



# INFINITY AVIONICS

YOUR EYES IN SPACE



**INFINITY**  
AVIONICS

**Infinity Avionics** is an Australian company which provides reliable and rugged optical sensor and processor solutions for the space industry and other high-reliability applications.

Our vision is to put our customers at the forefront of their missions through our reliable, robust and qualified technology solutions complemented by our know-how, specialised facilities, experience and expertise.



The team at Infinity Avionics is experienced in electronics design for space applications, project management, systems engineering, defence, and manufacturing, having contributed to the success of several Australian space missions.



Infinity Avionics provides space flight-proven and radiation-tested sensor and processor subsystems for space missions worldwide. Additionally, Infinity Avionics provides consulting services to design and deliver custom sensor payloads to meet customers' mission requirements in a timely manner.



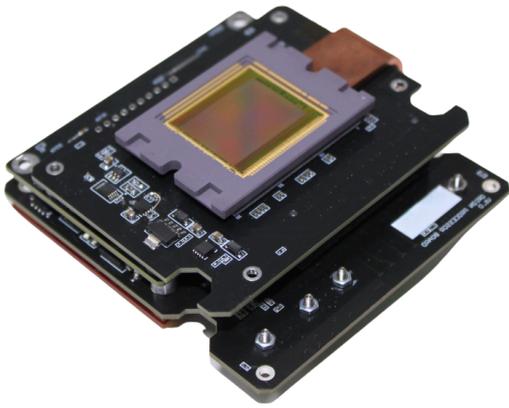
Onboard **25+** space missions

Designed **110+** electronics modules for space

**5+** space qualification campaigns

Provided expertise to **20+** design studies

**40+** years collective Aerospace experience

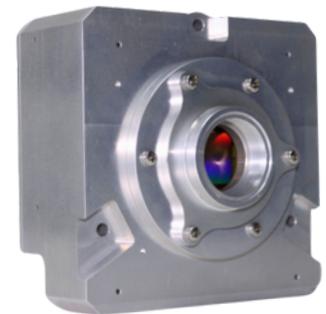


# ORION12MP

Orion12MP is a 12 Megapixel RGB/ Monochrome camera back end electronics unit which can be combined with application specific optical assemblies. Orion12MP is suitable for a range of space applications such as Earth observation, hyperspectral imaging, space based space surveillance, and docking/rendezvous applications based on the selected optical assembly.

Technical specifications	
Pixel resolution	12 MP (4096x3072)
Pixel size	5.5 um
Sensor technology	CMOS Global Shutter
Frames per second	Up to 100 at full resolution
Control interface	UART / RS485 / Ethernet
Bulk data interface	UART / RS485 / Ethernet
Power supply	5V DC
Operating temperature	-10 C to 60 Celsius
On-board RAM	Up to 290 full-resolution images

The camera provides high FPS image capture capability with on-board non-volatile data storage options. Orion12MP is designed leveraging a modular methodology providing the ability to customize the camera with different sensors and interface options with reduced engineering effort and cost. The system has been qualified for thermal vacuum, vibration and shock.



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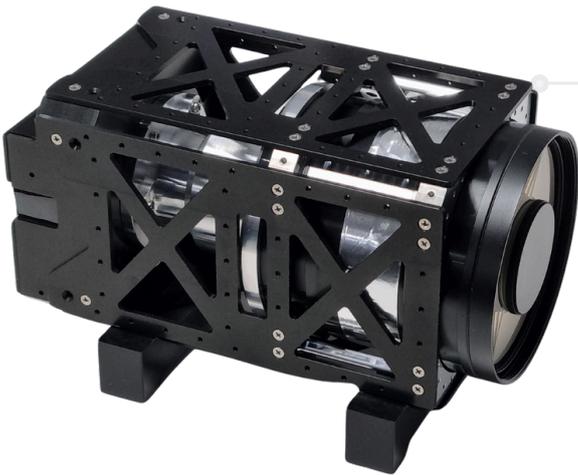
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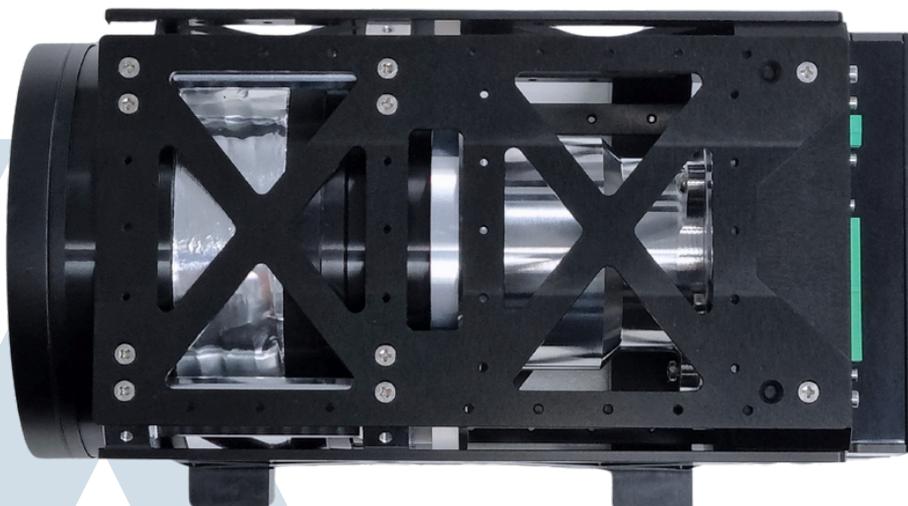
# ORION12MP - 550



## Technical specifications

Spatial resolution (GSD)	5 m at 500 km orbit
Focal length	550 mm
F number	6
Spectral range	400 nm - 1000 nm (customizable)
Dimensions	100 mm x 100 mm x 250 mm
Weight	1.5 kg

Orion12MP-550 camera comes with a 550mm focal length space grade optical assembly to support earth observation and space based space surveillance applications.



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