SPACECRAFT SYSTEMS

Commercial Integrated Digital Solar Sensor

The optical system adopts a single silicon photodiode encoding measurement method.

TECHNICAL SPECIFICATIONS

SPECIFICATIONS	
Model	C-SS-APS-Img/P-2
Measurement Accuracy	≤ 0.05° (3σ)
Flight Heritage	Completed qualification
Application	Hongyan satellite constellation
Dimensions (mm)	98 × 65 × 86.5
Weight (g)	540
Mounting Material	2A12 T4
Operating Temperature (°C)	−30 to +55
Storage Temperature (°C)	−50 to +75
Data Update Rate	≥ 20 Hz
Communication Interface	RS-422
Design Life	5 years

Quick Overview

The optical system adopts a single silicon photodiode encoding measurement method.

Key Specifications

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Key Features

- Low-cost design and implementation.
- Integrated opto-electronic structure with high compactness.
- Lightweight and small form factor.
- High adaptability to space environmental conditions.

Applications

- Used for solar vector measurement and attitude determination in commercial satellite constellations such as Hongyan.

Documentation & Resources

- Technical Specifications
- Applications