

# EnergyMax Sensors - Standard DB-25

## Diffuse Metallic Coating



J-50MT-10KHZ, J-25MT-10KHZ and J-10MT-10KHZ

### Features

- Unique diffuse metallic coating delivers increased damage threshold, allows high repetition rate operation and reduces specular reflectance
- Operate over the entire 190 nm to 2.1  $\mu\text{m}$  range
- Enable pulse energy measurements from 100 nJ to 1J with high signal-to-noise characteristics
- Measure up to 10 kHz repetition rate
- Spectral compensation characteristics built into each unit
- Onboard sensors provide automatic temperature compensation<sup>1</sup>

These sensors incorporate a diffuse metallic coating that enables measurements at high and low repetition rates across a wide range of energies, and wavelengths from 190 nm to 2.1  $\mu\text{m}$ . The damage resistance at 532 nm and shorter wavelengths is higher than the MaxBlack coating. These sensors are not compatible with FieldMaxII meters because the response time is too fast. They are best suited for the LabMax-TOP meter.

Device Specifications	Model	J-50MT-10KHZ	J-25MT-10KHZ	J-10MT-10KHZ
Energy Range		500 $\mu\text{J}$ to 1J <sup>2</sup>	50 $\mu\text{J}$ to 100 mJ	100 nJ to 200 $\mu\text{J}$
Noise Equivalent Energy		<16 $\mu\text{J}$	<2 $\mu\text{J}$	<10 nJ
Wavelength Range ( $\mu\text{m}$ )		0.19 to 2.1		
Active Area Diameter (mm)		50	25	10
Maximum Average Power (W) <sup>3</sup>		20	10	1
Maximum Pulse Width ( $\mu\text{s}$ )		1.7		
Maximum Repetition Rate (pps)		10,000		
Maximum Energy Density (mJ/cm <sup>2</sup> )		500 (at 1064 nm, 10 ns)		50 (at 1064 nm, 10 ns)
Detector Coating		Diffuse Metallic		
Diffuser		No		
Calibration Wavelength (nm)		1064		
Calibration Uncertainty (%) (k=2)		$\pm 2$		
Energy Linearity (%)		$\pm 3$		
Cable Length (m) <sup>4</sup>		2.5		
Cable Type		J DB-25		
Part Number		1110574**	1110747**	1110856**

ISO/IEC 17025:2005



<sup>1</sup> Except J-10MT-10KHZ.

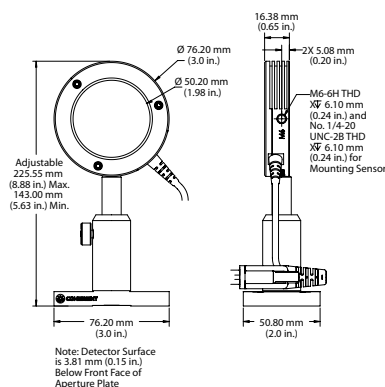
\*\* C24 Quick Ship program: eligible for next business day shipment.

<sup>2</sup> Optional energy range 50  $\mu\text{J}$  to 100 mJ available.

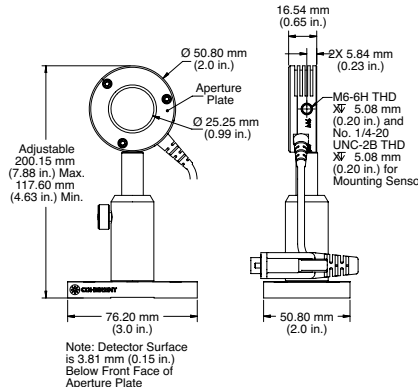
<sup>3</sup> Extend average power range with optional heat sink. See page 75 and 94.

<sup>4</sup> Cable lengths up to 10m possible. Contact factory.

J-50MT-10KHZ



J-25MT-10KHZ



J-10MT-10KHZ

