

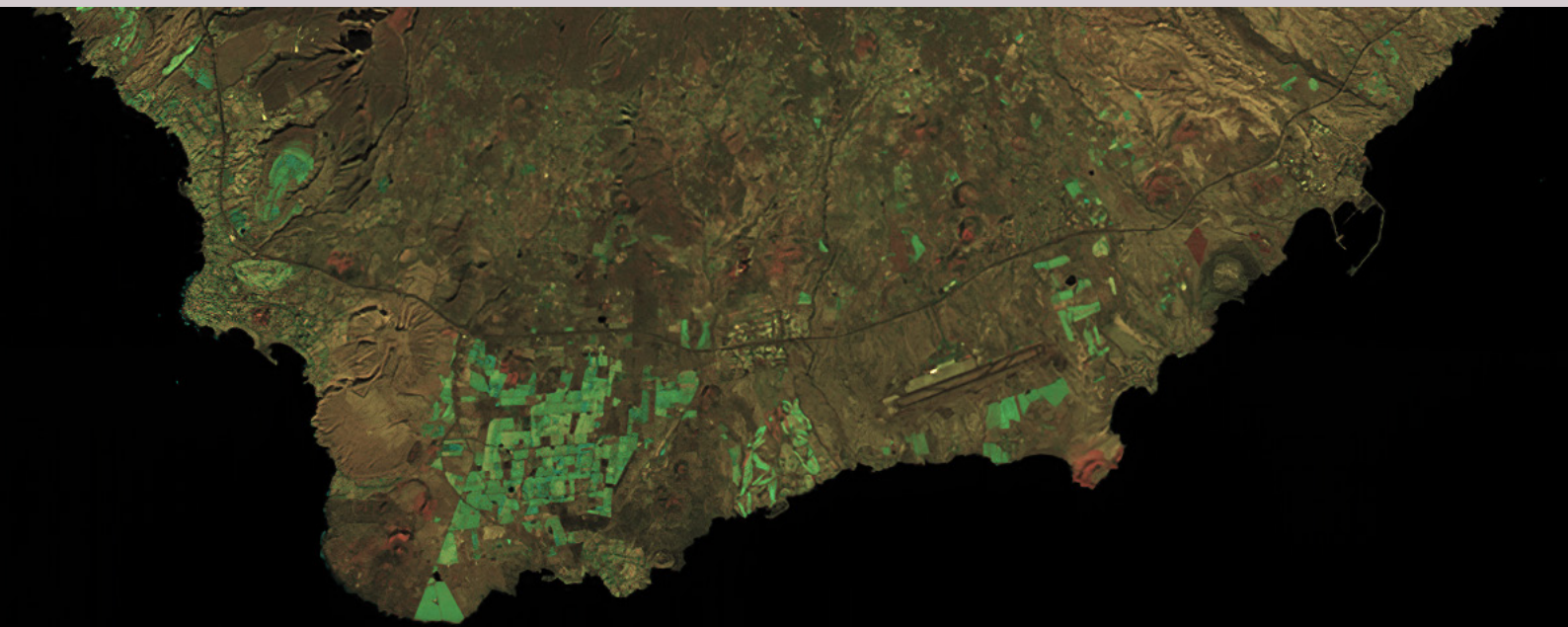
DRAGO-2

Demonstrator for Remote Analysis of Ground Observations

DRAGO-2 is a compact SWIR camera specifically designed for the space environment. It employs uncooled InGaAs technology to obtain high-quality multispectral images in two observing bands: 1.1 and 1.6 microns.

The camera boasts an on-board image processing unit that can compress, encrypt and even apply complex image processing algorithms such as super-resolution.

- Uncooled InGaAs Technology
- High-Speed Image Acquisition
- Size, Weight and Power (SWaP) Optimized Camera
- Proven Space Flight Heritage
- Earth Observation



**Expected image performance simulation of southern Canary Island of Tenerife*

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SYSTEM OVERVIEW

Sensor type	InGaAs
Observable bands	1.1 and 1.6 μm
GSD @500 km	50 <i>m/pixel</i>
Swath @500 km	32 <i>km</i>
Signal-to-Noise Ratio	>100 (albedo>0.2)

READ OUT INTEGRATED CIRCUIT

Frame rate	Up to 160 <i>fps</i>
Bit Depth	14 bits

POWER REQUIREMENTS

Regulated Supply Voltage	5 V (Min value: 4.5 V, Max value: 5.5 V)
Mean power	< 5.5 W
Required slew rate	>1 V/ms
Power bus input capacitance	215 μF

DATA INTERFACE

Physical layer	RS-422
Data link layer	UART @ 921600 <i>bps</i> max.
Application layer	Terminal emulator / ECSS-E-ST-70-41C (PUS) / Custom (per request)

ENVIRONMENTAL AND QUALIFICATION LEVELS

Outgassing levels	TML: <1%	CVCM: <0.1%		
Operational temperature range	-20°C to 60°C			
Survival temperature range	-30°C to 70°C			
GSFC-STD-7000A	Quasistatic loads	16g		
	Sinusoidal vibration	5-50 Hz : 2 g	50-105 Hz : 5.2 g	105-125 Hz : 1.25 g
	Random vibration	14.16 Grms		
	Shock	Half sine pulse, 300 g, 25 μs		

PHYSICAL PROPERTIES

Mass	1160 g
Required volume	96 mm x 96 mm x 170 mm

*Technical characteristics described in this datasheet are for information only.



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