**ILT5000**  
Research Radiometer & Picoammeter  
WIRED & WIRELESS Versions

**Features:**
- 10 Decade Dynamic Range of Optical Analysis.  
- Wireless Transmitter, Built-in.  
- Made in USA.  
- Autorange, Autodark, Auto-sample with User Control Options.  
- 4-20 mA Output.  
- “Set It & Forget It” Remote Data Logging.  
- Built-in Re-Chargeable Battery Pack.  
- Multi-System Simultaneous Continuous Monitoring  
- DataLight II Complementary Light Measurement and Data Collection Software Apps.  
- Labview Compatible.  
- Backwards Compatible with ILT1700 SED Detector/Filter/Optics.  
- Sample Rate Up to 100 Hz, Programmable.  
- Custom & OEM Inquiries Welcome.

**SPECIFICATIONS**

**Meter:**  
- Measurement Range: 100 fA – 1 mA.  
- Reverse Bias: (2 Voltages/selectable).  
- Automatic Ranging: Rapid switching through all current levels.  
- WiFi: Enabled.  
- Operating Temperature: -40 to 85°C (Calibrated Irradiance 0-40°C)  
- USB: USB2, Including Power, for Single and Multiple Systems  
- USB Current Draw: 500 mA max, 250 mA typical  
- Size: 1-3/5” H x 5” W x 7” L  
- Input connector: D-Sub and/or SMA.  
- CE certified: No rf/noise.

**Software:**  
- CLI: Command line interface sent over a serial port  
- Trigger: TTL, for synchronization of measurement**  
- Data Storage: Internal (includes units, date and time stamps)  
- Time Line: Scheduled data acquisition  
- Integration Range: Unlimited dosage/exposure  
- Transmission/Reflectance: (100%)  
- Optical Density: 0.00 to 4.00  
- Zero: (Dark or ambient subtraction)  
- Direct Reading: Current or calibrated optical units  
- Apps: Meters, CLI, Bar, Trend and Reports apps all included  
  ** Coming soon: TTL trigger and Flash App for pulsed light measurement

**Minimum Computer System Requirements:**  
- Tablet: Minimum 8" tablet  
- Operating System: Windows 7 or 8  
- Memory/RAM: Minimum 1 GB RAM (on board)  
- Storage: 32GB (flash or SSD)  
- Processor: at least 1.83GHz (with minimum 2MB Cache)  
- Ports: 1 Micro-USB 2.0 Port  
- Wi-Fi® Wireless networking (802.11b/g/n)  
- Bluetooth® v 4.0  
- Also Recommended:  
  - Micro SD/SDHC/SDXC Card slot (extra storage, data offloading/backup)  
  - OTG Cable (Micro-USB 2.0 to USB 2.0 (for program updates as needed)  
  - Micro-USB to Ethernet Cable for Non-wireless Network Connectivity

**DESCRIPTION**

The ILT5000 is “The ILT1700 for the 21st Century” improving on the industry standard with rapid measurements (up to 100 Hz), a broader dynamic range (100fA to 1mA), extensive supporting software apps, wireless communication, internal data storage, and 4-20 mA output.

The broad linear dynamic range of the ILT5000 and the SMA input connector allow the meter to also serve as a broadband, highly sensitive and accurate range picoammeter.

The ILT5000 supports numerous light measurement applications including, but not limited to; Radiometry, Photometry, Research, U.VGI- Sterilization, Solar, Photoresist, Optical Radiation Hazard, Phototherapy, Photo-degradation, Plant Growth and more.

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The ILT5000 comes with a complementary basic Labview DLL sample code, an extensive API and ILT’s DataLight II light measurement and data collection software.

**DataLight II ILT5000/ILT1000 Software**

**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.

**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.

**TREND** - Records all 6 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.

**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.