

# Product Sheet: Rooftop Sky Sensor

The Rooftop Sky Sensor provides ambient light and irradiance feedback to SageGlass Maestro®. The Rooftop Sky Sensor is composed of several sensors to provide 360-degree coverage assessing cloud cover, light and energy in order to optimize the automated tinting behavior of SageGlass Dynamic Glass.



## Product Dimensions

Part Number	Dimensions		
	Width	Length	Height
300-1181-001	8.9 cm	8.1 cm	8.9 cm

Interface	Description	Specifications
PoE Ethernet	Communication and Power	10/100M

Peak Power	Input		PoE Standard
	Voltage	Current	
1.1 W	44 - 57 V DC	25 mA	IEEE 802.3af Type 1

## Data Range

- Illuminance: 1K Lux to 100K Lux
- Irradiance: 8 W/m<sup>2</sup> to 800 W/m<sup>2</sup>

## Product Ratings



## Package Includes

1. Rooftop Sky Sensor
2. Rooftop Sky Sensor Mounting Bracket with inner diameter of 21 mm
3. 2 mm Allen wrench

## Tools and Materials required

1.3 cm Intermediate Metal Conduit (IMC) for roof mast with outside diameter of 21 mm.

## System Requirements

The Rooftop Sky Sensor communicates to the Symphony control system via Ethernet and receives power via Power over Ethernet (PoE).

1. For commercial applications use Ethernet cables, category CAT5e or above.
2. For residential applications use shielded Ethernet cables, category CAT5e or above.

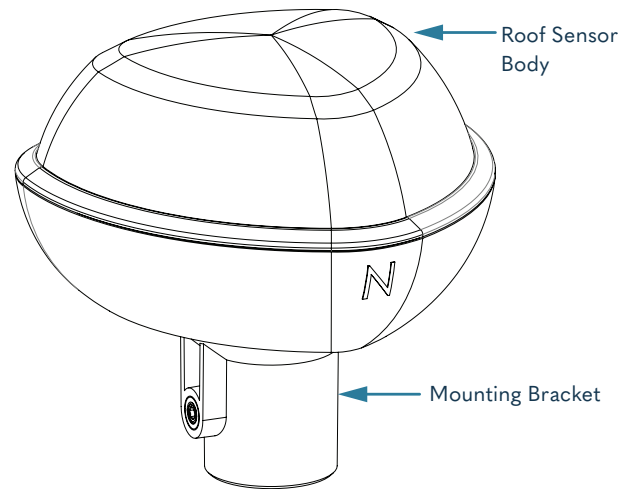


Figure 1: Product View

# Installation

## Step 1: Installing the Mast

1. When selecting a location to install the mast, ensure the Rooftop Sky Sensor will not be obstructed to the sky or the horizon. Ensure it is mounted high enough that snow accumulation or falling debris such as leaves will not cover the Rooftop Sky Sensor once mounted on top of the mast with outside diameter of 21 mm.
2. Using 12.7 mm Intermediate Metal Conduit (IMC), cut mast to the appropriate length and mount to the top of the roof using standard industry procedures. Ensure the installation complies with local building ordinances.
3. Ground the pipe for holding the Rooftop Sky Sensor to the building.
4. Deburr the top of the mast so that a cable can be routed through the mast and not cause damage to the Ethernet cable.

## Step 2: Run Cables

1. Feed the Ethernet cable down the mast into the building space. Leave about 5 cm from mast top to cable end for easy connection.



### Step 3: Connect Data and Power Cables

1. Using the 2 mm Allen wrench provided, remove three screws (1) and remove Rooftop Sky Sensor Mounting Bracket to gain access to the Ethernet cable connector on the bottom of the Rooftop Sky Sensor.
2. Run Ethernet cable through the center opening of the Rooftop Sky Sensor Mounting Bracket.
3. Connect Ethernet cable to Rooftop Sky Sensor.
4. Close up the Rooftop Sky Sensor with Rooftop Sky Sensor Mounting Bracket and secure with three screws (1).

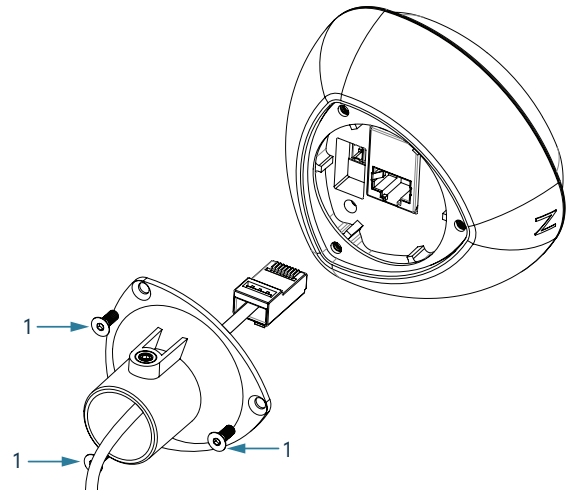


Figure 2: Cable Connection - Inside diameter of the Rooftop Sky Sensor Mounting Bracket = 21 mm

### Step 4: Mount the Rooftop Sky Sensor

1. Using the 2 mm Allen wrench, loosen the set screw (2) on the Rooftop Sky Sensor Base, so it can be installed on the mast.
2. Install Rooftop Sky Sensor on the mast and orient so sign "N" (3) faces North.
3. Tighten set screw (2) to secure Rooftop Sky Sensor.

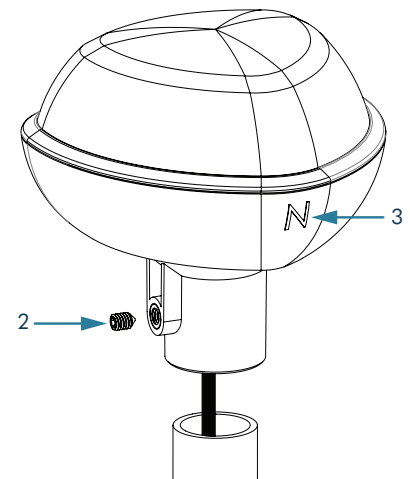


Figure 3: Rooftop Sky Sensor Mounting