

# OMH 6732B

## Short Wavelength Measurement Head

### Product Features

**NEW!** Measures power and wavelength  
from 350 to 530 nm

Measures up to 1W optical power

NIST Traceable Calibration

Free space or fiber coupled  
measurements

The OMH-6732B Short Wavelength Power/Wavehead provides the capability to measure up to 1W from short wavelength lasers while simultaneously measuring wavelength from 350 - 530 nm at a fraction of the cost of a power meter and a separate wavelength meter.

Integrate wavelength measurement throughout your development or production process to eliminate repetitive coupling or alignment, multiple process steps and costly errors.

The OMH-6732B measurement heads are calibrated in our own NIST traceable optical calibration lab, so you can have confidence in the measurement results.

These measurement heads can be used with the ILX OMM-6810B Optical Multimeter and the LPA-9080 Series Laser Diode Parameter Analyzers for complete characterization in R&D or production test.



## Power Meter With Integrated Wavelength Measurement For Short Wavelength Lasers

# OMH 6732B

## Short Wavelength Measurement Head

### Eliminate Errors

There is no need to enter a wavelength for an accurate power measurement - the instrument does it automatically with ILX's unique wavelength measurement capability eliminating the chance of measurement errors during development or production.

### Confidence in Measurements

The OMH-6732B Measurement Heads are calibrated to NIST traceable standards in our own calibration laboratory where accuracy and traceability are our primary concerns. Our documented quality system

ensures conformance to continuous traceability and ultimately your confidence in the OMH-6732B's measurements.

### Put Our Expertise to Work for You

ILX Lightwave is a recognized world leader in photonic test and measurement instrumentation. Our products are not only renowned for their reliability, quality and value, they're backed by industry leading after-sales support. For more information about the OMH-6732B Measurement Heads and our family of instrumentation, call us.

## Specifications<sup>1</sup>

### WAVELENGTH MEASUREMENT

Range:	350 to 530 nm
Accuracy <sup>2</sup> :	$\pm 0.5$ nm
Detection (min. power required):	- 10 dBm
Temperature Coefficient <sup>3</sup> :	< - 0.03 nm / °C (typical)

### POWER MEASUREMENT

Range <sup>4</sup> (350 - 500 nm):	- 40 to + 30 dBm
Damage Threshold:	+ 42 dBm
Accuracy (% of rdg) <sup>5</sup> :	
Reference Conditions <sup>6</sup>	$\pm 2.8\%$
Operating Conditions <sup>7</sup>	$\pm 3.5\%$
Entrance Aperture:	6 mm
Sensor Type:	Silicon
Noise <sup>8</sup> :	$\leq 5$ nW p-p
Temperature Coefficient <sup>3</sup> :	< - 0.15% / °C (typical)
Environment:	
Operating Temperature:	+10 °C to +40 °C
Storage Temperature:	- 20 °C to +60 °C
Humidity:	< 85% RH, non-condensing
Compatible Connector Types:	FC/PC, FC/APC, SC, ST, DIN, Bare Fiber Holder

### GENERAL

Dimensions	69mm (dia) x 28mm (depth)
Weight:	13.3 ounces

### NOTES

Typical values provide supplemental information beyond guaranteed specification limits.

1. Unless otherwise specified, all measurements taken at 22 °C  $\pm$  3 °C after 1 hour warm-up period.
2. This instrument's wavelength measurement technology provides "mean" wavelength i.e., all spectral contributions to which detectors are sensitive are measured.
3. Measured with a 371 nm source at 1 mW optical input.
4. Typical photodiode response is linear over a 60 to 70 dB range between the effects of thermal noise and saturation of the photodiode. Optical design ensures photodiode saturation will not occur for optical inputs  $\leq 1$ W.
5. Includes traceability to NIST. Reference conditions: calibrated at 22°C  $\pm$  3°C, at 10 nm intervals. Uncertainty evaluated according to NIST Technical Note #1297: "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results". Add  $\pm 0.3\%$  for  $\lambda < 370$  nm. Accuracy specifications are verified with the wavelength entered manually (instrument not in auto-wavelength mode). For auto-wavelength mode add  $\pm 0.8\%$  to the accuracy uncertainty.
6. Temperature 22°C  $\pm$  3°C,  $\lambda$  350 - 530 nm, 3.0 mm spot diameter at entrance aperture, power -20 dBm.
7. Within the specified operating temperature range. Beam centered in entrance aperture and pointing within  $\pm 10^\circ$
8. Measured over 1 minute, in medium filter mode at 375 nm.

In keeping with our commitment to continuing improvement, ILX Lightwave reserves the right to change specifications without notice and without liability for such changes.

### ORDERING INFORMATION

OMM-6810B	Optical Multimeter
OMH-6732B	Short Wavelength Power/Wavehead
AO120	Bare Fiber Adapter Ring
AO271	FC Adapter
AO272	SC Adapter
AO273	ST Adapter
BF-820	Bare Fiber Holder
MK-650	Head Mounting Post

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