
Part Number	1140727	1150146	1140408

¹ 1064 nm calibrations available. Contact factory.

² Cable lengths up to 15 m possible. Contact factory.

MECHANICAL SPECIFICATIONS

J-10Si & Ge EnergyMax Sensor DB-25



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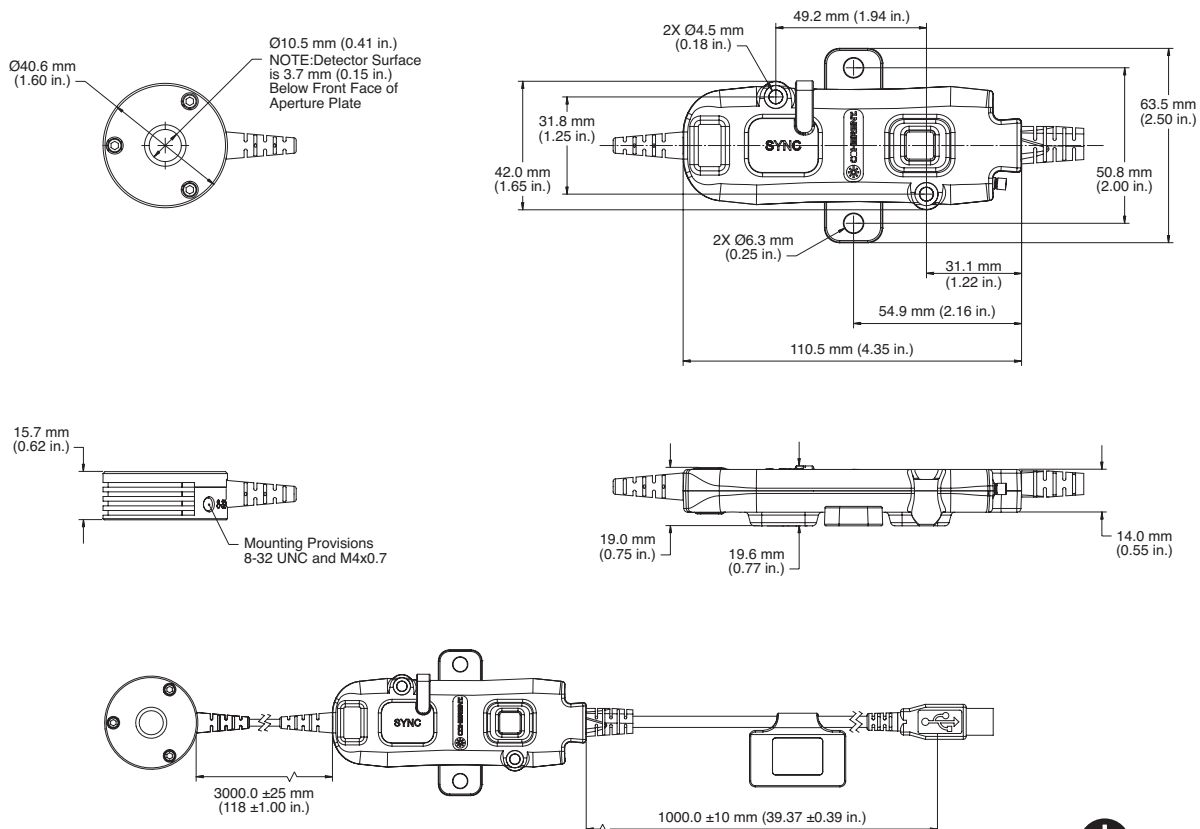
SPECIFICATIONS

	J-10Si-HE	J-10Ge-LE
Energy Range	750 pJ to 775 nJ (at 532 nm)	1 nJ to 600 nJ (at 1064 nm)
Noise Equivalent Energy	<75 (at 532 nm)	<100 (at 1064 nm)
Wavelength Range (nm)	325 to 900	800 to 1700
Active Area Diameter ¹ (mm)	10	10
Max. Avg. Power (mW)	60	60
Max. Pulse Width (μs)	1	1
Max. Rep. Rate (pps)	10,000	10,000
Sensor	Silicon	Germanium
Diffuser	ND2	ND2
Calibration Wavelength (nm)	532	1064
Calibration Uncertainty (%) (k=2)	±3	±3
Linearity (%)	±3	±3
Cable Length (m)	3	3
Cable Type	USB and RS	USB
Part Number		
USB	1191434	1286950
RS-232	1191427	

¹ Beam size must be >4 mm at energies above 200 nJ to avoid saturation.

