

# SpotCure® UV Intensity Meter

As UV spot curing technology has evolved, it has become increasingly important to establish a method of measuring system performance.

The EIT SpotCure® UV Intensity Meter is an easy, portable, effective method of quantifying UV output.



The EIT SpotCure® UV Intensity Meter is a self-contained, electro-optic instrument designed to measure and display the intensity emitted by a UV curing system. Degradation of UV lamps, light guides, and reflectors can cause decreases in intensity and create curing problems. The EIT SpotCure® UV Intensity Meter is designed to provide the operator with instant feedback as to the performance of the spot curing system.

## Configuration

The EIT SpotCure® UV Intensity Meter is totally portable self-contained, and battery-operated using a special lithium battery stick for extremely long life - in excess of 100,000 readings!

The measurement head which contains the optics, is attached to one end of the cylindrical instrument. Light guide adapters that fit into the measurement head are available to fit most size light guides.

An EIT SpotCure® UV Intensity Meter can be configured to read one of the following UV transmission bandwidths: 250-260nm, 280-320nm, 320-390nm or 395-445nm.

## Features

- Measures UV intensity up to 20W/cm<sup>2</sup> (Standard Range) or 200 W/cm<sup>2</sup> (Extended Range)
- Compact size, portable
- Accepts multiple light guide sizes
- Totally self-contained, battery-powered

## Applications

- Monitor UV spot curing system performance
- Measure individual UV lamp performance
- Measure light guide degradation
- Optimize light guide positioning
- Determine proper UV Intensity required for curing any material
- Meet ISO 9000 requirements

## Operation

The portable, EIT SpotCure® is simple to use. Its compact flashlight-like shape (4.60" long by 1.74" diameter) can comfortably be gripped in one hand.


In operation, the instrument is gripped in one hand while the light guide is inserted with the other hand. Once a spot curing system's light wand is inserted into the measurement head, the "START" switch is depressed and a measurement is taken. When the "START" switch is released, the measurement is frozen and can be viewed on the LDC display. It will be held for approximately 3 minutes until the display times out or until the "START" switch is depressed again. Adapters insert into the measurement head to accommodate the standard light wands on the market. This flexibility allows the instrument to be used in a variety of monitoring applications.

Short, simple operation instructions are printed on the outside of the instrument. The EIT SpotCure® UV Intensity Meter is designed to withstand the rugged UV environment and extremely high intensities that can be associated with UV spot curing. It can monitor UV intensities up to 20W/cm<sup>2</sup> for the standard version and 200W/cm<sup>2</sup> in the Extended Range version.

## Product Specifications (Specifications subject to change without notice)

Intensity Range	Standard Versions (& Full Scale) UVA (20W); UVB (2W), UVC (200mW), UVV (20W) Extended Range Versions (& Full Scale) UVA (200W), UVB (20W), UVV (200W)
Resolution	Standard Version 10mW/cm <sup>2</sup> Extended Range Version 100mW/cm <sup>2</sup>
Accuracy	+/-5% typical, +/-10% maximum
Display	3 ½ digit LCD
Power Source	Lithium battery stick
Battery Life	12,500 hours continuous operation (over 100,000 readings)
Overall Dimensions	6.40"L x 1.74" Diameter (16.26cm x 4.42cm); Measurement head – 2.13" Diameter (5.14cm)
Weight	12.8 oz. (358 grams)
Operating Temperature	0-70°C
Display Time	2.5 to 5 minutes
Spectral Ranges	250-260nm (UVC), 280-320nm (UVB), 320-390nm (UVA), or 395-445nm (UVV)
Case materials	Aluminum, polyester, quartz

**Ordering information** Model SP254 (250-260nm)  
Model SP313 (280-320nm)  
Model SP365 (320-390nm)  
Model SP405 (395-445nm)

 **EIT**® Designed and manufactured in the USA

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.

**EFSEN UV & EB TECHNOLOGY**

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