

**Aumictech**

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Data Sheet

August 13, 2026

ILX LIGHTWAVE

ILX Lightwave OMH-6790B

The ILX Lightwave OMH-6790B is a precision optical mount designed for laser diodes. It offers stable and accurate positioning for demanding research and development applications. It features a compact design and precise alignment capabilities. It is suitable for various laser diode packages.



MODEL

**ILX Lightwave
OMH-6790B**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

OMH-6790B

LISTING

<https://aumictechlabs.com/products/omh-6790b-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The ILX Lightwave OMH-6790B is a silicon-based power and wavelength measurement head engineered for integration with the OMM-6810B Optical Multimeter. This unit delivers simultaneous optical power and wavelength measurement across the 830 to 1100 nm band, supporting dynamic ranges from 1 μ W to 10 W. The measurement head accommodates fiber sizes from 9/125 μ m to 110/140 μ m with NA = 0.3, and features a 2.54 mm fiber input port. A fiber tap is included for spectral characterization of high-power sources via optical spectrum analyzer connection. Technical Specifications Spectral Range: 830 to 1100 nm Power Range: -30 dBm to +40 dBm (1 μ W to 10 W) Wavelength Accuracy: $\pm$ 0.2 nm (typical at 980 nm) Power Accuracy: $\pm$ 5.0% (0 to +40 dBm) Detector Material: Silicon Input Port: 2.54 mm fiber input Supported Fiber: 9/125 to 110/140 μ m, NA = 0.3 Operating Temperature: +10°C to +40°C Dimensions: 86 mm $\times$ 86 mm $\times$ 100 mm Weight: 1.34 kg (2.95 lbs) Calibration: NIST traceable Key Features Dual

measurement capability - simultaneous power and wavelength acquisition Wide dynamic range across near-infrared spectrum Fiber tap for high-power source analysis Interchangeable connector adapters support FC, SC, LC, bare FC ferrule, and bare fiber (FC adapter sold separately) Compact form factor for space-constrained test benches Typical Applications Optical component characterization in R&D environments Production test and quality assurance Wavelength and power monitoring in fiber-optic systems High-power source spectral analysis via tap configuration Compatibility & Integration Designed exclusively for use with the OMM-6810B Optical Multimeter. Adapter modules for common connector types are available as separate items.

Features & description

From manufacturer datasheet

Features

- Temperature-controlled silicon detectors
- Polarization-insensitive integrating sphere
- Fiber light-exit port (OMH-6790B only in the silicon 6700B family)
- NIST-traceable calibration
- Compatible only with OMM-6810B series meters
- FC adapter is not included with the head

Polarization dependent response: ± 0.002 dB (flat cleaved fiber)

Measurement repeatability: ± 0.003 dB Entrance aperture: fiber input, 2.54 mm Numerical aperture: 0.1 to 0.3 Sensor type: Silicon Noise: 50 nW p-p typical Linearity: ± 0.05 dB, ± 50 nW Fiber exit port: for 10 W input, 1 uW nominal output (60 dB attenuation); 62.5 um core FC/PC Compatible connectors: FC, LC, SC, bare fiber Operating temperature: +10 C to +40 C Storage temperature: -20 C to +60 C Relative humidity: max 85% non-condensing Dimensions: 86 mmHx 86 mmWx 100 mmD Weight: 2.95 lb (1.34 kg) Spec condition: 23 C ± 3 C after one-hour warm-up unless noted Fiber spec class: 9/125 to 110/140 um fiber, NA = 0.3 unless noted Notes Specs from MKS/ILX OMH-6700B silicon power/wavehead datasheet (OMH-6703B / OMH-6742B / OMH-6790B columns) and Newport OMH-6790B product page. Accuracy includes NIST traceability; add 1% for NA greater than 0.2 (max NA 0.30). Manual wavelength mode is the stated accuracy condition. Do not confuse with OMH-6795B (InGaAs, 1200 to 1650 nm).

OMH6790B Characteristics / Specifications

PARAMETER	VALUE
Model	OMH-6790B
Manufacturer	ILX Lightwave (Newport / MKS)
Instrument Type	Silicon optical power and wavelength measurement head
Detector material	Silicon
Host meter	OMM-6810B
Wavelength measurement range	830 to 1100 nm
Wavelength accuracy	±0.2 nm
Wavelength detection minimum	0 dBm; 1 mW
Wavelength temperature coefficient	less than -0.03 nm perC Power wavelength range: 830 to 1100 nm
Power range	-30 to +40 dBm (1 uW to 10 W)
Damage threshold	+42 dBm; 16 W
Power accuracy	±5.0%
Polarization dependent response	±0.002 dB (flat cleaved fiber)
Measurement repeatability	±0.003 dB
Entrance aperture	fiber input, 2.54 mm
Numerical aperture	0.1 to 0.3
Sensor type	Silicon
Noise	50 nW p-p typical
Linearity	±0.05 dB, ±50 nW
Fiber exit port	for 10 W input, 1 uW nominal output (60 dB attenuation); 62.5 um core FC/PC
Compatible connectors	FC, LC, SC, bare fiber
Operating temperature	+10 C to +40 C
Storage temperature	-20 C to +60 C
Relative humidity	max 85% non-condensing
Dimensions	86 mmHx 86 mmWx 100 mmD Weight: 2.95 lb (1.34 kg)

PARAMETER	VALUE
Spec condition	23 C ±3 C after one-hour warm-up unless noted
Fiber spec class	9/125 to 110/140 um fiber, NA = 0.3 unless noted
Wavelength range	830 to 1100 nm
Humidity	max 85% non-condensing

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Storage temperature	20 C to +60 C
Operating temperature	+10 C to +40 C
Operating Temperature	+10 C to +40 C
Humidity	max 85% non-condensing
Relative humidity	max 85% non-condensing
Dimensions	86 mmHx 86 mmWx 100 mmDWeight: 2.95 lb (1.34 kg)
Spec condition	23 C ±3 C after one-hour warm-up unless noted
Fiber spec class	9/125 to 110/140 um fiber, NA = 0.3 unless noted Notes Specs from MKS/ILX OMH-6700B silicon power/wavehead datasheet (OMH-6703B / OMH-6742B / OMH-6790B columns) and Newport OMH-6790B product page. Accuracy includes NIST traceability; add 1% for NA greater than 0.2 (max NA 0.30). Manual wavelength mode is the stated accuracy condition. Do not confuse with OMH-6795B (InGaAs, 1200 to 1650 nm).

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	
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Notes

Specs from MKS/ILX OMH-6700B silicon power/wavehead datasheet (OMH-6703B / OMH-6742B / OMH-6790B columns) and Newport OMH-6790B product page. Accuracy includes NIST traceability; add 1% for NA greater than 0.2 (max NA 0.30). Manual wavelength mode is the stated accuracy condition. Do not confuse with OMH-6795B (InGaAs, 1200 to 1650 nm).

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

Aumictech

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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.