

Phase One Space Robust Camera

iXM-SPL150

The iXM-SPL150 is the ruggedized evolution of the widely trusted iXM-RS150, a high resolution camera system designed for demanding aerial survey missions. With thousands of units deployed by leading OEM partners, iXM-SPL150 draws on deep expertise and a solid track record in aerospace imaging.

Successfully launched to Low Earth Orbit (LEO) in June 2022, the iXM-SPL150 has achieved TRL 9, confirming its status as a fully flight-proven Earth Observation camera. With tens of units scheduled for launch through 2025 and 2026, it continues to be a go-to choice for reliable, high-performance imaging from space.

At its core is a best-in-class 150MP snapshot matrix sensor, engineered for seamless integration with third-party space telescopes and satellite systems. Built entirely from commercial off-the-shelf (COTS) components, the iXM-SPL150 delivers exceptional value for cost-conscious New Space programs—without compromising on quality or performance.

Snapshot matrix cameras are ideal for dynamic satellite tasking purposes such as real-time surveillance, tactical intelligence, disaster response, and fast, accurate AI-driven image processing. iXM-SPL150 offers unmatched wide area, high resolution, high sensitivity and low noise imaging capabilities for Earth Observation. It can be delivered with achromatic and color sensor options.



Key benefits and features



Collect more data in every frame with our 150 MP, snapshot matrix camera

- 14,204 x 10,652 pixels simultaneously exposed and acquired
- Fast acquisition rate for motion detection
- Fine pixel pitch of 3.76 μm with BSI technology



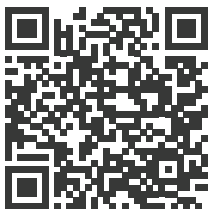
Proven for use in Low Earth Orbit

- Evolution of robust aerial design
- TRL 9 since mid-2022



Straightforward integration with satellite hardware

- Sensor and control electronics in a single housing
- Ready for 3rd party telescope integration
- SFP+ and USB 3.0 control and data-link



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Camera specifications

Imaging specifications	Sensor model	Sony IMX411
	Sensor type	Back-Illuminated CMOS
	Color variants	Achromatic, Bayer color
	Resolution (pixels)	14,204 x 10,652
	Pixel size (µm)	3.76
	Pixel depth (bit)	16, 14, 12
	Full well capacity (e-)	50,000
	Dark current	1.2 e-/s @ 40°C
	Read noise (e-)	3.4
	Line readout time (Normal mode, µs)	16-bit: 46
		14-bit: 20.5
		12-bit: 15.2
	Trigger delay (ms)	5
	Min. exposure time (ms)	0.25
	Dynamic range (dB)	83
	Capture rate (fps)	Up to 4*
Environmental specifications	Operating temperature range (°C)	-10 to +40 (camera body)
	Survival temperature range (°C)	-30 to +70 (camera body)
Technology readiness	TRL 9 since June 2022	

*Dependent on image size and compression used.

System specifications	Metadata	Embedded in image file
	Interface (data & control)	SFP+ (10GigE), USB3
	Image buffer size (MB)	1,500
	Hardware signals	Trigger input, camera ready output
	Software interface	Phase One SDK over Linux
	Power supply	12V - 30V DC
	Max. power consumption (W)	16
	Mass (g)	630
	Dimensions (mm)	90 x 90 x 73
	Thermal interface	Cold plate

Radiation hardening

iXM-SPL150 is designed entirely with COTS components. Qualified for 3+ years LEO missions.

