INDUSTRIAL SPECTRORADIOMETER ISR900

The industrial spectroradiometer iSR900 is an autonomous and high-resolution measuring system for fast and precise measurements in the UV, visible spectral range and IR.
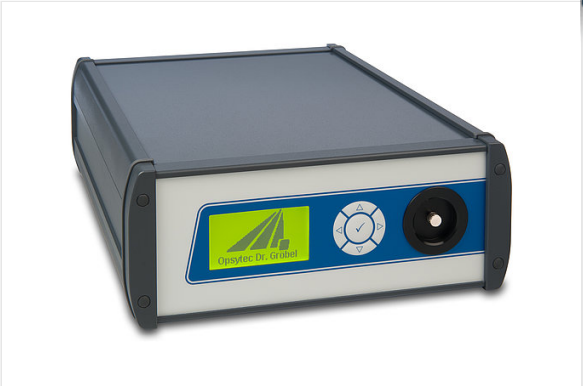
The spectroradiometer consists of an array spectrometer without moving parts and a silicon detector with 2048 pixels. The spectral resolution is 0.44 nm.

The iSR900 is combined with an SMA-905 quartz light guide and our radiometric measuring heads for irradiance and illuminance measurement.
The iSR900 is factory calibrated to PTB. A DAkkS test in our accredited laboratory is optionally available. The iSR900 thus allows accurate spectroradiometric measurements for the evaluation of irradiance and illuminance. The low-scatter design achieves high sensitivity in the UV range. Control and data evaluation take place in the iSR900 so that only a USB or RS485 / RS232 interface is required for the evaluation.

With trigger input and output the iSR900 is ideal for automated measurements.

▶ Product inquiry

HIGHLIGHS OF INDUSTRUAL SPECTRODATIOMETER ISR900

- Spectral range 200-1100 nm
- Nearly scatter-free grid with 300 lines/mm
- Spectral resolution 0.4 nm and 2,3 nm bandwidth
- Order filtering
- Radiometric and effect-related measurements
- USB, RS485 or RS232

APPLICATIONS OF UV-VIS SPECTRORADIOMETER ISR900

- Spectroradiometry
- Online process control, quality control
- Testing of light sources (lamps, LEDs)
- Inspection of optical materials and components, e.g. light conductors
- Qualitative and quantitative analyses in chemistry, pharmacy and biology

ISR900 SAMPLE COMMANDS

iSRSerialNr?	Serial number query

iSRFirmware?	Queryfirmware version
iSRReset!	Reset command
iSRIntTime: 400!	Setting the integration time
iSRMeasAVG?!	Request/Command Averages
iSRCalibDate?:	Calibration date request
iSRStartDark!	Start dark measurement
iSRStartMeas!	Start measurement command
iSRMeasResult?	Inquiry of measurement result

TECHNICAL DATA INDUSTRIAL SPECTRORADIOMETER ISR900

Spectral range	200 - 1100 nm
Spectral resolution	0,44 nm (pixel pitch)
Spectral bandwidth	2,3 nm (FWHM)
Grating	300 l/mm, holografic
Focal length	75 mm
Blaze wavelength	250 nm
Detector	SI
Pixel size	14 x 200 µm
Number of pixel	2048
Resolution	16 bit
Integrations time	0,1 ms to 60 s
measurement duration, typ.	300 ms
Interface	USB, RS232 or RS485
Trigger	I/ O, rear connection
Dimensions	250 x 320 x 100 mm
Gewicht	3,5 kg
Supply voltage	230 V, 50 Hz
Power	< 25 W
Operating temperature	5 to 40 °C
Storage temperature	-10 to 60 °C
Humidity	<80%, non-condensating
Communication	ASCII with CRC-16

DOWNLOADS

📄 Data sheet

ACCESSORIES

▶ Integrating spheres

▶ **Product inquiry**