

FINE SUN SENSORS ASSEMBLY - FSSA-110

The Fine Sun Sensor Assembly (FSSA-110) of Berlin Space Technologies hosts up to three analogue fine sun sensors. The FSSA can be placed in remote locations of the satellite and reports the sun vector back to the OBC. The FOV of one sensor reaches up to 114°. In order to sense the sun from all directions, 2 units are required.

The FSSA-110 is the second generation of our flight proven FSSA-100 with only minor modifications on it.



Figure 1 - FSSA-110 with one sun sensor

CHARACTERISTICS	
Operation voltage	5 V ± 0.5V
Power consumption	185mW
Accuracy	5°
Update rate	10 Hz
Coverage	Hemispherical
Main Interface	RS422
Sun sensor interface	5x analogue channels/sensor
Mass	With 3x sensors: 102 g ± 5g Without sensors: 87g ± 5g
Dimension	95 x 44 x 20 mm
Operational temperature range	-15°C to 40°C
Radiation tolerance	>20 kRad

Table 1 – Key specifications

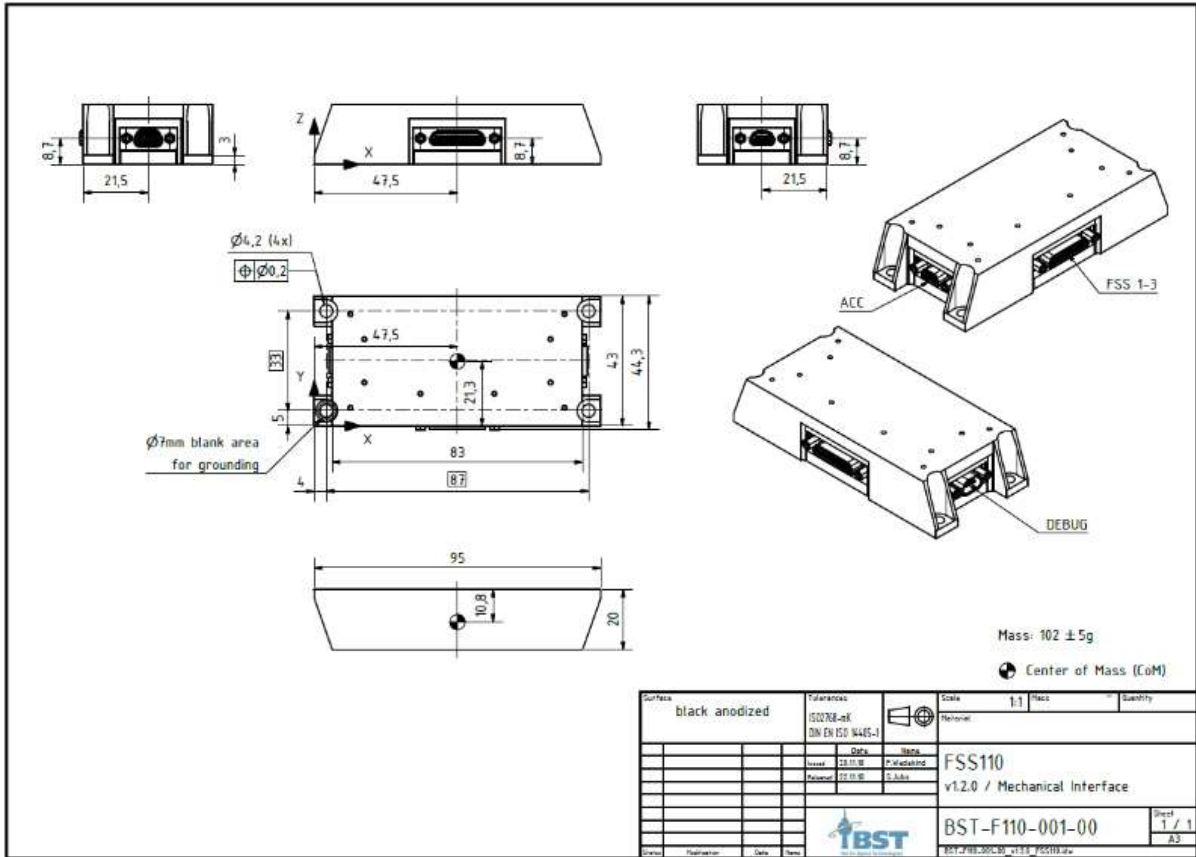


Figure 2 - Mechanical interface