



Laser Power Sensors

# Position Sensing Air-Cooled Thermopile Sensors to 200 W

# Low- to Medium-Power Pulsed and CW Lasers from 10 mW to 200 W

These unique position sensing thermopiles display the position of the incident beam on the sensor disk, in addition to measuring power when used with the LabMax and LabMax-Pro meters. This information allows the user to safely and precisely align the sensor and the beam being measured. This is particularly useful for non-visible beams.

These air-cooled, surface absorbing sensors are intended for measurement of low to medium power pulsed and CW lasers from the 10 mW to 100 W power range. Convection cooling makes them simple to operate as well as mechanically compact.



# **FEATURES**

- 10 mW to 200 W range
- Broadband coatings
- 0.25 to 10.6 µm spectral range
- · Convective air-cooled

## **APPLICATIONS**

- Medical
- Scientific
- Industrial
- General Laser Power Measurement to 200 W

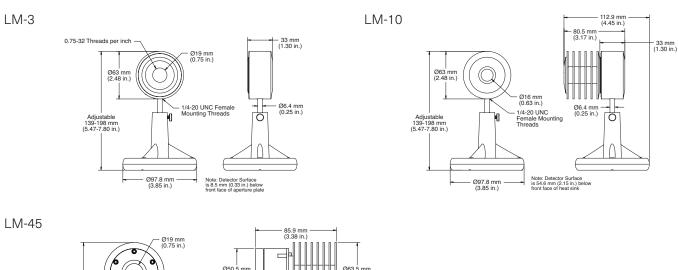


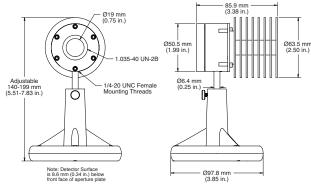
## Position Sensing Air-Cooled Thermopile Sensors to 200 W

Specifications	LM-3	LM-10	LM-45
Wavelength Range (μm)	0.25 to 10.6		
Power Range	10 mW to 3 W	10 mW to 10 W	100 mW to 25 W
Maximum Intermittent Power (W) (<5 min.)	10	12	45
Long-Pulse Joules Range (J)	0.5 to 10		
Resolution (mW)	1	1	10
Maximum Power Density (kW/cm²)	6		
Maximum Energy Density (mJ/cm²)	600 (10 ns, 1064 nm)		
Detector Coating	Broadband		
Detector Diameter (mm)	19	16	19
Calibration Uncertainty (%) (k=2)	±2		
Calibration Wavelength (nm)	10,600		
Cooling Method	Air		
Cable Type	LM DB-25		
Cable Length (m)	1.8		
Part Number	1098328¹	10983041	10983201

Notes:

#### **Mechanical Specifications**







<sup>1.</sup> C24 Quick Ship program: eligible for next business day shipment.

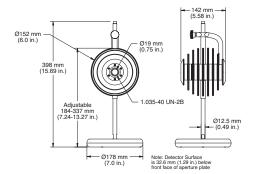
# Position Sensing Air-Cooled Thermopile Sensors to 200 W

Specifications	LM-100	LM-200		
Wavelength Range (μm)	0.25 to 10.6			
Power Range	100 mW to 100 W	100 mW to 200 W		
Long-Pulse Joules Range (J)	0.5 to 10			
Resolution (mW)	10			
Maximum Power Density (kW/cm²)	6			
Maximum Energy Density (mJ/cm²)	600 (10 ns	600 (10 ns, 1064 nm)		
Detector Coating	Broad	Broadband		
Detector Diameter (mm)	19			
Calibration Uncertainty (%) (k=2)	±2	±5		
Calibration Wavelength (nm)	10,600			
Cooling Method	Air	Fan		
Cable Type	LM DB-25			
Cable Length (m)	1.8			
Part Number	1098346	2290159 (12V DC) <sup>1</sup>		

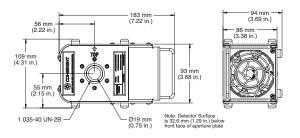
Notes:

#### **Mechanical Specifications**

LM-100



LM-200





<sup>1. 12</sup> VDC power supply and cord included.





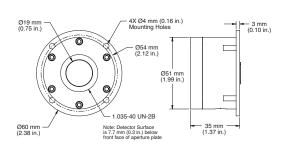
#### Position Sensing Air-Cooled Thermopile Sensors to 200 W

Specifications	LM-20	LM-150 LS	LM-150 FS	
Wavelength Range (μm)	0.25 to 10.6			
Power Range	100 mW to 20 W	100 mW to 150 W	100 mW to 150 W	
Long-Pulse Joules Range (J)	0.5 to 10			
Resolution (mW)	10			
Maximum Power Density (kW/cm²)	6			
Maximum Energy Density (mJ/cm²)	600 (10 ns, 1064 nm)			
Detector Coating	Broadband			
Detector Diameter (mm)	19			
Calibration Uncertainty (%) (k=2)	±2	±5	±5	
Calibration Wavelength (nm)	10,600			
Cooling Method	Conductive	Air	Air	
Cable Type	LM DB-25			
Cable Length (m)	1.8			
Part Number	1098456	1098452	1098394	

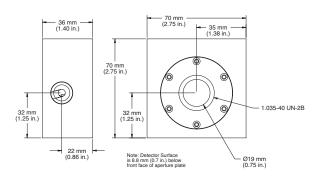
Notes:

#### **Mechanical Specifications**

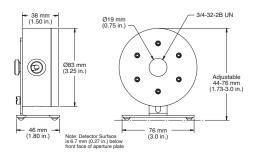
LM-20



LM-150 LS



LM-150 FS





<sup>1.</sup> C24 Quick Ship program: eligible for next business day shipment.