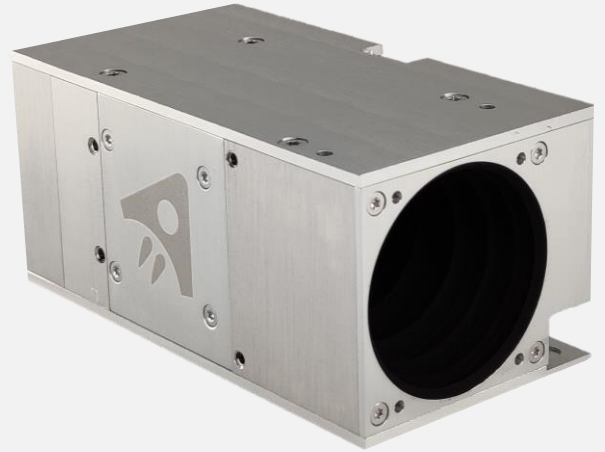# arcsec

# 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

✓ High Accuracy
✓ High Robustness
✓ Easy Interfacing

### 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: 25.4°
- Autonomous calibration

### Features

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

### Power consumption

- Nominal: ≈1500 mW

### Interface

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

### 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

44mm
50mm
95mm

arcsec