

EnergyMax Sensors - Standard DB-25

MaxBlack Coating and Diffusers



J-50MB-YAG

Features

- High energy and peak power to 14 J/cm²
- · Operate at Nd: YAG fundamental and harmonics
- Enable pulse energy measurements from 1 mJ to 15J
- · Spectral compensation characteristics built into each unit
- Onboard sensors provide automatic temperature compensation

These sensors are specifically designed for high energy and high peak power lasers operating at relatively low repetition rates, such as those based on Nd:YAG, Ruby, Ho:YAG and Erbium. The J-50MB-YAG sensor can be used with beams up to 35 mm in diameter and can work at 1064 nm, 532 nm, 355 nm and 266 nm without the need to change or self-calibrate diffusers or any other accessories. Sensors combine a MaxBlack coating and a diffuser to produce superior damage resistance characteristics. This combination enables operation with lasers that produce either very high energy per pulse or very high peak fluences.

J DB-25

Fax: (503) 454-5727

1151431

Device Specifications

ISO/IEC 17025:2005







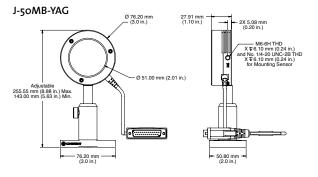


Model	J-50MB-YAG	J-50MB-YAG-1528	J-50MB-YAG-1535	J-50MB-YAG-1561
Energy Range	1.5 mJ to 3J	1.5 mJ to 3J	12 mJ to 15J	50 µJ to 100 mJ
Noise Equivalent Energy (µJ)	<50			
Wavelength Range (µm)	0.266 to 2.1			
Maximum Beam Size (mm)	35			
Maximum Average Power (W) ¹	20			
Maximum Pulse Width	340 µs	57 µs	2 ms²	340 µs
Maximum Repetition Rate (pps)	50	300	10	50
Maximum Energy Density (J/cm²)	14.0 (at 1064 nm, 10 ns)			
	2.8 (at 532 nm, 10 ns)			
	o.75 (at 355 nm, 10 ns)			
	1.0 (at 266 nm, 10 ns)			
Detector Coating	MaxBlack			
Diffuser	YAG			
Calibration Wavelength (nm)	1064			
Calibration Uncertainty (%)(k=2)	±2			
Energy Linearity (%)	±3			
Cable Length (m) ³	2.5			

Extend average power range with optional heat sink. See page 75 and 94.

Cable Type

Part Number



POWER

& Energy Meters

USB/RS Power Sensors

DB-25 Power Sensors

USB/RS Energy Sensors

DB-25 Energy Sensors

Custom & OEM

DIAGNOSTICS

CALIBRATION & SERVICE

> Laser Cross-Reference

> > Model Name Index

^{**}C24 Quick Ship program: eligible for next business day shipment. ² Pulsewidths up to 5 ms can be measured with an additional ±1% uncertainty.

³ Cable lengths up to 10m possible. Contact factory