CANADENSYS

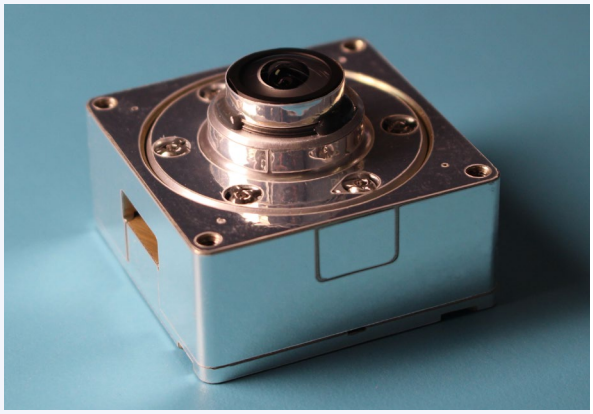
Moving Humanity into Space

NISA Family of Space Cameras

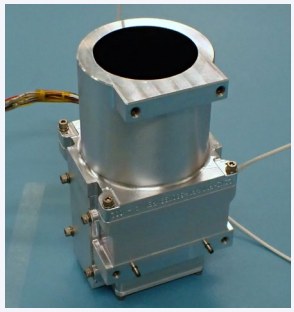
for Nano-Immersive Situational Awareness

Designed for missions from LEO to Lunar to Deep Space, the flight-proven NISA camera is available with a wide range of options, including imager type, thermal management, and fields of view, enabling applications in exploration, science, situational awareness, navigation, and mission monitoring.

The ultra-compact, ultra-lightweight NISA camera includes a powerful onboard CPU for image processing, and storage for thousands of images. A powerful scripting language allows for highly automated operation, for bandwidth-limited operations.









Customers who want a capable and robust camera choose NISA. These small but mighty cameras are on orbit now and have flown on lunar missions.

Whether you need a stock configuration, or one customized to your requirements, there is a NISA camera for you.

Key Features

- Resolution: 12MP (3000x4000)
- Capture: Single-shot, burst, bracketing, extended capture, auto-exposure, auto-HDR, and more
- Exposure: Integration time up to 30min, analog (aka ISO) and digital gain
- Processing: E-HDR, outlier filtering, image stacking/subtraction, histogram
- Output formats : raw and jpg; optional single/multi-file compression
- Automation: Embedded programming using 'Asp' scripting language
- ITAR-free

Options and Customization

- Color, mono, or muti-spectral imaging
- Lenses providing FOV from <20° to >180°
- Custom FOV and spatial resolution
- Baffles and sun-shades
- Radiators and other thermal management
- Custom housings and mounts
- Custom software solutions
- Custom integration (e.g., science instrument)









Sample images taken by Canadensys customers with NISA cameras

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www.canadensys.com

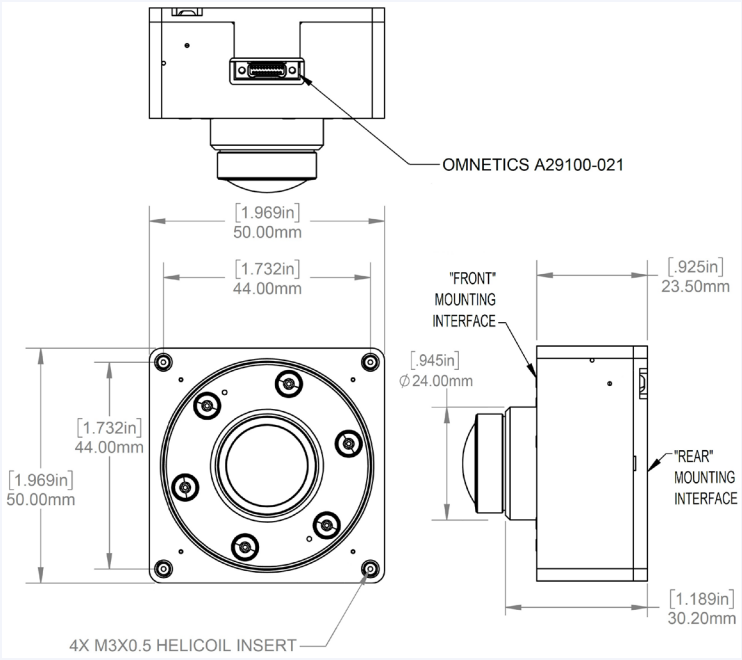
2025-04-28

NISA Family of Space Cameras

for Nano-Immersive Situational Awareness

Indicative technical details for a NISA camera with a 186-degree hemispherical field of view:

