SMARTSens
Digital UVC Irradiance Sensors

Enable real-time UVC dose monitoring for validation of UVC surface disinfection

Real-time UVC dose monitoring
Labsphere's calibrated UVC sensors enable real-time UVC dose monitoring for the validation of UVC surface disinfection. Easily access dose information on demand using our SMARTSens software platform and single or four channel sensor controllers as components in your UVGI system. 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 digital UVC sensors function either as a single unit using the single channel controller or with up to four sensors using the four channel controller. Choose the number of sensors that best monitors the UVC 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.

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

Applications:

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

 PB-14111-000 Rev 07

Ordering Information

Model Number	Description	Order Number
UVC-HISC-001	High Irradiance Sensor Controller: SSC-1000 Single Channel Controller, Software and APIs	AA-01603-101
UVC-HISC-002	High Irradiance Sensor Controller: SSC-4000 Four Channel Controller, Software and APIs	AA-01603-102
SSD-UVC-2M	SMARTSens Detector: UVC Irradiance Sensor with 2m cable. Calibration sold separately.	AA-01603-010

Calibrations - Choose Calibration Wavelengths

Calibration	Description	Order Number
254-HG-IRR	Irradiance response for Low Pressure Hg 254 nm. Calibration and programming of response for Low Pressure Hg 254 nm.	254-HG-IRR
265-LED-IRR	Irradiance response for 265 nm LED sources. Calibration and programming of response for 265 nm LED.	265-LED-IRR
275-LED-IRR	Irradiance response for 275 nm LED sources. Calibration and programming of response for 275 nm LED.	275-LED-IRR

Performance Specifications

Irradiance Range:	20 µW/cm^2 to 20 mW/cm^2	
Absolute Resolution:	0.3 µW/cm^2	
Performance:	Irradiance	Resolution (%)
	20 mW/cm^2	0.0015%
	2 mW/cm^2	0.015%
	200 µW/cm^2	0.15%
	20 µW/cm^2	1.5%
Signal to Noise Ratio:	10^4	
f2 Directional Response:	<1.5%	
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	

Physical Specifications

Channel Controllers

Dimensions:

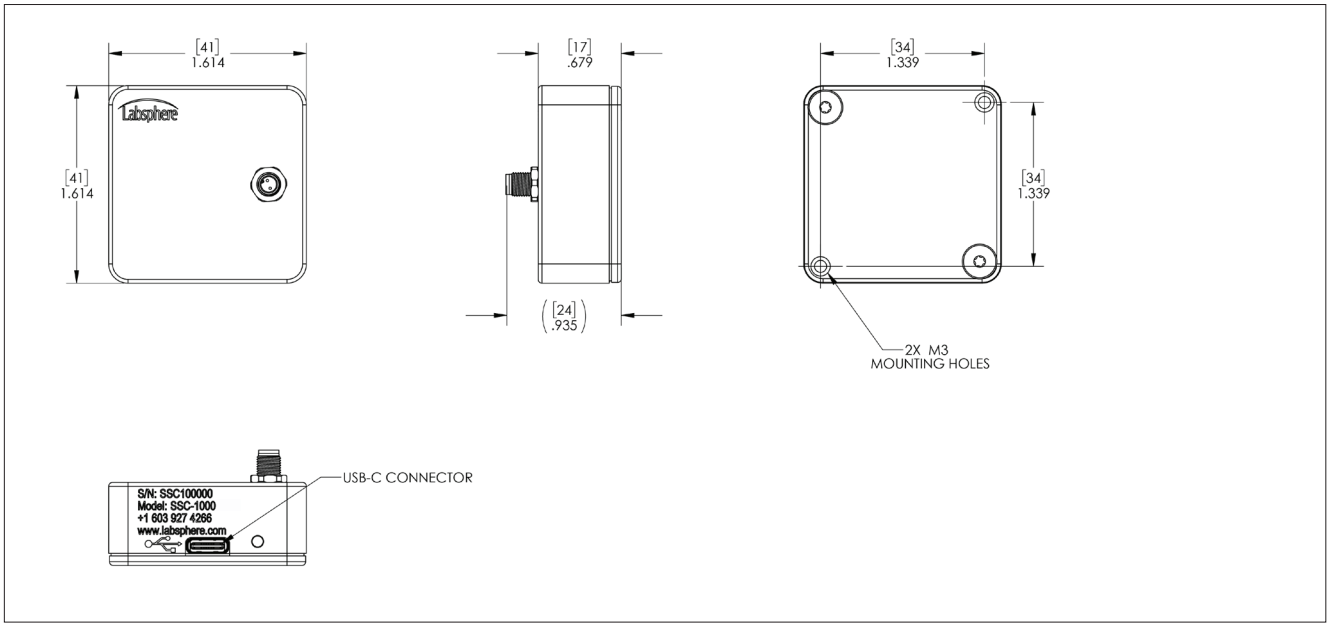
SSC-1000:	41 mm (L) x 41 mm (W) x 24 mm (H)
SSC-4000:	42 mm (L) x 42 mm (W) x 36 mm (H)
Power:	USB 2.0 type C, 5V, 100mA

