TWINKLE STAR TRACKER

The Twinkle 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 is extremely compact and easy to interface in CubeSats and large satellites. Due to its small size, several can be mounted under different angles.

Star Tracker Features

- ✓ High accuracy
- ✓ High Robustness
- ✓ Easy interfacing

Performance

- Cross-boresight: 15″ (1σ)
- Around boresight: 90″ (1σ)
- Tracks stars up to magnitude 6
- Update rate of 2 Hz
- On-board calibration algorithm

Robustness

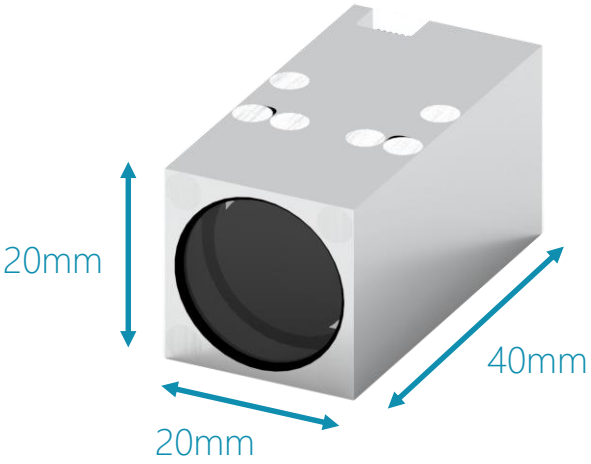
- Lost-in-space availability: >99% of the night sky
- Discards vast majority of false star instances
- Autonomously detects and corrects for outlier stars
- Electronics are radiation tested, lens is radiation shielded

Power consumption

- Nominal: < 1W

Interface

- RS485
- +5 V
- Bright pixel/ROI/Histogram modes
- Allows to downlink full images



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