ILT1000
Light meter, monitor and data logger

The ILT1000 is a broad and versatile UV, VIS and IR datalogging optometer with NIST-traceable ISO 17025 accredited calibrations. System configurations are based on the industry standard ILT1700 research radiometer/ photometer detectors, filter/optics and calibrations. The ILT1000 was designed with OEM and custom configurations in mind and can easily accommodate most solid state detectors, 1/2" and 1" optical filters and a vast selection of input optics.

The ILT1000 is capable of measuring over eight decades of light intensity and providing direct readout in W, W/cm², Lux, Fc, Lumens, cd/m², cd, W/sr, W/sr/cm² and more. On board data storage allows continuous monitoring at customer specified sampling rates using the "set it and forget it" datalogging.

Applications

Germicidal (UV disinfection) light monitoring & data logging in the bottled beverage and food industry, drinking and pool water disinfection, HVAC, pharmaceutical/cosmetics, semiconductor, municipal water/wastewater disinfection.

Process monitoring, curing, plant photobiology, thin film deposition, ribbon clarity/glass production and liquid turbidity, and transmission measurements.

Software

The ILT1000 comes with DataLight II software, a complementary basic Labview DLL and 5 versions of software including: CLI, BAR, TREND, DATALOG and the ALL NEW METERS app. designed to cover a wide range of applications.
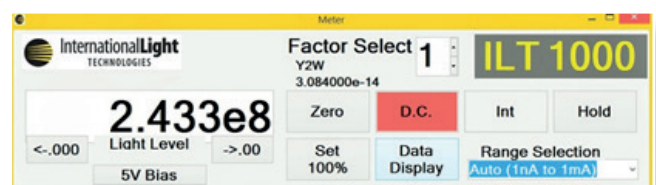
Meters

Designed to maintain the look and feel of the Industry Standard ILT1700 Research Radiometer. Designed for wireless use with Windows 8 tablets and touch screen computers, the larger, user-friendly panel includes buttons for hold, zero, integrate, factor, range, average and units selection.

Features and benefits

- Wired and **wireless** versions available
- Ideal for performing multi-point, wireless, remote light monitoring and data logging
- "Set it & forget it" remote data logging with on-board data storage
- Multi-system continuous monitoring (up to 32 systems with one hub)
- 4 open licensed, customer-configurable software options
- 6 decade dynamic range of optical analysis
- Autorange, autodark with manual control options
- 4-20 mA output
- Auto-sample rate configuration to reduce noise
- NIST-traceable calibration and certificate

Specifications	
Six decades of light sensitivity	
Optical density	0.00 to 4.00 optical density
Optical density repeatability	(single) ± 1%, (multiple) ± 2.5%
Operating temperature	-40 to 85°C (calibrated irradiance 0-50 °C)
USB	USB2 including power, for single and multiple systems
USB current draw	200 mA max, 130 mA typical
API	Simple, well documented API for custom programming
Size	76.2 x 76.2 x 25.4 mm (3" x 3" x 1") without filters and input optics
Weight	173 g (less than 0.5 lbs)

| Ordering information	
ILT-ILT1000	Broadband, Silicon diode,200 – 1100 nm
ILT-ILT1005	UV-VIS, GaAsp, diode 250 – 675 nm
ILT-ILT1007	IR, InGaAs diode, 850 – 1700 nm
ILT-ILT1254	UVC silicon diode, built in 254 nm filter
ILT-ILT1320	UV, GaN diode 200 – 320 nm
Other ILT1000 filter/optic combinations available on request!	

