

OP710

Multichannel Optical Power Meter



PRODUCT OVERVIEW

The OP710 offers an economical approach for optical power measurement applications where multiple channels are needed. This versatile instrument is built with individual power meters allowing for unparalleled simultaneous data acquisition over all channels. Its low cost of deployment, scalability, and ease of use make the OP710 an integral part of test systems at every corner of the fiber optic industry, from production environments to research and development.

KEY FEATURES & BENEFITS

- **Individual Power Meters**

Each OP710 can be built with up to 24 individual optical power meters capable of measuring output power simultaneously. These power meters are compatible with our entire standard range of adapters to test any combination of connector types.

- **Robust Operative Ranges**

The OP710 is available with both InGaAs and Silicon detectors, each with its own optimal wavelength spectrum and measurement range. Choose the detector type, size, and appropriate adapter to best fit your application.

- | | |
|--------------------------|-----------------------------|
| • Measurement range | • Broad wavelength spectrum |
| InGaAs: +6dBm to -72dBm | InGaAs: 830nm to 1700nm |
| Silicon: +3dBm to -65dBm | Silicon: 400nm to 1100nm |

- **Industry-Leading Accuracy**

You can count on each detector of the OP710 to provide the accuracy needed to meet the most demanding test requirements. The accuracy for relative measurements is $\pm 0.02\text{dB}^*$ and the front panel display has a measurement resolution down to 0.001dB.

- **Versatile Applications**

When paired with the right source and software, test systems with the OP710 can serve all kinds of functions. Whether you need long-term discontinuity measurement, high variability production testing, or stability measurement, a test system that includes the OP710 is the way to go. As your needs change and you shift to new types of testing, the applications for the OP710 can change with you.

* For signals varying a maximum of 5dB.



CALIBRATION

This product can be calibrated in-house, on-site, or remotely.



TECH SUPPORT

Our team of experts is ready to assist you.



WARRANTY

OptoTest offers a three-year warranty on this product.

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SOFTWARE

An important step in building a test system using the OP710 is choosing the right software for the job. DLLs are available to easily integrate into existing processes, while OptoTest offers a range of software programs that take full advantage of the capabilities of the OP710.

All OptoTest software affords the following benefits to your test system:

- **Automation**

Every step of the test process is fully controlled by the software, making your testing experience simple, repeatable, and reliable.

- **Expandability**

Multiple units and different types of units can be controlled together to expand the functionality of your test system. For instance, you can control up to seven OP710 units at once or control an OP710 and multichannel OP940 together to create a high-channel count IL and RL test system.

- **Customization**

Test settings, pass/fail criteria, and result output are fully customizable to create a tailored experience that best fits your needs.



COMPATIBLE SOFTWARE

- **OPL-CLX** multifiber connectors with production applications with database integration
- **OPL-Max** multifiber connectors with production applications
- **OPL-Log** optical datalogging for temperature and humidity
- **OPL-7** measure the power output on all channels of the OP710
- **OPL-PowerRT** simultaneous insertion loss testing on multiple channels
- **SDK** create custom software and integrate into existing systems through the DLL library. (Labview®, Visual Studio® & Python® are examples of the most commonly used development packages.)

APPLICATIONS

- **Long-Term Testing**
- **Discontinuity and Fluctuation**
- **High Channel Count**
- **High Variability Production**
- **Stability Measurement**
- **Transceiver Testing and Validation**



ISO CERTIFIED

Our Quality Management System is certified and in compliance with ISO 9001:2015.



MADE IN THE USA

We proudly design & manufacture our equipment in California, United States.

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AVAILABLE DETECTOR OPTIONS

IN1	1mm InGaAs detector with 5/8" Adapter
IN3	3mm InGaAs detector with 5/8" Adapter
IN5	5mm InGaAs detector with 5/8" Adapter
IN10	10mm InGaAs detector with 5/8" Adapter
HP	2mm High Power InGaAs detector with 5/8" Adapter
SI3	3mm Silicon detector with 5/8" Adapter
R	Electrical port for Remote Head Detector



PRODUCT SPECIFICATIONS

Optical Power Meter	1mm InGaAs	3mm InGaAs	5mm InGaAs	10mm InGaAs	3mm Silicon
Measurement Range	+6dBm to -72dBm at 1490nm	+3dBm to -72dBm at 1490nm	0dBm to -65dBm at 1490nm	0dBm to -55dBm at 1490nm	0dBm to -65dBm at 980nm
Wavelength Range	850nm to 1650nm				
Selectable Wavelength	Standard wavelengths (850nm, 980nm, 1300nm, 1310nm, 1490nm, 1550nm, 1625nm)				
Measurement Resolution	(Display) 0.001dB				
Absolute Accuracy	±0.25 dB at calibration conditions for all NIST traceable wavelengths				
Measurement Speed	Up to 80 samples/second				
Measurement Linearity (Relative Accuracy)					
Deviation ± 0.05dB	+3dBm to -65dBm at 1490nm	0dBm to -65dBm at 1490nm	0dBm to -55dBm at 1490nm	0dBm to -45dBm at 1490nm	0dBm to -55dBm at 980nm
Deviation ± 0.01dB	<10dB power variation	<10dB power variation	<10dB power variation	<10dB power variation	<10dB power variation

Mainframe	OP710s
Dimensions	42.5cm x 8.9cm x 20.3cm
Power Supply	90VAC ... 264VAC; 47Hz to 63Hz; 0.7Amps (115VAC) 0.4Amps (230VAC); Fuse: T1A, 250V
Warm-up time	5-15 minutes
Operating Temperature	5°C to 40°C
Maximum Relative humidity*	95%

* For temperatures up to 31°C, decreasing linearly to 50% relative humidity at 40°C.

Product specifications and descriptions in this document are subject to change without notice.
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