

## AURICAM



### MULTI-PURPOSE SPACE CAMERA

- SPECIFICALLY DESIGNED FOR DETECTION, SSA, RENDEZVOUS MISSIONS, MONITORING HEALTH & SAFETY, RENDEZVOUS MISSIONS, SSA AND LANDING
- COMPACT DESIGN & HIGH ROBUSTNESS
- BASED ON AURIGA STAR TRACKER HEADS FLIGHT PROVEN SINCE 2019
- GUARANTEED FOR 7/15 YEARS LIFETIME IN LEO/GEO ORBITS
- ECSS CLASS 1

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## MULTI-PURPOSE CAMERA

TECHNICAL SPECIFICATIONS				
SENSOR CHARACTERISTICS		VALUES		
Resolution	2048 x 2048 pixels – 5.5 $\mu$ m pitch			
Shutter type	Global shutter			
Programmable Integration time	[60 $\mu$ s – 30 s]			
Image type	Black & White (Standard) or Color (on request)			
CAMERA PERFORMANCES				
Diagonal Field of View – 2 options	35°		80°	
Focal length	25 mm		10 mm	
Pixel angular resolution	44''		112''	
Fixed Aperture	F/3.5 to F/8		F/4 to F/8	
Sun Exclusion Angle	38°		64°	
Typical detection capability (EOL – 0,001°/s stability – SNR>5)	Magnitude 6 – 8 Object 1m: detectable @800km Object 1cm: detectable @8km		Magnitude 4 – 6 Object 1m: detectable @800km Object 1cm: detectable @8km	
Resolution capability	20cm @ 1km	2m @10km	50 cm @1 km	5m @ 10 km
ENVIRONMENTAL CHARACTERISTICS				
Qualification operating range	-35 to +55 °C (baseplate temp.)			
Qualification non-operating range	-45 to + 60°C (baseplate temp)			
Storage temperature	-45 to +80 °C			
Mechanical first resonance frequency	> 700 Hz			
Vibration (random)	35°: 14.1 gRMS In plane 21.8 gRMS Out of Plane		80°: 12 gRMS In plane 21.8 gRMS Out of Plane	
Volume with baffle	35°: 140 x 71 x 65 mm		80°: 135 x 71 x 65 mm	
Mass	35°: < 420 g		80°: < 450 g	
RELIABILITY, AVAILABILITY AND LIFETIME				
EEE quality grade	ECSS Class 1 or Industrial grade			
Lifetime	7 years in LEO & 15 years in GEO			
Reliability	<119 FITS @25°C			
ELECTRICAL AND COMMUNICATION INTERFACES				
Interface	SpaceWire			
Power supply	4.75 to 6 V			
Power consumption	< 2W			
Frame Rate (with binning)	Up to 5 fps full frame with the existing VHDL Up to 10 fps full frame with VHDL in development			
<ul style="list-style-type: none"><li>• Compact and light weight Design</li><li>• Several fields of view available (D35, D80, D8 on request)</li><li>• Aperture and focus can be adapted on request</li><li>• Optional EGSE and OGSE</li><li>• Camera Numerical Model available for realistic simulation</li><li>• Heritage from Sodern Auriga Star Tracker</li><li>• High reliability and lifetime</li><li>• Compatible with LEO &amp; GEO</li><li>• Accurate calibration available</li><li>• Expert technical support available</li></ul>				

### CONTACT

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