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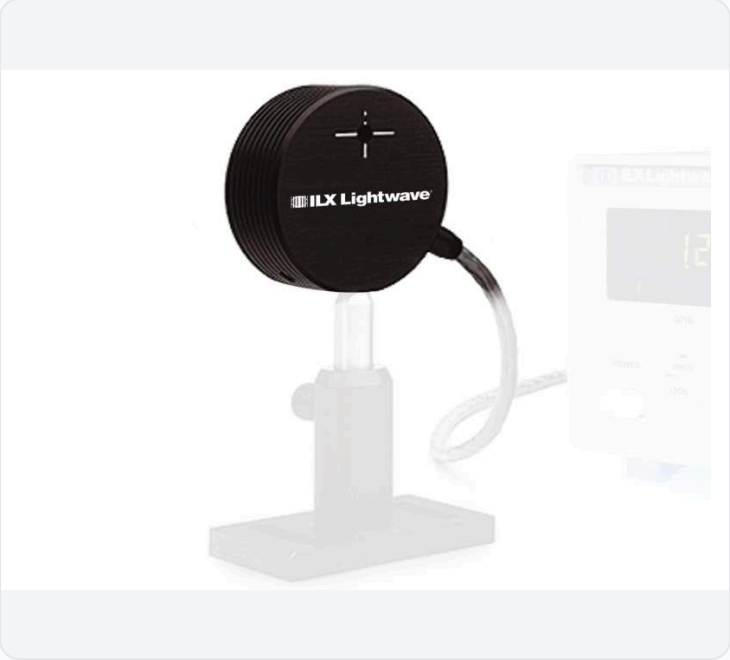
Data Sheet
August 1, 2026

ILX LIGHTWAVE

ILX OMH-6727B Optical Power and Wavelength Measurement Head, 1 W, 950 to 1650nm

The ILX Lightwave OMH-6727B is an optical measurement head designed for accurate power and wavelength measurement. It supports a power range up to 1W and operates within the 950 to 1650nm wavelength range. This head is ideal for use with ILX Lightwave optical power meters for comprehensive optical component and system testing.



MODEL ILX Lightwave OMH-6727B	CALIBRATION Available on request
CONDITION Used	STATUS In stock
RFQ / SKU OMH-6727B	LISTING https://aumictechlabs.com/products/omh-6727b-2/

NIST-traceable cal · SAM registered · 30-day returns · NAICS 423690 · 811210 · 541380

This unit

The ILX OMH-6727B is an InGaAs optical power and wavelength measurement head engineered for precision near-infrared testing from 950 nm to 1650 nm. Built around integrating sphere technology, it delivers simultaneous power and wavelength measurements without mechanical adjustment, eliminating alignment sensitivity and beam-profile dependencies. Operating with power ranges from 100 nW to 1 W (−40 dBm to +30 dBm), the OMH-6727B achieves ±5.0% power accuracy and wavelength accuracy of ±1.0 nm across 1000–1650 nm and ±1.5 nm from 950–1000 nm.The 6 mm entrance aperture supports free-space launch and fiber-coupled configurations via optional FC, SC, LC, ST, and DIN adapters, or bare fiber. Wavelength measurement requires minimum optical power of 150 µW (−8.2 dBm) at 950–1200 nm and 10 µW (−20 dBm) at 1200–1630

nm. With typical noise of 5 nW p-p and a temperature coefficient of −0.1%/°C, the head maintains stable measurements across its +10°C to +40°C operating range.All calibration is NIST traceable. The OMH-6727B integrates with the ILX Lightwave OMM-6810B Optical Multimeter and requires at least one hour warm-up for rated stability.Technical Specifications Spectral Range: 950 nm to 1650 nm Power Measurement Range: −40 dBm to +30 dBm (100 nW to 1 W) Maximum Power Handling: +37 dBm Power Accuracy: ±5.0% Wavelength Accuracy: ±1.0 nm (1000–1650 nm); ±1.5 nm (950–1000 nm) Minimum Power for Wavelength Measurement: 150 µW / −8.2 dBm (950–1200 nm); 10 µW / −20 dBm (1200–1630 nm) Noise: 5 nW p-p (typical) Temperature Coefficient: −0.1%/°C (typical) Detector Material: InGaAs Entrance Aperture: 6 mm Operating Temperature: +10°C to +40°C Storage Temperature: −20°C to +60°C Humidity: <85% RH, non-condensing Warm-up Time: ≥1 hour Dimensions: 69 mm diameter × 28 mm thickness Weight: 0.38 kgKey Features Integrating sphere design eliminates detector saturation, alignment, beam-profile, polarization, and back-reflection errors Simultaneous power and wavelength acquisition without repositioning NIST-traceable calibration Supports free-space and fiber-coupled optical launch Compatible with FC, SC, LC, ST, DIN connectors and bare fiber adaptersTypical Applications Telecommunications laser and component characterization Research and development optical system validation Near-infrared source power and spectral analysisCompatibility & Integration Designed for operation with the ILX Lightwave OMM-6810B Optical Multimeter. Optional fiber-coupling adapters enable measurement flexibility across diverse launch geometries.