MECHANICAL SPECIFICATIONS

J-10Si & Ge EnergyMax Sensor USB

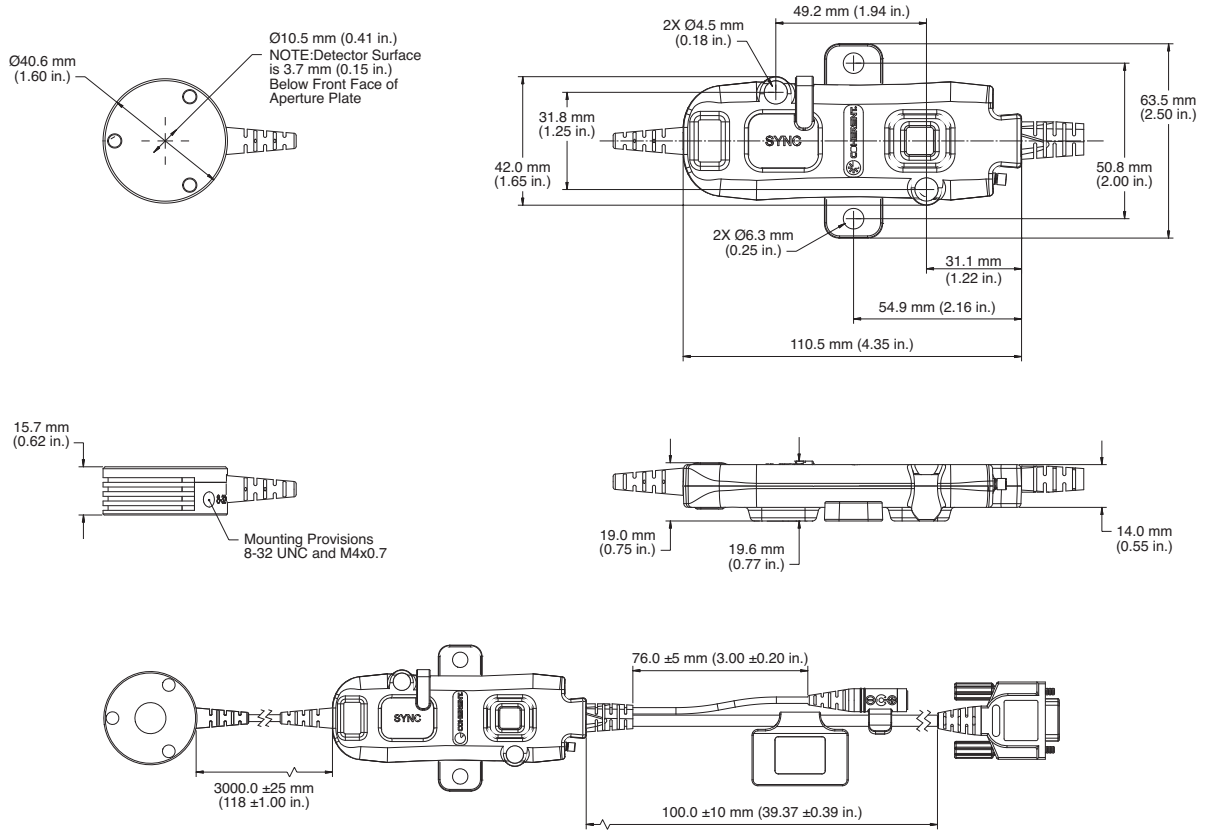


J-10Si & J-10Ge EnergyMax Sensors

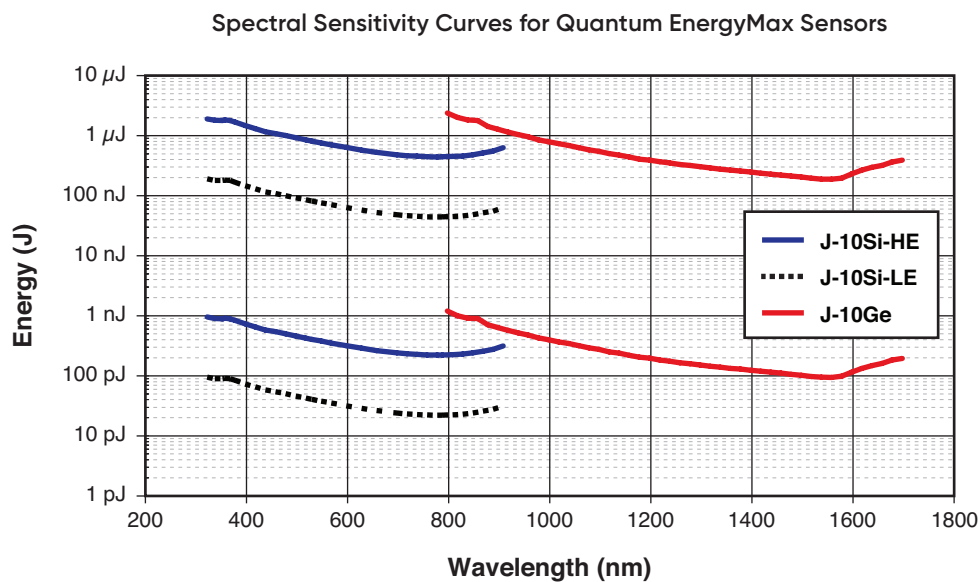
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MECHANICAL SPECIFICATIONS

J-10Si & Ge EnergyMax Sensor RS-232



TYPICAL PERFORMANCE DATA



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Coherent offers a limited warranty for all EnergyMax Sensors. For full details of this warranty coverage, please refer to the Service section at www.coherent.com or contact your local Sales or Service Representative.

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