Imager type	Color (Bayer) Monochrome (optional)
Imager resolution	4000 x 3000 (12MP)
Pixel size	1.85 µm x 1.85 µm
Shutter type	Rolling shutter with global reset
Maximum bit depth	12 bits per pixel
On-board flash memory	64 GB (32 GB hi-rel mode)
Field of view	186° hemisphere
Lens properties	1.83 mm, F/2.4
Spatial resolution	0.066173°/pixel
Camera dimensions	50 x 50 x 30 mm (body with lens holder)
Camera mass	135 grams
Lens adapter	C/CS/M12
Power/Data Connector	21 pos Nano-D
Data interface	RS-422 / USB 2.0 / Ethernet over USB
Input voltage	+3V to +5.5V VDC
Power consumption	2.2W average / 5W peak
Temperature	-25°C to +50°C (operational) (extended survival range)
Radiation	5 years TID in typical LEO environment. Contact us for other applications.
Vibration	Flight heritage Qualified to GEVS levels

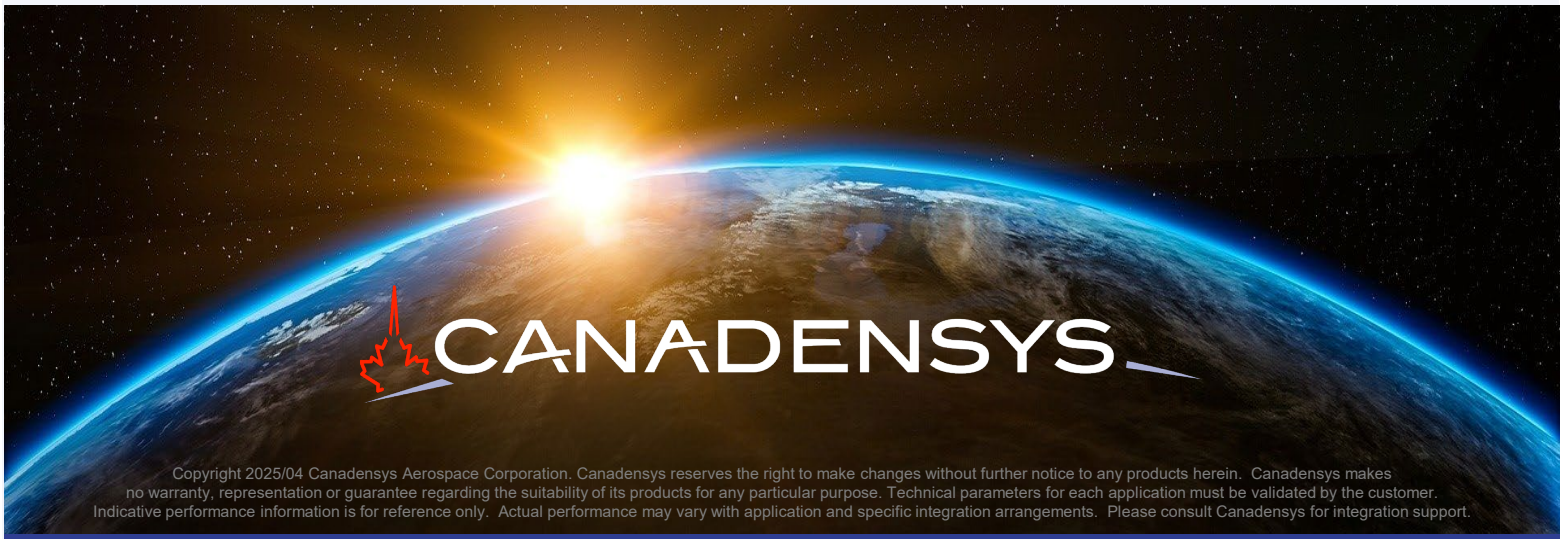


Canadensys Aerospace Corporation, headquartered in Toronto, Canada, is an innovative space systems company serving customers around the world.

We blend our advanced space hardware capabilities with smart, rugged designs to develop unique solutions for planetary, orbital, and terrestrial environments.

Our modern, commercial, business approach enables effective space program and mission development for both commercial and government customers.

For more information, email: info@canadensys.com



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