IS

Integrating sphere detector for laser power measurement up to 1 kW

New product

OUTPUT OPTIONS

- integra **ALL-IN-ONE-METER**
  Connects directly to a PC
  Two models available:
  - USB output (-INT)
  - RS-232 output (-IDR)

COMPATIBLE PC INTERFACES

INTEGRA

KEY FEATURES

- **FASTEST RESPONSE**
  With its silicon sensor, the integrating sphere is as fast as a photodiode.
- **WIDE POWER RANGE**
  Very low noise level = wide power range with just one device
- **HIGH AVERAGE POWER**
  Measure up to 1000 W of continuous power.
- **RESISTANT COATING**
  Our proprietary coating is designed to be strong. Its damage thresholds are orders of magnitude higher than any other "white" coatings on the market.
- **PRECISE CALIBRATION**
  The IS detectors have a NIST-traceable calibration for the entire calibrated spectral range.

ACCESSORIES

Stand with delrin post

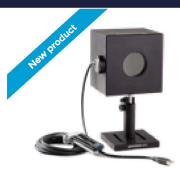
Fiber adaptors & connectors (for IS12L only)

Pelican carrying case

IS
Specifications

CE NIST* Traceable WEEE/RoHS COMPLIANT

*Also traceable to NRC-CNRC



	1SI2L-9S-RSI-INT-DO	ISSOA-IKW-RSI-INT-DO
MAXIMUM AVERACE POWER	9 W	1000W
EFFECTIVE APERTURE	12mml/J	50mml/J
COOLINC METHOD	Convection	Water
MEASUREMENT CAPABILITY		
Spectral range	340-1100 nm	340-1100 nm
Calibrated spectral range	400-1070 nm	400-1070 nm
Maximum average power	9 W	1000W
Noise equivalent power•	1µWat 1070 nm	10 µWat 1070 nm
Maximum divergence	10' (half-angle)	10' (half-angle)
Maximum incidence angle	±10°	±25' for beam diameter< 10 12mm ±5' for beam diameter> 10 12mm
Typical rise time	<0.2s	<0.2s
Sampling rate	15Hz	15 Hz
Calibration uncertainty	±5.0% (400 - 499 nm) ±3.5% (500 - 1069 nm) ±2.5% (1070 nm)	±5.0% (400 - 499 nm) ±3.5% (500 - 1069 nm) ±2.5% (1070 nm)
Back reflections •	6%	12%
Linearity with power	±1%	±1%
DAMACE THRESHOLDS		
Maximum average power density'	2kW/cm'	5kW/cm'
Maximum energy density•	400mJ/cm'	400mJ/cm'
PHYSICAL CHARACTERISTICS		
Effective aperture	12mml/J	50mml/J
Mounting thread	SMI	SM2
Sphere inner diameter	50mml/J	l00mml/J
Sensor	Silicon	Silicon
Dimensions	66H x 78W x 66D mm	127H x 140W x 115D mm
Weight	0.75 kg	4kg
ORDERINC INFORMATION		
Available output options	USB or RS-232	USB or RS-232
Compatible stand	STAND-S-443	STAND-S-443-C
Product page		

a. Nominal value. Actual value depends on environmental electromagnetic interference and wavelength.With anticipation.
b. The backscattered power (also known as back reflections) is concentrated in a cone with an apex located at the back of the sphere. For IS12, the cone has a 7.5-degree half-angle. For IS50, the cone has a 15-degree half-angle.
c. At 1064 - 1070 nm, CW.
d. At 7064 - 7070 nm, 7 ns.

Specifications are subject to change without notice
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