

## LFTPM-035-L Thermopile Power Meter

# Exceptional sensitivity and precise measurements

The thermopile meter is a state-of-the-art instrument designed to accurately measure optical power and energy. It utilizes a thermopile sensor, which is composed of multiple thermocouples meticulously integrated to provide exceptional sensitivity and precise measurements.

With its robust construction, this meter is capable of handling power levels up to 35 W. It efficiently converts heat energy into an electrical signal, allowing for reliable and accurate power measurements in various applications.

The 35 W thermopile meter offers several key features that make it an indispensable tool for professionals in fields such as laser research and manufacturing:

- High Precision: This meter boasts exceptional accuracy and resolution, enabling precise measurement of even the smallest variations in optical power and energy density.
- Wide Power Range: With its capability to handle power levels from 10 mW up to 35 W, it caters to a broad range of applications, from low-power systems to some medium-power industrial processes.
- **User-Friendly Interface:** Equipped with an intuitive software interface, the meter provides easy-to-read measurements and allows for convenient configuration and customization.

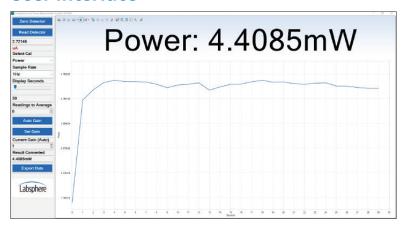
Labsphere's thermopile meter empowers you with accurate and reliable measurements to make informed decisions and drive efficiencies in R&D and development.



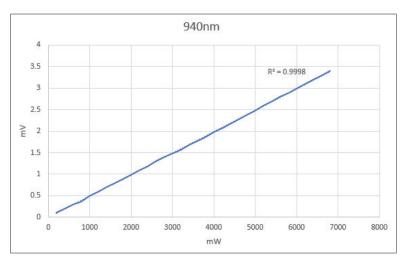
#### **Applications:**

- Laser materials processing requiring precision and reproducibility for higher yields
- Integrated redundant power monitoring for medical systems
- Laser beam positioning and power for optimizing alignment

#### **User Interface**



- RS232 based commands.
   Cross platform ready
- Simple one page software to set all the parameters and read results
- Text based calibration file for easier customer modification
- Dark noise subtraction by software
- Display duration and scans to average can be set by user
- If you need customized software, talk to us



Linearity with Optical Power

### **Ordering Information and Specifications**

**Model Number:** LFTPM-035-L **Order Number:** LAS-00278-000 Wavelength Range: 190 nm ~ 20 μm Optical Power Working Range: 10 mW ~ 35 W Typical Responsivity: 0.5 mV/W Active Senor Area: Ø15 mm Active Area Uniformity: ± 1% 1.5 kW/cm<sup>2</sup> Max Average Power Density:

Max Pulse Energy Density: 0.3 J/cm<sup>2</sup> (1 ns Pulse), 5 J/cm<sup>2</sup> (1 ms Pulse)

 $\begin{array}{lll} \mbox{Resolution:} & \mbox{1 mW} \\ \mbox{Rise Time:} & \mbox{1 s} \\ \mbox{Linearity with Optical Power:} & \pm 1\% \\ \mbox{Calibration Uncertainty:} & \pm 3\% \\ \end{array}$ 

Software: Labsphere Pulsed Laser Power Measurement System Software

Software Part Number: LAS-00366-003
Power Connector: USB Type B
Cooling: Heat Sink

Mounting: 2x M6 female thread holes

Dimensions: 2 in (50 mm) x 2.04 in (52 mm) x 6 in (150 mm)

