# EIT PowerPuck® II Profiler & Uvicure Plus® II Profiler



High Energy UV Integrating Radiometer with PowerView II data analyzing software

The radiometers that first set the standard for the industrial UV curing industry now have the ability to be used with display or as a profiling radiometer that transfers the irradiance profile to a computer for analysis.

Instrument Features on all EIT Uvicure and PowerPuck instruments:

**Easy to Use**: Single Button for On/Off and Run Mode makes it easy to collect and view data.

**Data Mode:** UV data (joules/cm², watts/cm²) displayed on one screen for up to 4 bands.

**Graph Mode:** A graph illustrating the collected UV irradiance and energy is displayed for each of the UV bands. Graph shows the irradiance profile as a function of time (mW/cm on y-axis, time on x-axis).

**Reference Mode:** Allows the user to store a run into the instrument memory to allow for easy comparison to current UV conditions.

**Setup Mode:** Soft buttons are used for function selections, and are indicated on the bottom of the display for easy operator selection and use. User can decide what screen mode & units to display and also select the sample rate.

Smooth On: Compatible with previous sampling rate on legacy Power Puck units sampling at 25 samples per second

<u>Smooth Off:</u> Compatible with UV PowerMAP sampling rate at over 2000 samples per second.

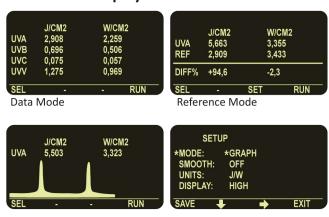
### **Dynamic (Operating) Ranges**

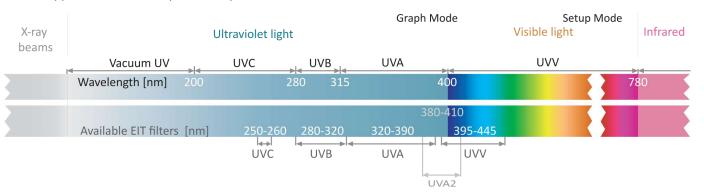
The Uvicure Plus II or UV PowerPuck II instruments are available in three dynamic (operating) ranges.

- The standard range (10 Watt) works well for high power curing applications.
- The mid-range (1 Watt) works well with low power arc lamps and in applications with lamps that are non focused or away from the cure surface.
- The low range (100 mW) works well in exposure systems and applications with low power lamps

# PowerPuck II Profiler Ver: 5.00 SN# 12345 Calibration: 2014-01-02 Range: 10W/UVA/B/A2/V DESIGNED & MANUFACTURED BY EIT, INC. STERLING, VA 20164 USA PATENT PRICENT Ccated on Chaptido what

### **Instrument Display Windows**







### **EIT Bands**

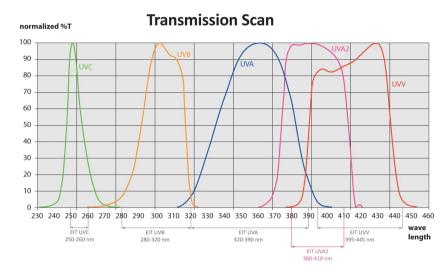
EIT UV PowerPuck II Profiler instruments are available in two versions:

- Standard version (UVA, UVB, UVC, UVV)
- UVA2 version (UVA, UVB, UVA2, UVV)

EIT UVICURE Plus II Profiler instruments are available in any one of EIT's bands (UVA, UVB, UVC, UVA2 or UVV)

### **EIT Profiler instruments**

The EIT Profiler instruments contain the same functions and features as the standard Puck II Instruments. The new Profiler func-



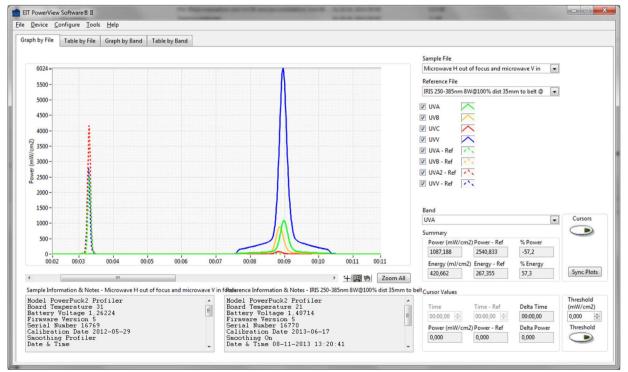
tion allows the transfer of the numerical (irradiance, energy density) values and the irradiance profile to your computer via a USB port for analysis with the new PowerView Software® II Program.

