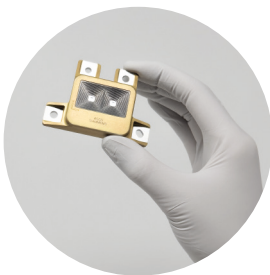
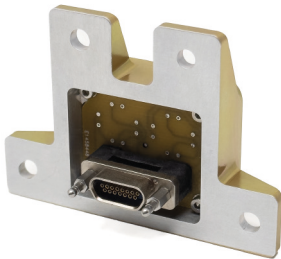


ITAR FREE
Space Qualified



Description

Advanced Coarse Sun Sensor (ACSS) is a device for sun-tracking and **attitude determination**. This sensor measures the incident angle of sun ray in two orthogonal axes, providing a high sensitivity based on the geometrical dimensions of the design.

ACSS sun sensor offers the highest **reliability and radiation hardness** for the most demanding LEO, MEO and GEO missions. ACSS technology has **flight heritage** since 2019 with hundreds of flight units delivered, and its manufacturing process has been developed and industrialized for **mass production**.

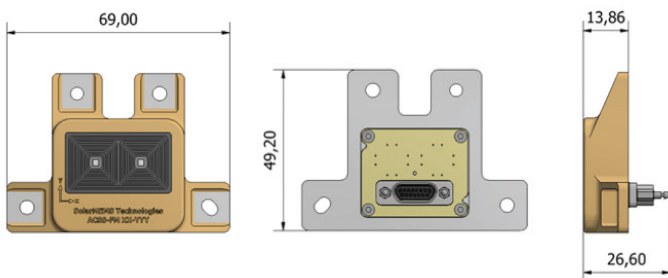
Qualification Data and Flight Heritage

Operating Temperature	-55 to 105° Celsius
Radiation test	200 kRad (gamma) 8e11 10 MeV (protons)
Mechanical test	Shock 2000 g 18.3 g @ 20-2000 H
Endurance test	600 cycles from -55 to 105°C 2000h at 125°C
EMC/ESD	ECSS-E-ST-20-07C MIL-STD-461F

ACSS internal sensor with more than 2500 units in orbit since 2019.

Mechanical Interface

Technical Characteristics



measuring scale: mm

Sun sensor	Double redundancy
Type	2 orthogonal axes
Field of View	±60°
Accuracy	<3° (3sigma, no calibrated)
Electrical interface	Analog, 15-pin micro connector
Power supply	15-30V, 3 mA
Operating Temperature	-45° to 85° Celsius
Mechanical interface	65 x 47 x 13 mm
Mass	40 g
Housing	Aluminum 6082 Alodine + Black anodizing