Features & description

From manufacturer datasheet

Features

• InGaAs power and wavelength measurement head • Integrating sphere for free-space and fiber inputs • Power range -40 to +30 dBm (100 nW to 1 W) • Wavelength range 950 to 1650 nm • NIST-traceable calibration • Compatible only with OMM-6810B series meters • Optional fiber adapters: FC, ST, bare fiber • Approximately 2 m cable for convenient placement

OMH6727B Characteristics / Specifications

PARAMETER	VALUE
Model	OMH-6727B
Manufacturer	ILX Lightwave (Newport / MKS)
Instrument Type	Optical power and wavelength measurement head
Detector	InGaAs
Host Meter	OMM-6810B
Wavelength Range	950 to 1650 nm (1630-1650 nm: MANUAL wavelength mode only)
Power Measurement Range	100 nW to 1 W; -40 dBm to +30 dBm
Power Accuracy	+/-5.0%
Wavelength Accuracy	+/-1.0 nm (1000-1650 nm); +/-1.5 nm (950-1000 nm)
Minimum Power for Wavelength Measurement	150 uW / -8.2 dBm (950-1200 nm); 10 uW / -20 dBm (1200-1630 nm)
Damage Threshold (family brochure)	+37 dBm class
Entrance Aperture	6 mm
Noise	typically about 5 nW p-p
Temperature Coefficient	typically -0.1%/C
Operating Temperature (family)	+10 C to +40 C Related Models
Optional fiber adapters	FC, ST, bare fiber
Linewidth	sources can shift reported wavelength vs spectral center. Do not exceed damage threshold. The OMM-6810B mainframe is discontinued for new sale; heads remain usable with existing meters.
Operating temperature	(family): +10 C to +40 C

OMH6727B Specifications

PARAMETER	VALUE
Technical Specifications	Model: OMH-6727B
Related Models	OMH-6708B: InGaAs power-only head, 800-1600 nm, up to 100 mW
Standard Operating Conditions	Use only with OMM-6810B. Observe HI-P / HI-lambda / LO-lambda display warnings. Allow meter warm-up per OMM manual.

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	(family): +10 C to +40 C
Operating Temperature	(family): +10 C to +40 C
Operating Temperature (family)	+10 C to +40 C Related Models

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications

Specifications

PARAMETER	VALUE
Model	OMH-6727B
Manufacturer	ILX Lightwave (Newport / MKS)
Instrument Type	Optical power and wavelength measurement head
Detector	InGaAs
Host Meter	OMM-6810B
Wavelength Range	950 to 1650 nm (1630-1650 nm: MANUAL wavelength mode only)
Power Measurement Range	100 nW to 1 W; -40 dBm to +30 dBm
Power Accuracy	+/-5.0%
Wavelength Accuracy	+/-1.0 nm (1000-1650 nm); +/-1.5 nm (950-1000 nm)
Minimum Power for Wavelength Measurement	150 uW / -8.2 dBm (950-1200 nm); 10 uW / -20 dBm (1200-1630 nm)
Damage Threshold (family brochure)	+37 dBm class
Entrance Aperture	6 mm
Noise	typically about 5 nW p-p
Temperature Coefficient	typically -0.1%/C
Operating Temperature (family)	+10 C to +40 C

Related Models
OMH-6708B: InGaAs power-only head, 800-1600 nm, up to 100 mW
OMH-6742B: Silicon power/wavelength head, 400-1100 nm

Standard Operating Conditions
Use only with OMM-6810B. Observe HI-P / HI-lambda / LO-lambda display warnings. Allow meter warm-up per OMM manual.

Operational Notes
Wide-linewidth sources can shift reported wavelength vs spectral center. Do not exceed damage threshold. The OMM-6810B mainframe is discontinued for new sale; heads remain usable with existing meters.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: **sales@aumictech.com** · +1 (484) 841-9341

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