

Digital UV-C Irradiance Sensors

SMARTSens-D, smart sensors 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 digital UV-C sensors are available with one to four sensors per controller. Choose the number of sensors that best monitors the UV-C dose in your UVGI system design. 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 in disinfection chambers 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:	UVC-HISC-001	UVC-HISC-002	UVC-HISC-003	UVC-HISC-004
Order Number:	AA-01603-101	AA-01603-102	AA-01603-103	AA-01603-104
Digital Radiometer:	SSC-1000	SSC-4000	SSC-4000	SSC-4000
UVC Detector (quantity):	SSD-UVC (1)	SSD-UVC (2)	SSD-UVC (3)	SSD-UVC (4)

All systems include SmartSens Control Software and Software Development APIs

Typical Performance Specifications

Irradiance Range:	~20 $\mu\text{W}/\text{cm}^2$ to 20 mW/cm^2	
Absolute Resolution:	0.305 $\mu\text{W}/\text{cm}^2$	
Performance:	Irradiance	Resolution (%)
	20 mW/cm^2	0.0015%
	2 mW/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	
Measures Surface Irradiance:	Yes	
Monitor Dose:	Yes	
Calibrations Options:	See below	

Physical Specifications

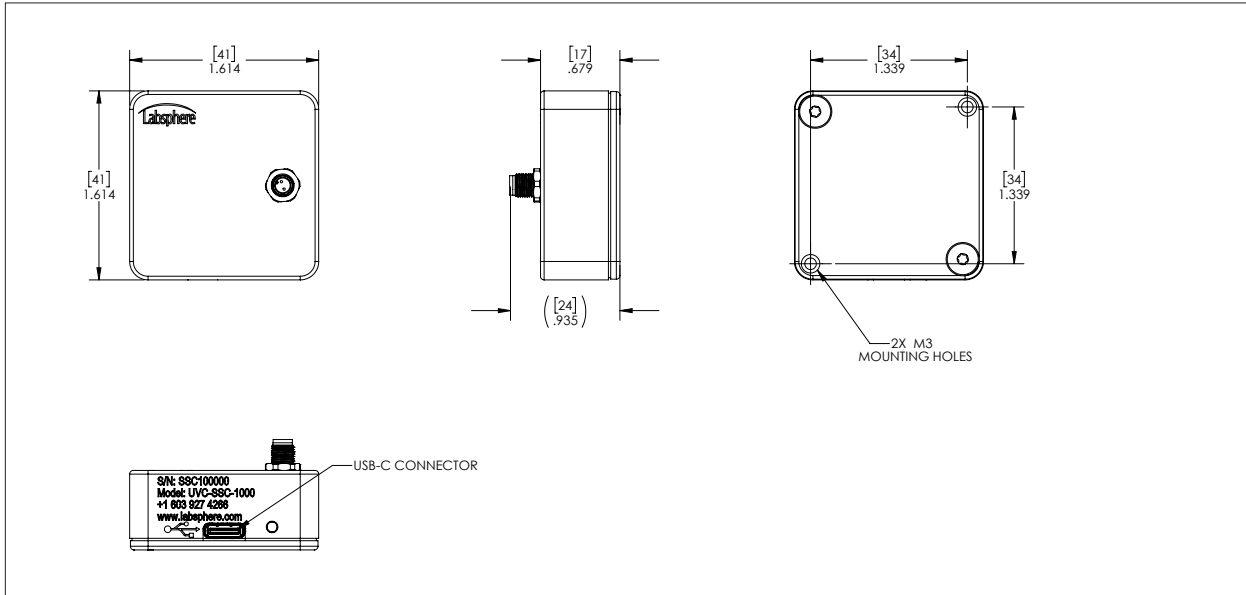
Radiometer Dimensions:	
SSC-1000:	41 mm (L) x 41 mm (W) x 17 mm (H)
SSC-4000:	42 mm (L) x 42 mm (W) x 29.4 mm (H)
Detector Dimensions:	28 mm (L) x 28 mm (W) x 13 mm (H)
Input Optics Size:	9 mm diameter
Input Optics Type:	Diffuser Dome
Cable Length:	2 m
Power:	USB 2.0 type C, 5V, 100mA

