

**Aumictech**

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Data Sheet

August 1, 2026

ILX LIGHTWAVE

ILX Lightwave FPM-8210 Optical Meter

ILX Lightwave Optical Power Meters. Accuracy: $\pm 2.5\%$ (reference conditions), Bandwidth: Key Features.



MODEL

**ILX Lightwave
FPM-8210**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

FPM-8210

LISTING

<https://aumictechlabs.com/products/fpm-8210-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The ILX Lightwave FPM-8210 is a fiber optic power meter designed for precision optical power measurements across the 800 nm to 1650 nm wavelength range. Built around an InGaAs sensor, the instrument delivers $\pm 2.5\%$ accuracy under reference conditions and $\pm 5.0\%$ under operating conditions, with measurement repeatability of ± 0.003 dB typical. The single input port accepts both connectorized (FC/PC, FC/APC, LC, SC) and bare fiber configurations, eliminating the need for multiple test heads in production environments. Technical Specifications Wavelength Range: 800 nm to 1650 nm Power Measurement Range: -70 dBm to +20 dBm; +23 dBm to -70 dBm for $\lambda < 1000$ nm Maximum Power Level: +33 dBm at pump wavelengths (+40 dBm Accuracy: $\pm 2.5\%$ (reference conditions), $\pm 5.0\%$ (operating conditions) Measurement Repeatability: ± 0.003 dB typical Polarization Dependent Response: ± 0.001 dB typical; ± 0.002 dB typical Noise: ≤ 100 pW p-p at 1630 nm typical; < 40 pW p-p at 1310 and 1550 nm typical Temperature Coefficient: $\pm 0.2\%/^{\circ}\text{C}$ typical Linearity: ± 0.02 dB, ± 100 pW (-60 dBm to +20 dBm) Entrance Aperture: 2.54 mm Analog Output: 0 to 10 V, 1000 Ω impedance, 0 to 10 Hz bandwidth Key Features InGaAs sensor for

extended NIR sensitivity Dual measurement range capability for sub-1000 nm and full-band operation ± 0.003 dB repeatability enables tight process control Low polarization sensitivity minimizes calibration complexity GPIB (IEEE 488.2) interface for workstation integration Typical Applications Laser and light source characterization Optical component test and qualification Fiber optic system commissioning High-throughput manufacturing test environments Compatibility & Integration Compatible with ILX Lightwave or Agilent bare fiber holders CA-120 Bare Fiber Adapter supported Standard connector adapters available for FC, SC, and LC interfaces Class I equipment; $\pm 10\%$ mains supply voltage tolerance

Features & description

From manufacturer datasheet

Features

- Single input port for connectorized and bare fiber
- Integrating cavity detector head optimized for bare-fiber positioning (about 1-5 mm fiber extension zone)
- Typical polarization dependent response ± 0.001 dB to ± 0.002 dB
- Typical measurement repeatability ± 0.003 dB
- GPIB / IEEE-488 interface
- Analog output proportional to power
- Connector adapters (CA-series) for common ferrules; CA-120 bare fiber adapter
- Compatible with ILX or Agilent bare fiber holders via CA-120

Polarization Dependent Response: ± 0.002 dB typical (some literature ± 0.001 dB typical)

Measurement Repeatability: ± 0.003 dB typical Sensor: InGaAs Linearity: about ± 0.02 dB, ± 100 pW (-60 to +20 dBm class) Analog Output: 0 to 10 V; bandwidth typically 0 to 10 Hz; impedance about 1 kohm Remote Interface: GPIB Standard Operating Conditions Use the correct CA-series adapter for the connector type. Clean ferrules before insertion. Warm-up for stable low-level readings. Operational Notes Adapters are often sold separately. The FPM-8220 is the drop-in successor with interchangeable heads and USB. Do not confuse FPM-8210 with FPM-8210H power range.

FPM8210 Characteristics / Specifications

PARAMETER	VALUE
Model	FPM-8210
Manufacturer	ILX Lightwave
Instrument Type	Benchtop fiber optic power meter
Wavelength Range	approximately 800 / 850 to 1650 nm (published listings 800-1650 or 850-1650 nm)
Power Range	-70 to +20 dBm (FPM-8210); FPM-8210H extends toward 1 W / higher pump power class (about +33 dBm at pump wavelengths under 1000 nm in series literature)
Damage Threshold	greater than +40 dBm class
Accuracy (reference conditions)	about +/-2.5%; operating conditions about +/-5.0%
Polarization Dependent Response	+/-0.002 dB typical (some literature +/-0.001 dB typical)
Measurement Repeatability	+/-0.003 dB typical
Sensor	InGaAs
Linearity	about +/-0.02 dB, +/-100 pW (-60 to +20 dBm class)
Analog Output	0 to 10 V; bandwidth typically 0 to 10 Hz; impedance about 1 kohm
Remote Interface	GPIB Standard Operating Conditions Use the correct CA-series adapter for the connector type. Clean ferrules before insertion. Warm-up for stable low-level readings. Operational Notes Adapters are often sold separately. The FPM-8220 is the drop-in successor with interchangeable heads and USB. Do not confuse FPM-8210 with FPM-8210H power range.
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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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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

788 S 500 E, Pleasant Grove, UT 84062
sales@aumictech.com · +1 (484) 841-9341
<https://aumictechlabs.com>

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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.