

# 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; Hg 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.	AA-01603-200

## Typical Performance Specifications

Irradiance Range:	~20 $\mu\text{W}/\text{cm}^2$ to 20 $\text{mW}/\text{cm}^2$	
Absolute Resolution:	0.305 $\mu\text{W}/\text{cm}^2$	
Performance:	Irradiance	Resolution (%)
	20 $\text{mW}/\text{cm}^2$	0.0015%
	2 $\text{mW}/\text{cm}^2$	0.015%
	200 $\mu\text{W}/\text{cm}^2$	0.15%
	20 $\mu\text{W}/\text{cm}^2$	1.5%
Signal to Noise Ratio:	$10^4$	
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	
Calibrations Options:	See below	

## Physical Specifications

Package Dimensions:	41 mm (L) x 41 mm (W) x 29 mm (H)
Input Optics Size:	9 mm diameter
Input Optics Type:	Diffuser Dome
Power:	USB 2.0 type C, 5V, 100mA

## Calibration Options

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



# Integrated UV-C Sensor Package