### **Puck Profiler Instrument Features**

- Fixed sample rate of 128 samples/second
- Memory supports data collection of over 100 min.
- Information displayed on the screen for production team, transfers to computer for analysis & archiving
- "Profiler" mode in instrument to match instrument display with calculated PowerView Software® II values

### PowerView Software® II Features

- New program for use with PROFILER instruments
- Analyze up to four UV bands on two different files or a single UV band on four individual files
- Display instrument data by UV band or units/parameter (irradiance, energy density)
- Enhanced note and information options to add information to your collected files
- Easily share & paste information into reports/programs



Data and graph in same window



## **Specifications**

Display	Easy to Read, Yellow Text on Black Background
Suggested Operating Ranges	Standard High Range: UVA <sup>EIT</sup> , UVB <sup>EIT</sup> , UVV <sup>EIT</sup> - 100mW/cm² to 10W/cm² & UVC <sup>EIT</sup> - 10mW/cm² to 1W/cm²
	Mid-Range: UVA <sup>EIT</sup> , UVB <sup>EIT</sup> , UVV <sup>EIT</sup> -10mW/cm <sup>2</sup> to 1W/cm <sup>2</sup> & UVC <sup>EIT</sup> : 1mW/cm <sup>2</sup> to 100mW /cm <sup>2</sup>
	Low Power: UVA <sup>EIT</sup> , UVB <sup>EIT</sup> , UVV <sup>EIT</sup> - 1mW/cm² to 100mW/cm² & UVC - 1mW/cm² to 100mW/cm²
	Units will "turn on" and display data at irradiance values much lower than the suggested Operating Ranges. Th suggested Operating Ranges are where the instrument performs best.
Accuracy	+/- 10%; +/- 5% typical
Spectral Ranges (UV Power Puck <sup>®</sup> II)	4-channel continuous monitoring .Standard version: 320-390nm (UVA <sup>EIT</sup> ), 280-320nm (UVB <sup>EIT</sup> ), 250-260nm (UVC <sup>EIT</sup> ), 395-445nm (UVV <sup>EIT</sup> ) & UVA2 <sup>EIT</sup> Version: 380-410nm (UVA2 <sup>EIT</sup> replaces the UVC <sup>EIT</sup> band).
Spectral Ranges (Uvicure <sup>®</sup> Plus II)	1-channel continuous monitoring. 320-390nm (UVA <sup>EIT</sup> ), 380-410nm (UVA2 <sup>EIT</sup> for LED monitoring and additive bulb monitoring), 280-320nm (UVB <sup>EIT</sup> ), 250-260nm (UVC <sup>EIT</sup> ), 395-445nm (UVV <sup>EIT</sup> )
Spatial Response	Approximately cosine
Operating Temperature	0-75°C Internal temperature; tolerates high external temperatures for short periods (audible alarm indicates when temperature has exceeded tolerance)
Smooth Modes	Smooth ON: Effective Sample rate of 25 samples/second Smooth OFF: Effective Sample rate of 2048 samples/second Smooth PROFILER: Effective Sample rate of 128 samples/second
Sample Rate for Profiling	The Profiler instruments use a fixed sample rate of 128 samples/second for profiling. For best matching between instrument display and PowerView Software II values, use Smooth PROFILER mode
Memory Capacity for Profiling	The memory capacity of the PowerPuck II and UVICURE Plus II Profilers in Profiler Mode is sufficient to collect data for >100 minutes
PowerView Software II	National Instruments LabVIEW based programming designed for Windows XP, Windows NT, Windows Vista an Windows 7. Collected data stored in LabVIEW based *.tdms files
Time-Out Period	2 minutes DISPLAY mode (no key activity). A no time-out mode can be activated by EIT-IM.
Battery	Two user-replaceable AAA Alkaline Cells
Battery Life	Approx. 20 hours with display on
Dimensions	4.60 x 0.50 inches; 117 mm x 12.7 mm (D x H)
Weight	10.1 ounces (289 grams)
Instrument Materials	Aluminum, stainless steel
Carrying Case Material	Cut polyurethane interior, scuff resistant nylon exterior cover
Carrying Case Weight	9 ounces (260 grams)
Carrying Case Dimensions	10.75 x 3.5 x 7.75 inches; 274 x 89 x 197 mm (W x H x D)



This equipment is in conformity with the following standards and therefore bears CE marking: IEC 61326-1:2005, EN55011:1998, EN61000-4-2: 1995, A1: 1998, A2: 2001; EN 61000-4-3: 2002, A1: 2002, following the provisions of the applicable directives: 98/34/ EEC and amendments, 89/336/EEC and amendments. Designed and manufactured in the USA.

### **Further Information**

We have wide experience of measuring UV and the practical aspects of the use of EIT's instruments in different applications.

For more detailed information regarding price, delivery time and further specifications, please contact us.

### Send to Efsen for calibration

Efsen Engineering is the European center for calibration of EIT instruments, and is certified to calibrate according to EIT standards.

More information is available at www.efsen.dk.

18.03.2014