

NST10-G2 STAR TRACKER

Is a fully autonomous high precision nano attitude sensor, dynamic performance up to 10°/s to meet the ultra-high dynamic requirements of satellites. The 25° sun exclusion angle plus the secondary baffle guarantees that the star tracker will work at 25° and outside the 45° is not disturbed by stray light.

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Dimensions		
Sensor + Baffle	80×80×266mm ³	
Mass		
Sensor + Baffle	<850g	
Optical Design		
Lens	refractive	
Environmental Tolerance		
Vibration(Flight mode)	sine 13g, random 12 grms	
Vibration(Qualification testing)	sine 16g, random 18 grms	
Radiation Hardness	30 Krad [si]	
Thermal	-40~+45 (°C)	
Performance		
Field of View	$18^{\circ} \times 18^{\circ}$ [effective]	
Attitude Accuracy	<3"[3σ] pointing	$<30''[3\sigma]$ rolling
Update Rate	≥20 Hz	
Slew Rate	10° /s	
Sensitivity	5.8Mv, G0.Ref star	
Exclusive Angle	Sun: <25°	Earth: <20°
Data Interface		
	422/CAN/1553B	
Power Consumption		
	$2\pm0.2W$	
Operating Modes		
	Boot, Autonomous attitude determination, Nominal attitude tracking, Photo	
Input Voltage Range		
	5V	
Life Time		
	7years (500Km orbit) 5years (1000Km orbit)	
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