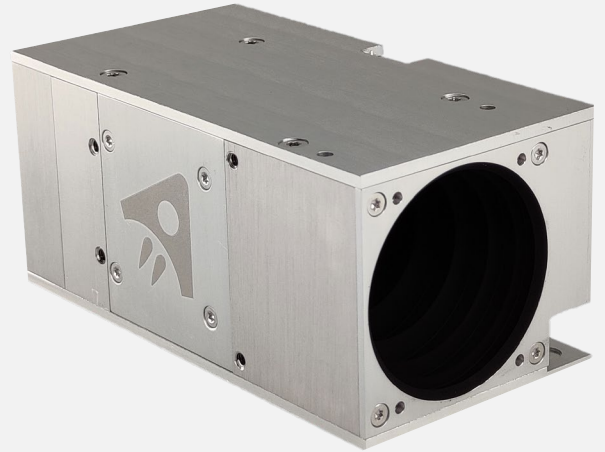


SAGITTA STAR TRACKER

The Sagitta star tracker offers arc second range pointing accuracy to your CubeSat. The custom algorithms are optimized for accuracy, robustness and low computational cost. The star tracker has a built-in baffle to reduce the effect of stray light. The system is compact and easy to interface in CubeSats and large satellites.



Star Tracker Features

Performance

- Cross-boresight accuracy: 2" (1σ)
- Around boresight accuracy: 10" (1σ)
- Tracks stars up to magnitude 7
- Tracks up to 64 stars
- Update rate of 10 Hz
- Field of view: 24,8°
- Autonomous calibration

Features

- Star tracking and attitude determination
- Full image download capability
- Image histograms
- Fast lost-in-space algorithm

Power consumption

- Nominal: ≈ 1400 mW

Interface

- RS485
- +5 V
- Mass: 270 g
- Alignment cube for integration

- ✓ High Accuracy
- ✓ High Robustness
- ✓ Easy Interfacing

Robustness

- Lost-in-space availability: >99% of the night sky
- Discards vast majority of false star instances
- Autonomous detection and correction for outlier stars
- Baffle sun rejection angle: 40°
- Radiation shielded lens
- Electronics are radiation tested

