

EIT[®] UVKEY[™]



INTRODUCTION

The UVKEY[™] is a ultraviolet UVC radiometer optimized for 254 nm UV germicidal measurement in applications requiring high control of UV energy (dose) measurements. Targeted applications include hospitals, medical offices, long term care facilities and research.

UVKEY FEATURES

- Single button operation which makes it easy to use
- Small size makes it easy to attach and minimizes shadowing of an area
- Provides accurate, NIST traceable numerical display of the dose
- Eliminates color interpretation by the user and lot-to-lot variations associated with radiochromic films
- UVKey is an affordable opto-electronic solution that provides excellent matching and repeatability, instrument-to-instrument, source to source and run-to-run
- The UVKey is IP67 sealed to protect it from dust and fluid splashes
- Subscription plans available



UV Key Product Specifications

Feature	Description
Full Scale Operating Range	10 mW/cm ²
Display Resolution / Threshold	1 μ W/cm ² / 15 μ W/cm ² (Approximately)
Displayed Energy Value	Values < 1 Joule (0.001-999.9 mJ/cm ²) displayed in mJ/cm ² Values $\geq$ than 1 Joule (1.000-999.9 J/cm ²) displayed in J/cm ²
Spectral Response	245-265 nm minimum, Spectral out of band blocking of Optical Density (OD) > 4 average
Spatial Response	Approximately Lambertian (Cosine)
Accuracy	Typically, $\pm$ 5% or better; $\pm$ 10% of reading plus $\pm$ 0.2% of full scale
Repeatability	Typically, better than 0.5%; <1% maximum
Calibration	Calibration on low pressure mercury source, NIST Traceable
Sample Rate	1 Hz (One reading/second)
Display-Interface	Single button operation 4 Digit LCD display of energy (mJ or J/cm ²), floating decimal point
Operating Life Time / Shelf Life	6 Months from user initialization / 1 Month
Calibration Period	6 Month (recommended) or 500 Joules/cm ² (maximum)
Temperature Ranges	Operating: +10°C - +50°C / Storage: 30°C - +70°C
Dimensions/ Weight	Unit size 2.0" x 1.5" x 0.5" (50.8 x 38.1 x 12.7 mm) / 0.7 oz. (19.8 grams)
Battery/ Materials/ Electronics	Lithium Manganese Dioxide Non-Rechargeable/ Thermoplastic Polymer
Electronics / Environmental	IP67 sealed case/ RoHS3 compliant

EIT LLC reserves the right to make improvements; specifications are subject to change without notice

Designed and Manufactured in the USA

The UVKey was tested and passed each of the following standards:

- FCC Radiated Emissions Part 15.109 ICES-003: 6.2
- 2014/30/EU: Electromagnetic Compatibility
- IEC 61326-1: 2012



ABOUT EIT LLC

Founded in 1977, EIT provides contract electronic manufacturing & engineering services for medical, industrial, analytical instrument, telecommunications and aerospace customers from multiple facilities in Virginia and New Hampshire. Since 1986, EIT has designed, manufactured and sold over 100,000 UV measurement solutions for industrial curing applications for UV LED and Broadband (mercury) sources.

For more information contact EIT or:

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