SMARTSens Digital UVC Irradiance Sensors

SMARTSens-D, smart sensors calibrated for real-time UVC dose monitoring

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 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 UVC sensors are available with one to four sensors per 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

Ordering Information

Model Number	Description	Order Number
UVC-HESC-001	SSC-1000 Single Channel Controller, Software and APIs	AA-01603-101
UVC-HESC-002	SSC-4000 Four Channel Controller, Software and APIs	AA-01603-102
SSD-UVC-2M	SSD-UVC Irradiance Sensor with 2m cable. Calibrations sold separately.	AA-01603-010
SSD-UVCF-2M	SSD-UVCF Irradiance Sensor with 2 m cable. Calibrations sold separately.	AA-01603-600

Calibrations - Choose Calibrations

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. Calibration and programming of response for 265 nm LED.	265-LED-IRR
275-LED-IRR	Irradiance response for 275 nm LED. Calibration and programming of response for 275 nm LED.	275-LED-IRR
222-EXM-IRR	Irradiance response for 222 nm Excimer Calibration and programming of response for 222 nm Excimer source.	222-EXM-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:

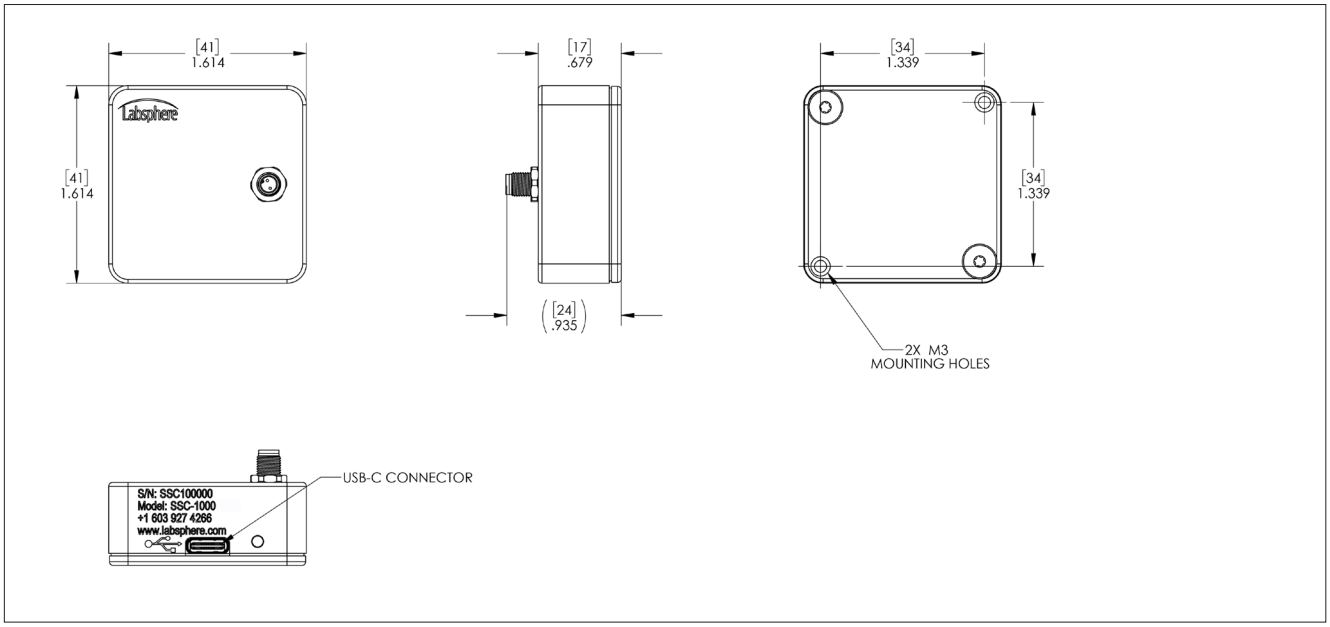
SSC-1000:	41 mm (L) x 41 mm (W) x 24 mm (H)
SSC-4000:	42 mm (L) x 42 mm (W) x 36 mm (H)
Power:	USB 2.0 type C, 5V, 100mA

