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 **20+** space missions

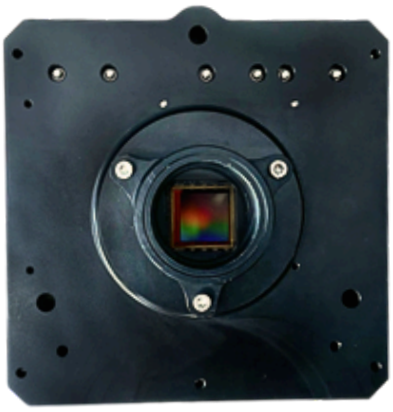
Designed **100+** electronics modules for space

5+ space qualification campaigns

Provided expertise to **20+** design studies

30+ years collective Aerospace experience

LYNX4MP



Lynx4MP is a 4MP RGB/Monochrome camera electronics backend designed for space applications. The system has been designed based on a space proven processor, sensor, and readout and storage electronics.

Technical specifications	
Image sensor	CMOS Global Shutter
Spectral bands	RGB Bayer / Monochrome
Pixel resolution	2048 x 2048
Pixel size	5.5 um
Control interface	UART / RS485
Data interface	UART / RS485 / USB2 / Ethernet
Power supply	5V DC
Power consumption	2.75 W
Operating temperature	-10 C to 60 C
On-board RAM	30 full resolution images
On-board flash memory	800 full resolution images
Dimensions	100 mm x 100 mm x 125 mm
Weight	500 g
TRL	9

Lynx4MP is mechanically compatible with standard CubeSat form factor and can support precise image capture timing requirements. The system has been qualified for thermal vacuum, vibration and shock and tested up to 40kRad TID. Lynx4MP camera backend electronics can be combined with different optical assemblies to suit a range of space applications.

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LYNX4MP-10

Lynx4MP-10 comes with a 10 mm focal length wide angle ruggedized optical assembly. The wide field of view is ideal for space based space asset monitoring and close proximity applications.

Technical specifications	
Field of view	58 degrees
Focal length	10 mm
F Number	Adjustable: F/1.9 to F/16
Spectral range	VIS, NIR
Optics interface	C-mount
Dimensions	100 mm x 100 mm x 90 mm
Weight	440 g
Recommended temperature for imaging	10 - 30 degrees

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LYNX4MP-70

Lynx4MP-70 is a Lynx4MP camera variant with a 70mm ruggedized optical assembly. The camera can be used as an engineering camera, in docking/rendezvous applications as well as low spatial resolution Earth Observation.

Technical specifications	
Spatial resolution (GSD)	39 m at 500 km orbit
Focal length	70 mm
F Number	2.2
Spectral range	VIS, NIR
Optics interface	C-mount
Dimensions	100 mm x 100 mm x 125 mm
Weight	500 g
Recommended temperature for imaging	10 - 30 degrees

LYNX4MP - 550

Lynx4MP-550 camera comes with a space grade 550mm focal length optical assembly to support Earth Observation and space based space surveillance/ space domain awareness applications.

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

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