

SPACECRAFT SYSTEMS

Ultra-Compact Star Sensor

This product is a fully autonomous star sensor designed for CubeSat applications.

TECHNICAL SPECIFICATIONS

PERFORMANCE	
Measurement accuracy	30" (3σ)
Data update rate	5 Hz
Dynamic performance	1°/s
Full-sky acquisition time	≤ 1.2 s
Sunlight exclusion angle	35°
ELECTRICAL	
Power consumption	0.2 W
Input voltage	4.5 V – 5.5 V
MECHANICAL	
Weight	75 g
Dimensions	40 × 40 × 67 mm
ENVIRONMENTAL	
Operating temperature	–30 to +40 °C
Design life	1 year
INTERFACE	
Communication interface	RS-422 & CAN

Quick Overview

This product is a fully autonomous star sensor designed for CubeSat applications.

Key Specifications

Parameter	Value
Model	C-ST-MA-ASP1-1C
Measurement Accuracy (3σ)	30"
Weight (g)	75
Power Consumption	0.2 W
Dimensions (mm)	40 × 40 × 67

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Data Update Rate	5 Hz
Dynamic Performance	1°/s
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Key Features

- Precision manufacturing with rapid mass-production capability.
- Miniaturized modular design with high thermal and structural integration.
- Lightweight, compact, and low power consumption.
- Advanced technical performance indicators.

Applications

- Used for attitude determination and control in compact CubeSat systems requiring high-precision, ultra-low-power star sensors.

Documentation & Resources

- [Technical Specifications](#)
- [Applications](#)