

# Integrated UV-C Irradiance Sensors

SMARTSens-D, calibrated for real-time UV-C dose monitoring



#### Real-time UV-C dose monitoring

Labsphere's calibrated UV-C sensors enable real-time UV-C dose monitoring for the validation of UV-C surface disinfection. Easily access dosage information on demand using our SMARTSens-D software platform, or integrate the digital sensors as a component in your UVGI system software using the provided firmware. Each sensor delivers unparalleled application flexibility and measurement accuracy with irradiance responsivity calibration options for the following sources; Ha sources for disinfection at 254 nm and LED sources including 265 nm and 275 nm LEDs.

#### Simplify dose monitoring

SMARTSens-D integrated digital UV-C sensors are available as single sensors that can be used to monitor UV-C irradiance and dose. Multiple sensors can be networked and monitored from a central location. Not sure where to place your sensors or how many sensors you need? Labsphere has you covered with our comprehensive radiometric modeling service.

### **Applications**

- Real-time UV-C dose monitoring in medical disinfection enclosures
- Monitor UV-C dose performance for room disinfection and production systems
- Track disinfectant lamp performance in HVAC systems for UVGI coil maintenance

#### Value

- Real-time dose monitoring for disinfection confidence and exposure safety
- Instantaneous system performance feedback enables immediate troubleshooting and increased performance confidence
- Concurrent dose monitoring allows tracking of area safety levels to optimize efficiencies

## **Ordering Information**

**Model Number** Description **Order Number** 

UVC-HISI-001 High Sensitivity Integrated UV-C Irradiance and Dose Meter,

SmartSens Control Software and Software Development APIs.

Calibration Sold Separately.

## Calibrations - Choose a calibration

Calibration Description **Order Number** UVC-IRR-254HG AA-01603-300 Irradiance response for Low Pressure Hg 254 nm. Calibration and programming of response for Low Pressure Hg 254 nm. UVC-IRR-265LED Irradiance response for 265 nm LED. AA-01603-301 Calibration and programming of response for 265 nm LED. UVC-IRR-275LED Irradiance response for 275 nm LED. AA-01603-302

Calibration and programming of response for 275 nm LED.

## **Typical Performance Specifications**

~20 µW/cm<sup>2</sup> to 20 mW/cm<sup>2</sup> Irradiance Range:

Absolute Resolution: 0.305 µW/cm<sup>2</sup>

Performance: Irradiance Resolution (%)

> 20 mW/cm<sup>2</sup> 0.0015% 2 mW/cm<sup>2</sup> 0.015% 200 μW/cm<sup>2</sup> 0.15% 20 µW/cm<sup>2</sup> 1.5%

 $10^{4}$ Signal to Noise Ratio: f2 Spatial Response: <3%

Communication Protocol: USB 2.0 type C

Hardware Sampling Rate: 10 Hz

User Defined Running Average: Up to 25 Readings

Compliance: CE) Measures Surface Irradiance: Yes Monitor Dose: Yes

## **Physical Specifications**

Package Dimensions: 41 mm (L) x 41 mm (W) x 23 mm (H)

9 mm diameter Input Optics Size: Diffuser Dome Input Optics Type:

Power: USB 2.0 type C, 5V, 100mA



AA-01603-200

## **Integrated UV-C Sensor Package**



