

X9-3

<https://www.gigahertz-optik.com/en-us/product/x9-3/>

Product tags:



Description

Radiometer for Low and Medium Power Lasers

The X9₃ (Xnine three) meter is a compact lightweight radiometer for the measurement of Laser Power and Laser Power Density in W and W/m² within the wavelength range from 400 to 1100nm.

7mm Diameter Light Detection Area

The detector LP-9901-4 offers a low profile 8mm height housing with 7mm diameter measurement window for the measurement of laser power in mW and power density in mW/m². A 100mm long handle assists safe placement of the detector head in the measurement zone. Its power range varies with wavelength with a maximum of 100mW at 633nm.



LP-9901-4 Flat Field Detector

50mm Diameter Integrating Sphere

The ISD-5-Si-4 (formerly model LP-9910-4) is built with a compact 50mm diameter integrating sphere with 12.5mm measurement port and a silicon photodiode detector. The +/-45° acceptance angle enables measurement of lasers and laser diodes with dispersed beams and reduces the need for perpendicular alignment of the laser to the detector.



ISD-5-Si-4 Integrating Sphere Detector

Integrating Spheres Avoids Regular Reflection

The integrating sphere disperses the incoming laser beam which avoids resonance in the laser chamber a problem with plane detectors with reflective surface that can reflect the beam back into the laser chamber.

Traceable Calibration

Both detectors are calibrated for spectral sensitivity from 400 to 1100nm in 10nm wavelength steps as well as for power density. The calibration is traceable to international standards.

Simple to Use

The X9₃ meter is a handheld battery operated meter with 9 mm high character LCD display for easy viewing. Operating the X93 is simple. Hard-shell case is optionally available.

Custom Labeling Welcome


Specifications


Specification

Design	Compact size hand-held housing
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Display	6 character LCD, Character height 9mm. Indication of measurement quantity in W and W/m², cw or peak measurement mode, stop, battery low
Detector interface	ITT (-4) type connector.
CW	Continuous Mode with Run / Hold function (Snapshot) / Manual & Automatic Gain Selection
CW integration time	500 ms
Frequency Range	0.166 Hz to >300MHz
Spectral range	Menu selected with arrow up and down
Measured Quantity	Menu selection of radiant power (W) and irradiance (W/cm²)
Parameter adjustment	Via RS232 interface
Front panel control	3 button system
Interface	RS232, 9600 Baud, 8 8D pin plug Hirose type 3260-8S1, Power supply option recommended for remote control operation
Temperature range	Operation 5 to 40°C, Storage 0 to 50°C
Power Supply	9V one-piece battery, operating time about 100 hrs Operation from AC plug-in power supply 230V/50Hz on option by erase of battery
LP-9901-4 1)	Radiant Power and Irradiance detector
Spectral responsivity	400 to 1100nm, Wavelength depending sensitivity, Calibration in 10nm increments and the laser wavelength 441, 458, 473, 488, 496, 514, 532, 543, 568, 594, 612,633, 647 and 1064nm
Active Area	12.7mm diameter
ISD-5-Si-4 1)	Radiant Power detector with 50mm dia integrating sphere
	compatible
	compatible
Warranty	12 month
	100mW with 0.00002mW display resolution at 633nm 30mW with 0.00002mW display resolution at 900nm
1)	For more specifications please check the LP-9901 and ISD-5-Si detector datasheet
2)	The measurement range may be limited by the detectors operation temperature
	NULL
Measurement range	NULL
Measurement modes	NULL

Configurable with

Product Name	Product Image	Description	Go to product
LP-9901		Detector head to measure Laser radiant power in W and Laser irradiance in W/m²	https://www.gigahertz-optik.com/en-us/product/lp-9901/

Product Name	Product Image	Description	Go to product
K-xx-C		Calibration of the signal current sensitivity of optometers. Features: calibration of all gain stages, traceable calibrated current source, calibration certificate	https://www.gigahertz-optik.com/en-us/product/k-xx-c/

Purchasing information

Article-Nr	Modell	Description
Product		
100437	X9-3	Meter with battery and manual
Re-calibration		
15300700	K-X9n-C	Electrical calibration of the X93 meter
15300700	K-LP9901-SD	Calibration of radiant power and irradiance from 400 to 1100nm in 10nm increments, Calibration certificate
15300483	K-ISD5Si-SD	Calibration of radiant power and irradiance from 400 to 1100nm in 10nm increments and additional Laser wavelength, Calibration certificate
Accessories		
100480	LP-9901-4	Laser power and Irradiance detector, calibration certificate
100481	ISD-5-Si-4	Laser power detector, calibration certificate
100065	X9-Z01	RS232 interface adapter cable to connect the X9 meters with 9PIN SUB-D standard sockets on PCs
100299	X9-Z02	External power supply unit for the X9 meters including meter modification (chancels battery operation)
101122	X9-Z05	Plug-in power supply for main operation of the X9 optometer. Connected to the RS232 socket of the meter. Prevent the remote control operation via the RS232 interface. 100VAC - 240VAC; 5VDC
100010	BHO-01	Hard case to carry and store one X9-3 with ISD-5-Si-4
100020	BHO-05	Hard case to carry and store one X9-3 with LP-9901-4

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- Technical Consulting & Sales
- After-Sales Support
- Calibrations & Re-Calibrations ([ISO/IEC 17025 Calibration Services](#), [factory calibration](#), [Calibration of Third-Party Products](#))
- Repairs & Updates
- OEM & Feasibility Consulting of Customized Solutions

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