Irradiance Sensors

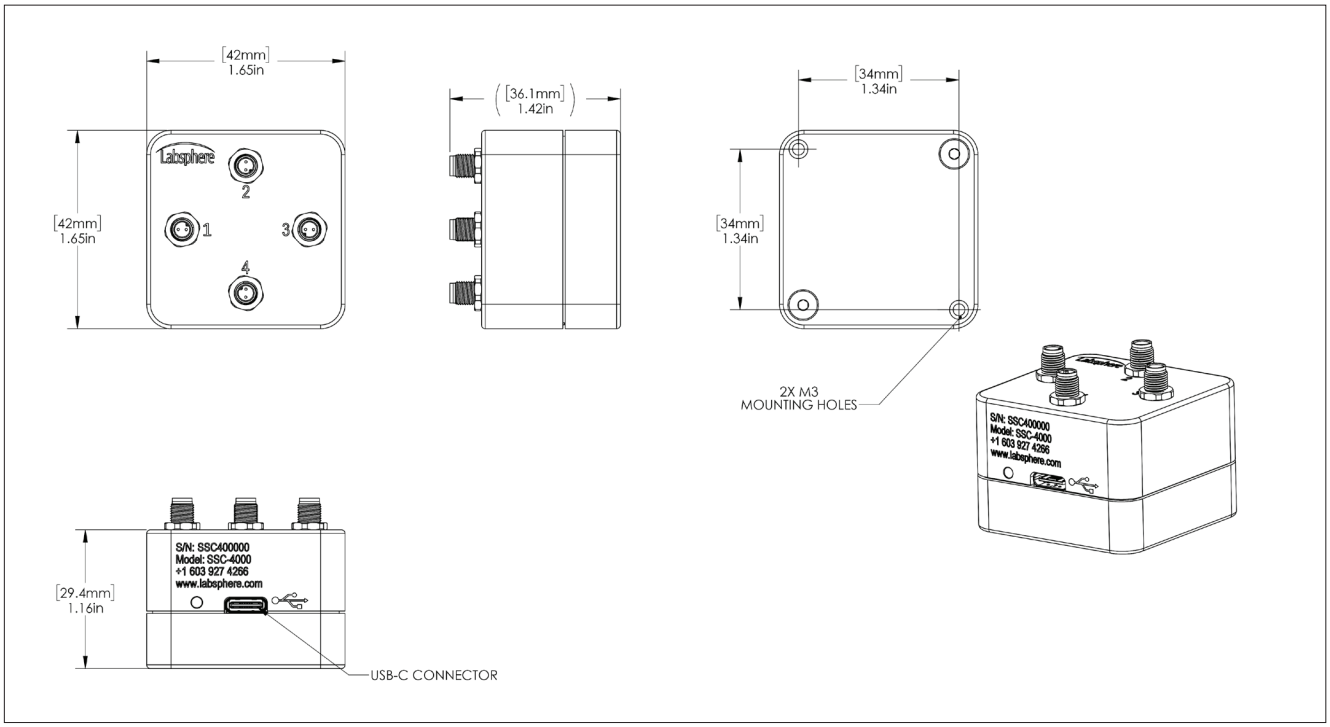
Dimensions:

SSD-UVC-2M:	28 mm (L) x 28 mm (W) x 13 mm (H)
Cable Length:	2 m
Input Optics Size:	9 mm diameter
Input Optics Type:	Diffuser Dome

SSC-1000 Digital Controller



SSC-4000 Digital Controller



SSD-UVC Detector Head