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Trend

Records all six parameters while displaying the trend over time for the user switchable parameter. Multiple examples of trend can be run simultaneously to allow multi-unit comparisons. Trend also has a user-friendly calibration feature.
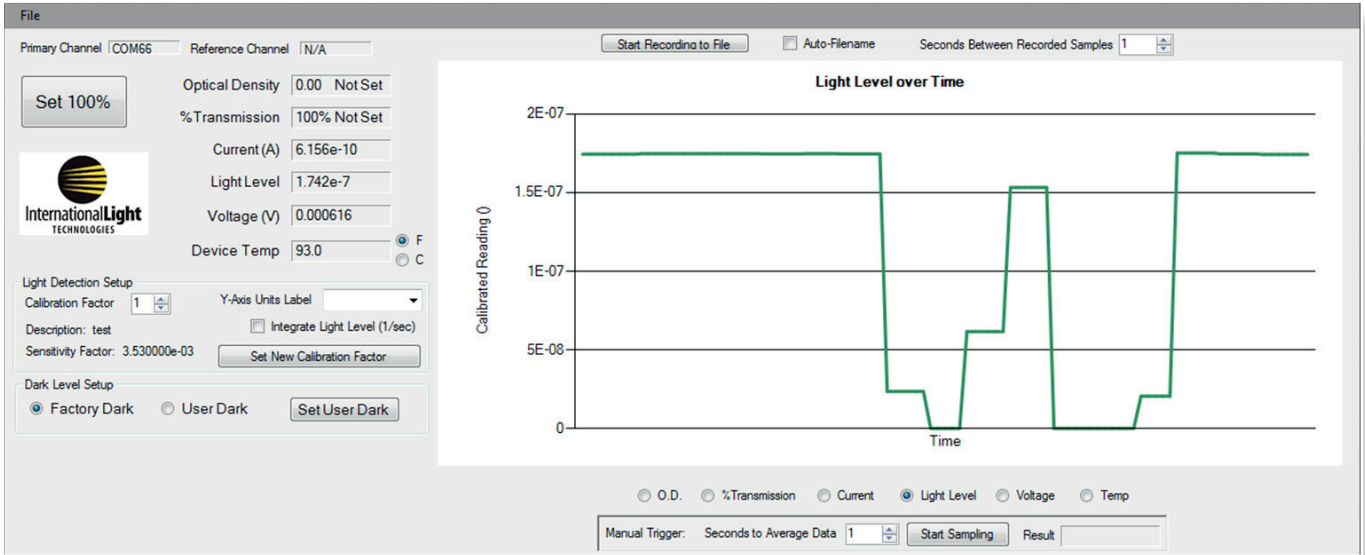
Bar

Allows multisystem, datalogging and displays the user switchable parameter in a bar graph. The expandable graph can accommodate up to 32 systems simultaneously with use of hub(s). User can enter nicknames for each unit to define the location, application, version, serial number, etc. Customer can program max and min warning levels and use color coded bar responses for easy troubleshooting.
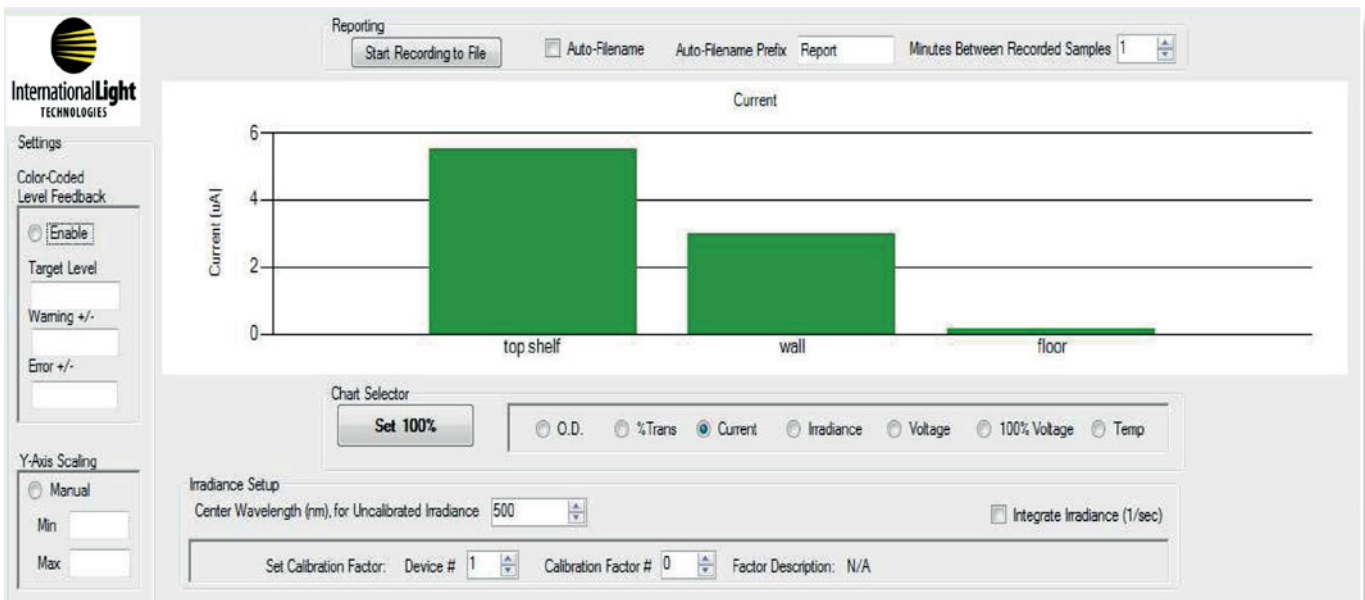
CLI is a very basic command line interface program that allows customer to type commands from the API and record readings into the device memory.

Datalog is a user interface that allows remote "set it and forget it" datalogging.

All software is provided with an open source (MIT) license for ease of customization. A full version API is also available.