

MODEL SPECS: ILT950-NIR

Wavelength Range: 900- 1750 nm

Symmetrical Czerny-Turner: 50 mm focal length

Grating: 200 lines/nm**

Slit: 50 μm**

Resolution: 6 - 7 nm

Stray Light: < 1%

Signal/Noise HS: 2000:1

Integration Time HS: 10 μm - 750 ms

Signal Noise LN: 6000:1

Detector: InGaAs Linear Array

256 Pixels 50 μm x 50 μm

AD Converter: 16 bit, 500kHz

Interface: USB 2.0 High Speed

Sample Speed w/On-Board Averaging: 1.06 ms / scan

Power Supply: USB Power

Dimensions 175 x 165 x 85 mm

Weight: 2.2 Kg

ILT950-NIR

Bench-Top, Research Spectroradiometer

Cost-Effective, Fully-Integrated Spectroradiometer with ISO17025 Accredited Calibration

The ILT950-NIR compact air cooled NIR spectrometer uses a 256 pixel linear InGaAs array and offers both a High Sensitivity and Low noise mode for measurements in the near infrared range out to 1700 nm (1.7 micron). The ILT950NIR allows for economical measurements by comparison to many TE-Cooled spectrometers, yet still offers exceptional performance. With a sample speed of only 1.06 ms/scan and integration times as fast as 10 µs the ILT950-NIR offers fast accurate results.

The ILT950-NIR can be combined with ILTs UV-VIS spectrometers by attaching a bifurcated fiber cable to both units, with only 1 shared input optic. This allow simultaneous, broad spectrum measurements with minimal set up time. Results are displayed for both systems in one graph using ILT's easy to use SpectrlLight software.

Applications include laser measurements, Research and development, Transmission measurements, LED testing, and IR lamp testing.

OPTIONAL INPUT OPTICS



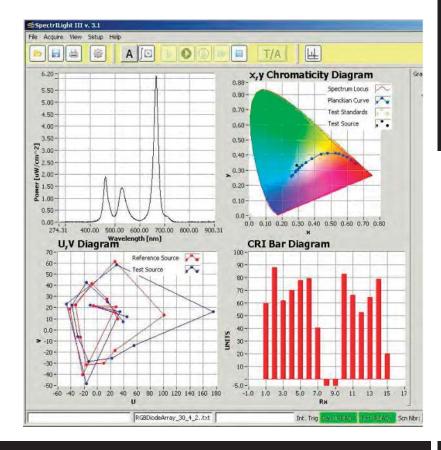
COSINE CORRECTORS

Several cosine correctors are available in addition to our standard W2 Cosine Corrector including teflon and miniature models to tailor the ILT950-NIR to your unique application.

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^{**}Additional slit sizes and gratings are available. Changing the slit and grating can allow for smaller resolution, a reduction in the wavelength range and an increase in sensitivity. Please contact an ILT light measurement specialist at ilsales@intl-lighttech.com for help configuring your ILT950 system.



SpectriLight III ILT950 Control & Analysis Software

SpectriLight™ III is a LabView™ based software package for Windows that allows acquisition of spectral and color data. Analysis of the data is calculated instantly within the same program - no exporting required.

SpectriLight™ III provides easy setting of all operating controls of the ILT950 spectrometer with an integrated data analysis package, making your spectral analysis fast and simple. Wavelength range, integration time, scan average and other controls can be easily set through pop up windows, menus and toolbars. Absolute Irradiance and chromaticity are calculated instantly.

SPECIFICATIONS

- Automated time line measurements
- Access multiple calibration files
- Auto-integration simplifies user interactions
- Scan Average: 1 to 999 for reduced noise
- External Trigger
- Peak Find
- Enhanced scaling and zoom features including movable vertical cursors
- Export to ASCII text, report, or directly into Excel.
 Save screens/scans in multiple formats including .bmp, .jpg, and .png
- Powerful import data wizard can even import data from other spectrometers!

SpectriLight III - Version 5 - New Features:

- Overlay: allows comparison to baseline reading
- 2. PAR: plant growth calculations
- 3. New color calculation includes 2 & 10 degree observer, and metamarism calculation
- 4. Improved colorimetry calculations based on 1nm (previously 5nm)

REAL-TIME ANALYSIS

- Irradiance: Total, Visible, UVA, UVB, UVC, PAR, photopic data.
- Selectable bandwidth for irradiance, power, and radiance (requires additional hardware & calibration options)
- Chromaticity analysis: x, y, u, v coordinates and display in CIEcolor spaces.
- Dominant and complementary wavelength and color purity.
- General Color Rendering Index (CRI) and 15 special color rendering indices.
- Correlated Color Temperature (CCT) and Duv.

Requires: Windows XP Professional, 7&10; Pentium II 300 MHz or better

C, C++, and Visual Basic DLL's as well as custom DLL's are also available.

Please contact our software engineer at ilsupport@intl-lighttech.com for more information.

ISO 9001 / ISO/IEC 17025

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