



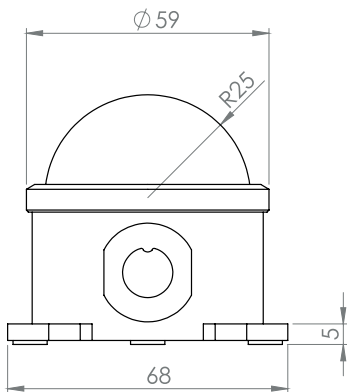
# All-out Irradiation Sensor

Versions	CaptPro	CaptPro+	CaptPro++
Global Normal Irradiance (GNI)	✓	✓	✓
Direct Normal Irradiance (DNI)	✓	✓	✓
Diffuse Horizontal Irradiance (DHI)	✓	✓	✓
Internal Temperature and Humidity	✓	✓	✓
GPS coordinates		✓	✓
Global Horizontal Irradiance (GHI)		✓	✓
Direct Beam Horizontal Irradiance (BHI)		✓	✓
Optimal Panel Inclination (OPI)		✓	✓
Maximum Irradiation Angle (MIA)		✓	✓
Global Tilted Irradiance (GTI) @ OPI and @ MIA		✓	✓
Global Tilted Irradiance (GTI) spectral-weighted on the PV modules technology @ OPI and @ MIA		✓	✓
User Global Tilted Irradiance (UGTI)* spectral-weighted on the PV modules technology		✓	✓
Ground Reflected Irradiance (GRI)			✓
Albedo			✓
All solar irradiation components divided in four different spectral bands (IR, Red Green, Blue)			✓

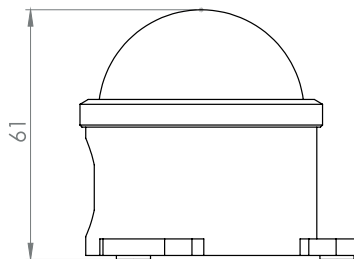
\*UGTI = GTI calculated with angle inserted by the User

## Dimensions

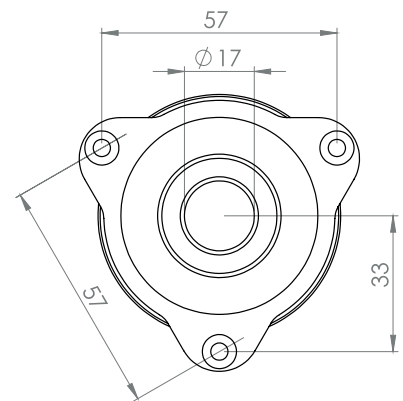
Back view



Side view



Bottom view  
Only CaptPro++



# All-out Irradiation Sensor

## Specifications

Digital Output	RS485 Modbus, Serial Output, USB
Response Time	<1 s
Sensitivity	1 W
Accuracy	3% (value <b>not</b> affected by tracking errors typical of pyrheliometers' measurements)
Dynamic Range	0-2000 W
IR Spectral Range	780-910 nm
RED Spectral Range	570-640 nm
GREEN Spectral Range	495-580 nm
BLUE Spectral Range	391-495 nm
Mounting Zenithal Tilt Tolerance	± 5 degree
Mounting Azimuthal Tilt Tolerance	± 180 degree
Field of View	2 $\pi$ Rad + $\pi$ Rad (Ground Reflected Irradiance)
Max Data Rate (complete dataset)	1 Hz
Operating Temperature Range	-30°C ÷ 85°C
Humidity Range	0-100%
International Protection	67
Measure Stability	>99% per year
Power Supply	5-14 V <sub>DC</sub> or 8-30 V <sub>DC</sub>
Max Power Consumption	0.1 W
Weight (without cable)	150 g
10 m Long Cable Weight	400 g

## Ordering info

Link [www.sunto.technology/sensing/CaptPro#order](http://www.sunto.technology/sensing/CaptPro#order)

Email [sales@sunto.technology](mailto:sales@sunto.technology)