Irradiance Sensors

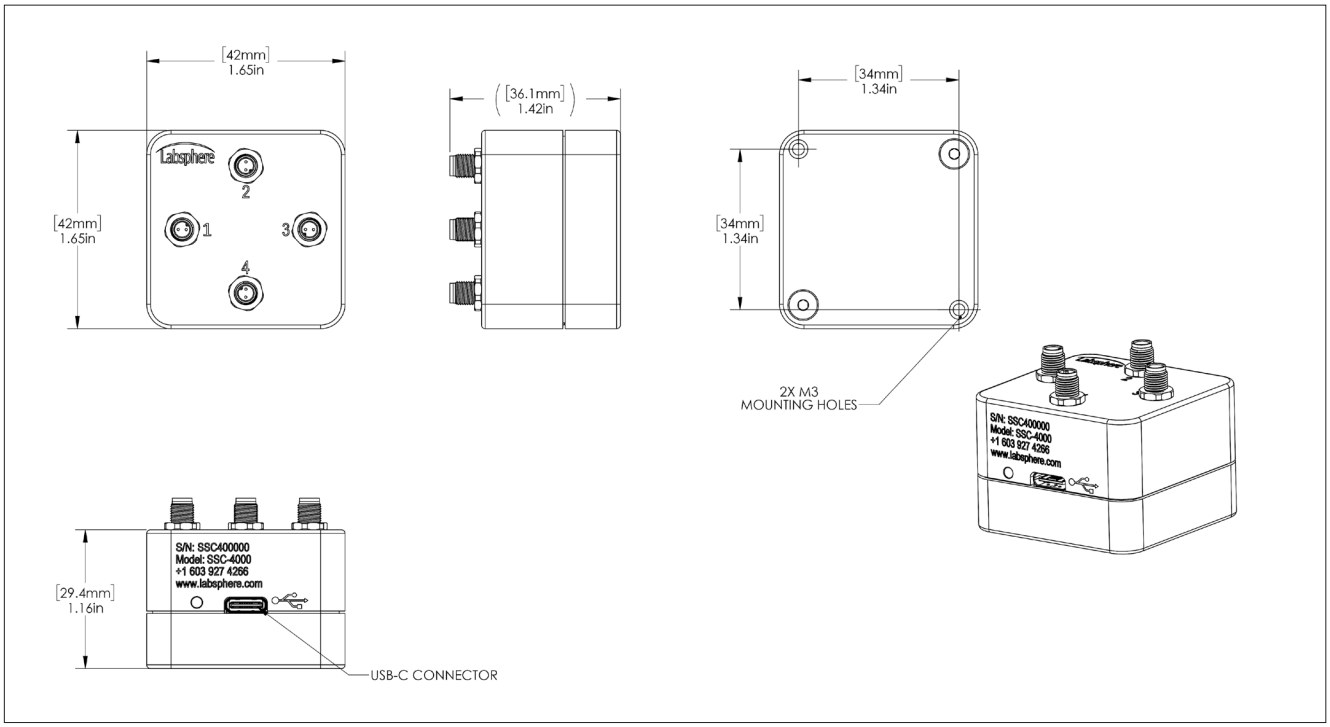
Dimensions:

SSC-UVC(F):	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

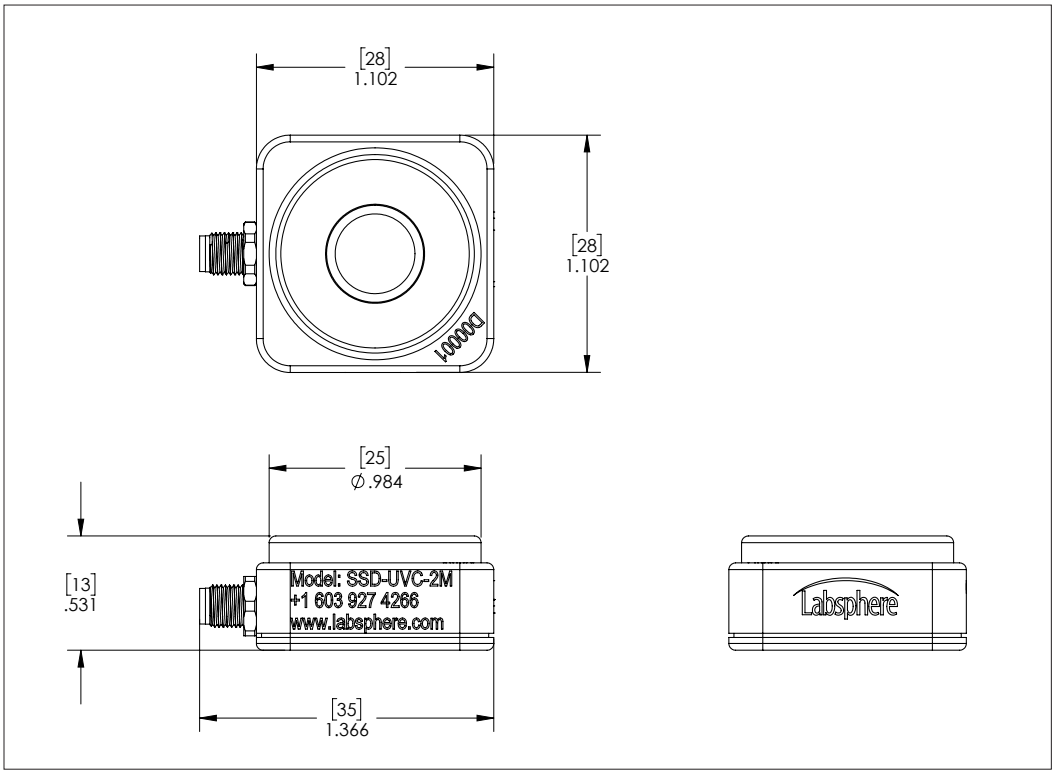
SSC-1000 Digital Controller



SSC-4000 Digital Controller



SSD-UVC Detector Head



SMARTSens Integrated UVC Irradiance Sensors

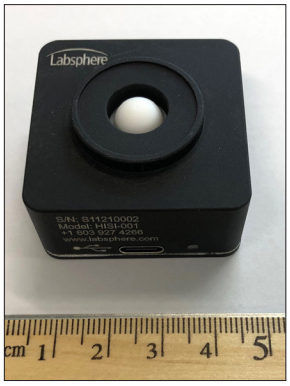
SMARTSens-D, calibrated for real-time UVC dose monitoring

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 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 UVC sensors are available as single sensors that can be used to monitor UVC 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.



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- 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 performance for room disinfection and production systems
- Track disinfectant lamp performance in HVAC systems for UVGI coil maintenance

Ordering Information

Model Number	Description	Order Number
UVC-HISC-001	High Sensitivity Integrated UVC Irradiance and Dose Meter, Software and APIs. Calibration Sold Separately.	AA-01603-200
UVC-HISC-002	High Sensitivity Integrated FAR UVC Irradiance and Dose Meter, Software and APIs. Calibration Sold Separately.	AA-01603-700

Calibrations - Choose a Calibration

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. Calibration and programming of response for 265 nm LED.	265-LED-IRR
275-LED-IRR	Irradiance response for 275 nm LED. Calibration and programming of response for 265 nm LED.	275-LED-IRR
222-EXM-IRR	Irradiance response for 222 nm Excimer Calibration and programming of response for 222 nm Excimer source.	222-EXM-IRR

Performance Specifications

Irradiance Range:	20 µW/cm^2 to 20 mW/cm^2	
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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	
Compliance:	CE	
Measures Surface Irradiance:	Yes	
Monitor Dose:	Yes	

Physical Specifications

Package Dimensions:	41 mm (L) x 41 mm (W) x 23 mm (H)
Input Optics Size:	9 mm diameter
Input Optics Type:	Diffuser Dome
Power:	USB 2.0 type C, 5V, 100mA

Integrated UVC Sensor Package