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

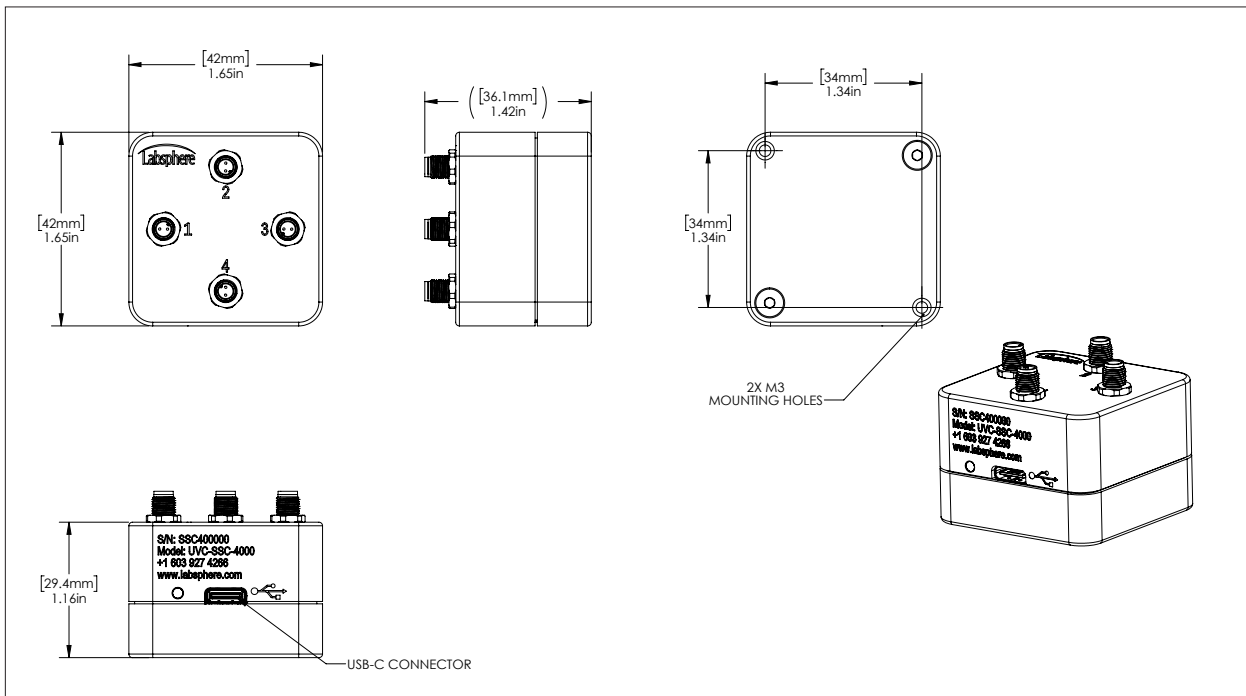


SSC-1000 Digital Radiometer



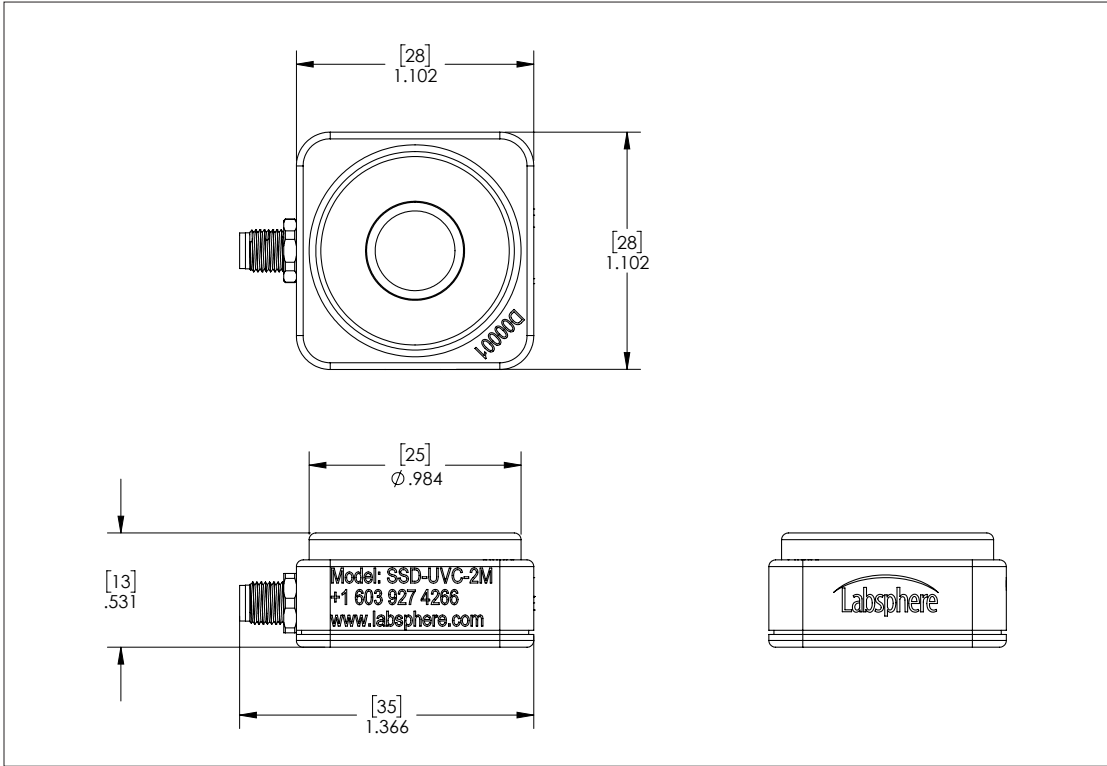
Dimensions accurate as of 9/2021. Subject to change.

SSC-4000 Digital Radiometer



Dimensions accurate as of 9/2021. Subject to change.

SSD-UVC Detector Head



Dimensions accurate as of 9/2021. Subject to change.