

Portable Optical Power Meter with Infrared Light Integration



AI Overview

Portable optical power meters with integrated infrared measurement are available with photodiode or thermal sensors, offering broad wavelength coverage, wireless operation, and high accuracy for field and lab applications.

Key Features and Options

Sensor Types:

- Silicon Photodiodes:** Ideal for visible to near-IR (400–1100 nm), sensitive to low optical powers (10 nW–2 mW), often with neutral density filters to extend the range up to 200 mW (Thorlabs PM160).
- Thermal Sensors:** Suitable for broadband and mid-IR measurements (190 nm–20 μm), capable of handling higher powers (up to 70 W), with nearly flat absorption curves for accurate broadband readings (Thorlabs PM160T-HP).

Portability and Display: Handheld meters feature built-in OLED displays for real-time readings and graphical interfaces. Wireless operation allows remote control via mobile devices, enhancing flexibility in tight or hard-to-reach spaces.

Wavelength and Power Range: Devices cover visible, near-IR, and mid-IR ranges, making them suitable for LEDs, SLDs, and quantum cascade lasers. Power ranges vary from nanowatt levels for sensitive photodiodes to tens of watts for high-power thermal sensors.

Connectivity and Software Integration: Many meters can interface with PCs or LabVIEW for data logging and analysis (Ophir, OptoSigma). Some models offer USB or wireless connectivity, enabling integration with measurement systems or remote monitoring.

Calibration and Accuracy: Units typically include NIST-traceable calibration certificates and recommend annual recalibration for precision. Thermal sensors provide flat spectral response, reducing wavelength-dependent errors in IR measurements.

Specialized Features: High-speed thermal sensors can detect short pulses and fast rise times, useful for pulsed laser applications (OptoSigma). Detachable or rotatable sensor heads allow flexible posi...

Article Content

Handheld Optical Power and Energy Meter Console

Optical Parameter Monitor PC Software Available (See Software Tab for Details) The PM400 console is designed to be used with Thorlabs' power, position & PDF document

Read this PDF document online, download the original file, and browse related details on device.report. Additional coding instructions can be found in the Article File chapter of

Portable Light Sources and Power Meters

Compact and Portable Light Source and Optical Power Meter Tools Compact and portable, our light source and optical power meter tools are essential for testing and verifying insertion losses in fiber

ILT960-NIR Portable Spectroradiometer

The ILT960-NIR is a compact, broad-band, portable, mini portable spectrometer used to measure both the light's amplitude and wavelength, and provide calibrated spectral irradiance, radiance or power

Optical Power and Energy Meters

Thorlabs' expanding line of optical power and energy meters includes a large selection of sensor heads, single- and dual-channel power and energy meter

Amazon : Optical Power Meter

Fiber Optic Cable Tester Portable Optical Fiber Power Meter FC/SC/ST Universal Interface Integrated OPM, VFL, and RJ45 Functions (OPM-VFL-4) 50+ bought in past month Save \$2.00 with coupon

F-712.PM1 Optical Power Meter

The large wavelength range of the optical power meter enables working in both the visible and infrared range without switching. The precise, logarithmical output signal is ideal for optical alignment systems.

ILT 2400 Hand-Held Light Meter and Optometer | ILT

The ILT2400 is the most advanced hand-held light/lux meter and opto meter on the market today. ILT's Accuspan software automatically sets the averaging while

Amazon : Fiber Optic Power Meter

Equip your fiber optic toolkit with a versatile power meter. Measure optical power, detect breaks, and test network cables with these compact, portable devices.

AQ2170 Series Portable Optical Power Meter (Simple

The compact and lightweight AQ2170 Series portable optical fiber power meter is battery-operated with auto wavelength matching and versatile data

Y3 Handheld Optical Power Meter & Red Light Pen All

The Y3 Handheld Optical Power Meter & Red Light Pen combines precision testing and fault locating. Ideal for FTTH, CATV, and network

Amazon : Optical Power Meter

Browse optical power meters designed for network installation and maintenance. Shop reliable fiber testing equipment with multiple wavelength support.

F-712.PM1 Optical Power Meter

Switching between the inputs is done via a button and an LED lights up when the current input is activated. The large wavelength range of the optical power meter enables working in both the visible

Home | Hamamatsu Photonics

The official website of Hamamatsu Corporation whose mission is to advance science and industry through photonic technologies. Our products include optical sensors and components, cameras, light

Portable Optical Fiber Power Meter, FC/SC/ST Interface

This 3-in-1 optical fiber power meter comes equipped with a color display and offers versatile functionality, including optical power measurement, a light source

Optical Power Meters

Benchtop optical power meters provide accurate measurements of optical power and energy by reading the output of calibrated optical sensors. Our benchtop optical power and energy meters are plug and

ILT2400 Light / Radiometer – Handheld Light Meter

The ILT2400 is powered via rechargeable battery or USB and supports real-time monitoring with live graphing on screen. Ideal for users who need a lab-grade

Handheld Optical Power and Energy Meter Console

The PM400 console is designed to be used with Thorlabs' power, position & power, and energy sensors to measure the optical power of laser light, other

Optical Power Meters

Keysight optical power meters measure optical signal strength, providing multi-channel measurement processing and system control while offering rapid

Optical Power Meters – optical power measurement

Optical power meters are instruments for optical power measurements, based on heating of an absorber structure, for example, or on a photodiode.

HPL220IR Infrared Radiometer

HPL220IR infrared optical power meter is a wide spectral line infrared optical power meter, which is mainly used to measure the power density of infrared radiation, that is, the radiant energy power per

Optical Power Meters

Our benchtop optical power and energy meters are plug and play compatible with our wide range of calibrated optical sensors for the highly accurate and repeatable optical measurements required in

LH-131 IR Light Meter Infrared Light Irradiance Power Meter ...

Measures infrared light: the LH-131 IR Light Meter is specifically designed to measure infrared light, which can be useful in a variety of applications, such as industrial heating and cooking,

Portable Optical Fiber Power Meter with Universal

The Portable Optical Fiber Power Meter with Universal FC/SC/ST Interface and Built-in 2mW Visual Fault Locator is an essential tool for anyone working with

VIAMI Solutions | Network Test, Monitoring, and Assurance

Our test, monitoring, assurance, and resilient position, navigation and timing solutions enable and secure critical infrastructure ranging from data center

FOPM-203 Handheld Optical Power Meter (-70~+10dBm) with 2.5mm

This power meter can be extensively used in telecommunication projects and other situations where the optical power of wavelengths close to infrared rays needs to be measured.

Contact Us

For more information, pricing, or custom solutions, please contact us:

Website: <https://lwazipm.co.za>

Email: info@lwazipm.co.za

Phone: +27 82 415 6392

Address: 15 Oxford Street, Rosebank, Johannesburg, 2196, South Africa

This document is for informational purposes only. Specifications subject to change without notice.

