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Data Sheet

August 14, 2026

ILX LIGHTWAVE

ILX Lightwave FPM8210

The ILX Lightwave FPM-8210 Optical Power Meter is a versatile instrument for measuring optical power in various applications. It features a broad wavelength range, high accuracy, and user-friendly interface. Ideal for testing and characterizing optical components and systems.



MODEL

**ILX Lightwave
FPM8210**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

FPM8210

LISTING

<https://aumictechlabs.com/products/fpm8210-2/>

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 engineered for accurate optical power measurements in production test and characterization environments. It delivers high repeatability and exceptionally low polarization-dependent response across a broad wavelength range. The instrument accommodates both connectorized and bare fiber inputs through a single port, with extended measurement zone capabilities for bare fiber applications. Technical Specifications Wavelength Range: 800 nm to 1650 nm Power Measurement Range: +23 dBm to -60 dBm ($\lambda < 1000$ nm); -70 dBm to +20 dBm (longer wavelengths) Measurement Accuracy: $\pm 2.5\%$ (reference conditions); $\pm 5.0\%$ (operating conditions) Repeatability: ± 0.003 dB typical Polarization Dependent Response: ± 0.001 dB typical Linearity: ± 0.02 dB, ± 100 pW (-60 dBm to +20 dBm) Noise: < 40 pW p-p at 1310 nm and 1550 nm; +40 dBm Sensor: InGaAs Temperature Coefficient: $\pm 0.2\%/^{\circ}\text{C}$ typical Measurement Units: dB, dBm, Watt Key Features Virtually insensitive to polarization state or fiber orientation changes Extended bare fiber measurement zone compared to conventional systems

Fiber holder design accommodates 125 μm diameter fiber (250 μm or 900 μm buffer) Analog output: 0–10 V, $\sim 1000\ \Omega$ impedance, 0–10 Hz bandwidth typical GPIB/IEEE interface for automated system integration Environmental & Physical Operating Temperature: 0 $^{\circ}\text{C}$ to 40 $^{\circ}\text{C}$ Storage Temperature: -40 $^{\circ}\text{C}$ to 70 $^{\circ}\text{C}$ Humidity: <80% RH, non-condensing Maximum Altitude: 3000 m Form Factor: 1/2-width, 2U rack-mount Power: Factory configured for 100, 120, 220, or 240 VAC ($\pm 10\%$ supply tolerance) Compatibility & Integration Compatible with ILX Lightwave BF-820 or Agilent 81000BA bare fiber holders via CA-120 Bare Fiber Adapter. GPIB connectivity enables seamless integration into automated test systems.

Features & description

From manufacturer datasheet

Polarization Dependent Response: plus or minus 0.001 dB

Measurement Repeatability: plus or minus 0.003 dB Detector Architecture: integrating cavity Input Ports: 1 Connectorized Fiber Support: yes with CA-series adapters Bare Fiber Support: yes with CA-120 class adapter FC Adapter Reference: CA-100 Bare Fiber Adapter Reference: CA-120 SC Adapter Reference: CA-150 Remote Interface: GPIB Analog Output: proportional to power measurement Intended Use Class: production testing and laboratory optical power Wavelength Lower Bound: 850 nm Wavelength Upper Bound: 1650 nm Power Lower Bound: minus 70 dBm Power Upper Bound Standard: +20 dBm Damage Threshold Continuity: greater than +40 dBm Measurement Channel Count: single channel Notes Specs from ILX FPM-8210 published product specification summaries. Adapter part numbers are references for CA-series heads; adapters are not included with the meter on typical used units.

FPM8210 Characteristics / Specifications

PARAMETER	VALUE
Wavelength Range	850 to 1650 nm
Power Range	minus 70 to +20 dBm
Damage Threshold	greater than +40 dBm
Pump Wavelength Power Capability	up to +33 dBm at wavelengths under 1000 nm
Polarization Dependent Response	plus or minus 0.001 dB
Measurement Repeatability	plus or minus 0.003 dB
Detector Architecture	integrating cavity
Input Ports	1
Connectorized Fiber Support	yes with CA-series adapters
Bare Fiber Support	yes with CA-120 class adapter
FC Adapter Reference	CA-100
Bare Fiber Adapter Reference	CA-120
SC Adapter Reference	CA-150
Remote Interface	GPIB
Analog Output	proportional to power measurement
Intended Use Class	production testing and laboratory optical power
Wavelength Lower Bound	850 nm
Wavelength Upper Bound	1650 nm
Power Lower Bound	minus 70 dBm
Power Upper Bound Standard	+20 dBm
Damage Threshold Continuity	greater than +40 dBm
Measurement Channel Count	single channel

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 list 850 to 1650 nm wavelength coverage, -70 to +20 dBm power range, damage threshold greater than +40 dBm, and integrating-cavity detector architecture with GPIB and analog output.

Applications

Fiber optic production test power measurements, connectorized and bare-fiber optical power readings, and automated optical power monitoring via GPIB.

Key Features

Integrating cavity detector head

Plus or minus 0.001 dB polarization-dependent response

Plus or minus 0.003 dB measurement repeatability

Single input port for connectorized or bare fiber with CA-series adapters

GPIB interface and analog output proportional to power

Technical Specifications

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PARAMETER	VALUE
Wavelength Range	850 to 1650 nm
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Damage Threshold	greater than +40 dBm
Pump Wavelength Power Capability	up to +33 dBm at wavelengths under 1000 nm
Polarization Dependent Response	plus or minus 0.001 dB
Measurement Repeatability	plus or minus 0.003 dB
Detector Architecture	integrating cavity
Input Ports	1
Connectorized Fiber Support	yes with CA-series adapters
Bare Fiber Support	yes with CA-120 class adapter
FC Adapter Reference	CA-100
Bare Fiber Adapter Reference	CA-120
SC Adapter Reference	CA-150
Remote Interface	GPIB
Analog Output	proportional to power measurement
Intended Use Class	production testing and laboratory optical power
Wavelength Lower Bound	850 nm
Wavelength Upper Bound	1650 nm
Power Lower Bound	minus 70 dBm
Power Upper Bound Standard	+20 dBm

PARAMETER	VALUE
Damage Threshold Continuity	greater than +40 dBm
Measurement Channel Count	single channel

Notes

Specs from ILX FPM-8210 published product specification summaries. Adapter part numbers are references for CA-series heads; adapters are not included with the meter on typical used units.

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.