

Star Tacker

Datasheet



FEATURES

- Internal accelerometer
- Compact size
- Ability to take images on-the-fly

We offer compact size, fully autonomous Star Tracker, ideal for CubeSat and NanoSat missions. It is designed with minimized dimensions, weight, and power consumption while maintaining high accuracy. We have flight heritage for Star Tracker since 2019.

SPECIFICATIONS	
Dimensions	56 x 60 x 93 mm
Mass	197 g (include baffle)
Accuracy	
Pointing	< 5 arcsec @ 3σ
Rolling	< 60 arcsec @ 3σ
Thermo-elastic error	< 0.1 arcsec/°C
FOV spatial error	< 0.78 arcsec @ 3σ
Pixel spatial error	< 2.5 arcsec @ 3σ
Temporal NEA	< 0.8 arcsec/Hz ^{1/2} @ 3σ
The angular width of the FOV	22° (± 11 arc degree)
Acquisition time	< 2 seconds,
	at 5°/sec up to 10 min
Maximum angular velocity	5°/s
Maximum polling frequency	10 Hz
Sun exclusive angle	30° / 20°
Power supply	5.0 ± 0.25 V
Power consumption	
Main mode	< 0.5 W
Calibration mode	< 1.35 W
Colling system	< 1.2 W
Interface RS485	625000 bit/s
CAN	1000000 bit/s
Operating temperature	-30 ~ +40°C
Storage temperature	-30 ~ +100°C

* Unique internal cooling system for sensor to improve accuracy

KAIROSPACE CO., LTD.

13229, RM 513, SICOX TOWER, 484, Dunchon-daero, Jungwong-gu, Seongnam-si, Gyeonggi-do, Republic of Korea TEL: +82 31 756 9998 | EMAIL: info@kairo.space | www.kairo.space

