



MAI-SS Space Sextant

Low Cost Miniature Star Tracker
Stock #: MAI-000-00000010

The MAI-SS Star Tracker is low in cost and intended for CubeSat and NanoSat missions. The unit is completely self-contained and features Lost In Space star identification. Just apply power and begin receiving quaternions accurate to about 4 arcsec at 4 Hz rate. Currently available in either vertical or horizontal mounting and with or without baffle.

Specifications

Performance Item	Specification
Accuracy (Cross Axis / Boresight)	5.7 arcsec / 27 arcsec
Acquisition Time	130 ms Acq, 105 ms Track (typical)
Max Tracking Rate	>2.0°/sec
Update Rate	4 Hz
Star Catalog	Hipparcos
Lens	0.9in f1.2 BK7 Glass
Sun Exclusion w/wo Baffle	45° / 90°
Operating Temperature	-40 to 80 °C
Weight	170g (282 g w/ housing)
Dimensions wo / w case (mm)	50 x 50 x 47 / 55 x 65 x 70
Baffle Dimensions, Wt.	100 x 90 x 195, 135 gm
DC Voltage	5.0 V
Radiation TID (outside of case)	75 krad
Average power consumption	2.0W LIS, 1.5 W Track
Serial Interface	UART TTL / I2C



MAI Space Sextant Star Tracker without packaging.

U.S. Government customers may purchase this product on a non-competitive basis as follows: "In accordance the SBA Policy Directive Sec 4 (c) (2), any procurement by US Government Entities is an SBIR Phase III award that is derived from, extends, or completes efforts made under prior SBIR funding agreements and is authorized under 10 U.S.C. 2304(b)(2) or 41 U.S.C. 3303(b) with no further competition pursuant to FAR 6.302-5".

