

F-361

High-Speed Integrating Sphere Optical Power Meter

>> Click <http://www.pi.ws/fwd/Photonics> for the Latest Specs on these Products



F-361 integrating sphere and optical power meter.

- Ultra Fast: 5 ksamples/s
- Power Range 1 nW to 10 mW
- Absolute Power Measurement, NIST Traceable
- Display for Instantaneous and Test Measurements
- Spectral Range 1000 nm to 1600 nm
- Compatible to PI F-206, M-840 & M-850 Hexapod Systems
- Compatible to PI C-880 Multiaxis Alignment

Absolute Power Measurement, NIST Traceable

F-361 is a very sensitive, absolute measuring power meter. All incoming light is detected by three InGaAs detectors in its integrating sphere. All F-361 are calibrated and NIST traceable.

10⁷ Power Range

The F-361 is extremely sensitive, the minimum signal resolution already starts at 1 nW. It covers a range of 7 orders of

magnitude to 10 mW. For higher optical power, an attenuator can be used.

High Speed

The F-361 provides a high bandwidth of 5 kHz, a prerequisite for automatic alignment. Its high-throughput RS-232 interface provides up to 5,000 samples/s.

Compatibility to PI Alignment Systems

PI offers various photonics alignment systems consisting of precision mechanics up to 1 nm resolution, advanced motion controllers, high level software and open-source alignment routines.

The F-361 is compatible to all PI alignment systems such as M-840/M-850, F-206 and C-880 and existing systems with rela-

tive power meters can be upgraded (firmware update required). Up to two F-361 can be used with the above alignment systems.

F-361 comes with an RS-232 interface board for the PI motion controllers, interface cables, power supply, installation and operation manual and software.

Compatible to

- M-840 Fast Six-Axis Parallel Kinematics Hexapod
- M-850 Hexapod Parallel Kinematics MicroMotion Robot
- F-206 HexAlign Six-Axis MicroMotion Robot and Alignment System
- M-824 Vacuum-Compatible Hexapod
- C-880 Multi-Axis Automation Platform

Ordering Information

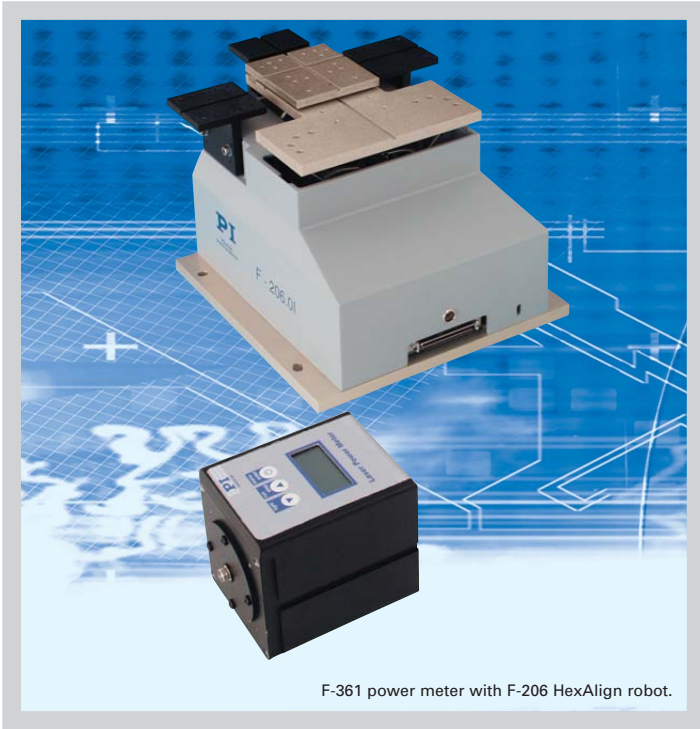
F-361.10
High-Speed Optical Power Meter, NIST Traceable, 1000-1600 nm wavelength

Technical Data

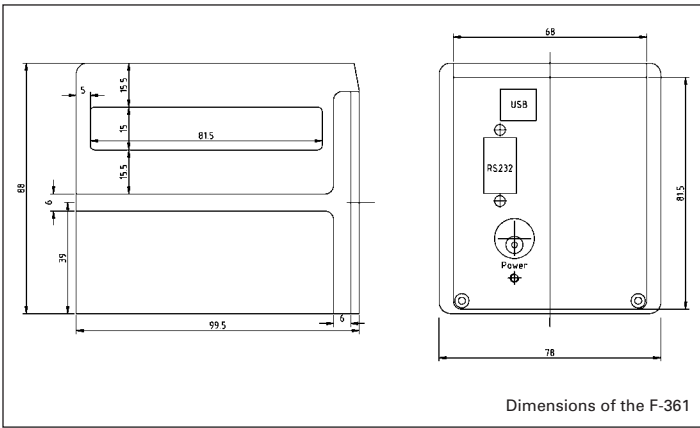
Models	F-361.10
Function	High-speed optical power meter for absolute power measurement
Channels	1
Spectral Range	1000 nm to 1600 nm
Calibration	NIST traceable
Power Range	1 nW to 10 mW
Absolute accuracy	8.5 %
Autoranging time	140 µs
Interface	USB, RS-232
RS-232 throughput	5 ksamples/s, max. 7 ksamples/s
Fiber Connector	FC
Detector	3 x InGaAs
Dimensions	99.5 x 88 x 78 mm
Weight	865 g

Application Examples

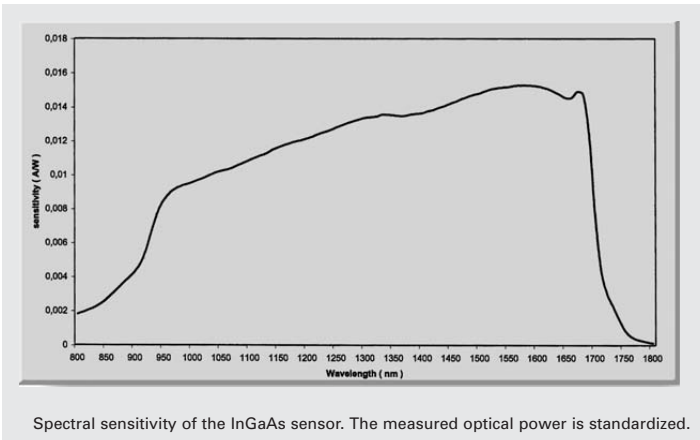
- Fiber alignment
- Optical measurement
- Characterization of optical parts or MEMS
- Quality assurance of optical parts or MEMS



F-361 power meter with F-206 HexAlign robot.



Dimensions of the F-361



Spectral sensitivity of the InGaAs sensor. The measured optical power is standardized.

- Piezo Actuators
- Nanopositioning & Scanning Systems
- Active Optics / Steering Mirrors
- Tutorial: Piezo-electrics in Positioning
- Capacitive Position Sensors
- Piezo Drivers & Nanopositioning Controllers
- Hexapods / Micropositioning
- Photonics Alignment Solutions**
- Motion Controllers
- Ceramic Linear Motors & Stages
- Index