



Earth Sensor for Satellite



Outline

The Earth Sensor is an equipment for attitude determination of Micro-Satellites.

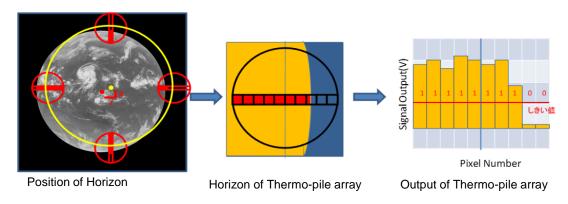
4 pieces of multi-pixel array of thermopile sensors detect Earth edge to calculate the roll angle and the pitch angle. Its compact design is suitable for Micro-Satellites.

Heritage:

ALOS-II piggy-back of SOCRATES

Features

- Compact (40 x 40 x 55mm)
- Light weight (< 250g)
- Low cost
- · Can be used for both of sunlight and eclipse
- · No cooling system required
- · Suitable for Earth oriented micro-satellites



Theory of measurement

[•]This product was developed with the support of JAXA (Japan Aerospace Exploration Agency)

[•]Specifications and designs are based on the standard model. Please contact us regarding further customization to suit your project's needs.





Specifications

Dimension	40mm × 40mm × 55mm
Mass	< 250g
Detector	COTS based Thermopile Sensor
FOV	33deg × 4 arrays
Accuracy	1°
Power voltage	+5V
Power Consumption	< 1W
Telemetry / Command Interface	12C
Environment	Temperature: -25 to +60 degC Sine: 22 G (5 – 100 Hz) Random: 23 Grms (20 – 2000 Hz) Radiation: < 10 krad

^{*} Above-mentioned specifications is an example. At your request it will be customized.

Appearance



Connector for Power ,Telemetry and Command (MDM-9)



Caution

- Specifications and designs are subject to change without notice. Specifications and designs are based on the standard model. Please contact us regarding further customization to suit your project's needs.
- This products may be subject to the application of the Foreign Exchange and Foreign Trade Act and other related laws and regulations in Japan. Customer agrees to comply with such regulations and acknowledges that it is their responsibility to obtain any required licenses to export, re-export, or import this products.
- •We shall not be liable for any damages arising out of or in connection with the use of specifications herein, including liability for lost profit, business interruption, or any other damages whatsoever.
- ●The printed colors may appear difficult from the actual product.

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