Digital Sun Sensor

The SITAEL Sun Sensor is a low cost attitude determination device suitable both for LEO and GEO orbits.

Each Sun Sensor group is capable to estimate the Satellite-to-Sun vector with 1° (up to 0.1° when sunlight is perpendicular to sensor's surface) of accuracy.

The Sun Sensor is a 4-Quadrant Sensor (4-Q) based system, with a wide angle pinhole frontend able to guarantee increased precision, light power, and field of view. On-board a microcontroller acquires the 4-Qs data and applies the correction algorithms in real time.

Different optical-head configurations are available on request

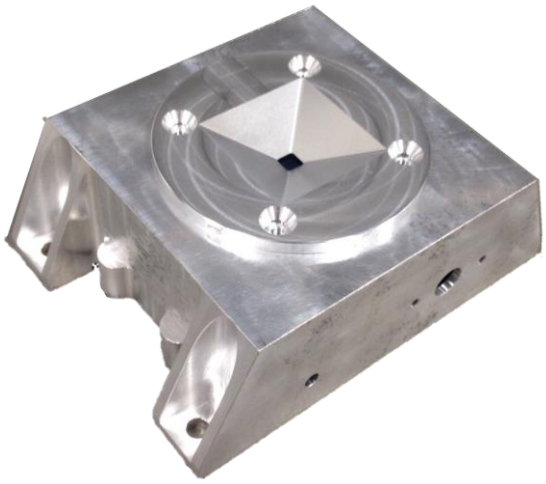
Bi-Axial Sun Sensor

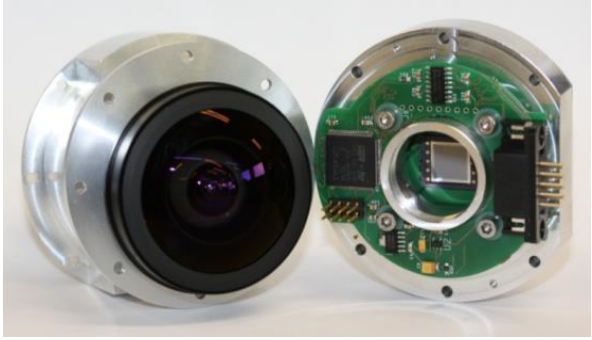
Features

- Different optical-head configurations
- On board ADC and data processing
- Selectable refresh rate (up to 10 Hz)
- High Efficiency and Compactness

Technical Information

SPECIFICATIONS	
Accuracy	< 0.5°
Field of view (FoV):	Max 140° (pinhole configuration)
Intefaces	CAN-Bus, RS422 or SPI digital I/F redundant configuration available
Bus Input Voltage	+12.0 V to 50.0 V
Operating Temperature	-25 °C to 70 °C
Power Consumption	< 50 mW typ.
Size	92 x 68 x 33 mm^3
Mass	240 g





SITAEL S.P.A | Via San Sabino, 21 - 70042 Mola di Bari (BA) Italy | info@sitael.com | www.sitael.com

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