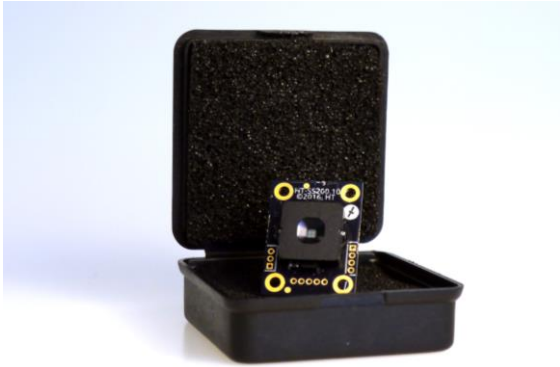




# HYPERION TECHNOLOGIES

## SS200 Sun Sensor



### DESCRIPTION

The SS200 is a small-size, light-weight and low-power sun sensor for use in CubeSats.

One of SS200's features is that the sampling rate can be adjusted by the customer to suit their needs. The benefits are two-fold: higher sampling rates can be achieved when necessary at a temporary increase in power consumption, while when low sampling rates suffice, power consumption can be optimized.

The sun sensors are easily mounted with two counter-sunk screws and two flat screws to minimize offsets. The flat cable connectors help to avoid harnessing issues. Custom connectors are available on request.

The SS200 can be seamlessly integrated with Hyperion Technologies' line of integrated attitude determination and control systems to provide a fully integrated ADCS solution.

### HIGHLIGHTS

- Mass: 2 g
- Power consumption (active) 2.5-40 mW
- Sampling rate up to: 100 Hz
- Accuracy (+/- 45°) <1°
- I<sup>2</sup>C-compatible interface

### PERFORMANCE

The SS200 has a field of view of up to 110 degrees to allow for a smooth transition between the measurement ranges of two sun sensors on adjacent faces.

The SS200 delivers below 1 degree accuracy in the +/-45 degree range, and is calibrated on delivery.

Every sun sensor will be delivered with documentation describing its individual performance characteristics.



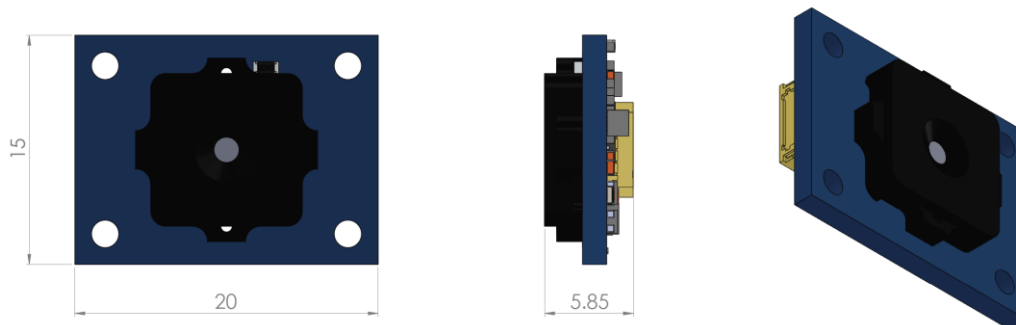
## SPECIFICATIONS

Performance		
Field of view	110	°
Accuracy (+/- 45° range)	<1	°
Sampling rate	up to 100	Hz
Environmental		
Operating temperature (electronics) <sup>1</sup>	-45 to +85	°C
Operating temperature (sensor)	-55 to +125	°C
Electrical specifications		
Supply voltage	5	V
Power consumption <sup>2</sup> (sampling)	2.5-40	mW
Power required (idle)	< 1.5	mW
Mechanical		
Outer dimensions	20 x 15 x 6	mm
Mass	2	G

<sup>1</sup> Temperature range of control electronics. Functionality of mechanical components and sensor extends beyond this range.

<sup>2</sup> Power consumption dependent on set sampling rate.

## MECHANICAL CHARACTERISTICS



SS200.10 outer dimensions [mm]

For pricing, delivery, configuration and ordering information please contact Hyperion Technologies B.V. at [info@hyperiontechnologies.nl](mailto:info@hyperiontechnologies.nl), or visit Hyperion Technologies' website at [www.hyperiontechnologies.nl](http://www.hyperiontechnologies.nl).