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: 2" (1σ)
• Around boresight: 10" (1σ)
• Tracks stars up to magnitude 6
• Tracks up to 32 stars
• Update rate of 10 Hz
• On-board calibration algorithm

Robustness
• Lost-in-space availability: >99% of the night sky
• Discards vast majority of false star instances
• Autonomously detects and corrects for outlier stars
• Baffle sun rejection angle: 40 deg
• Lens is radiation shielded
• Electronics are radiation tested

Power consumption
• Nominal: < 1W

Interface
• RS485
• +5 V
• Bright pixel/ROI/Histogram modes
• Alignment cube for integration