

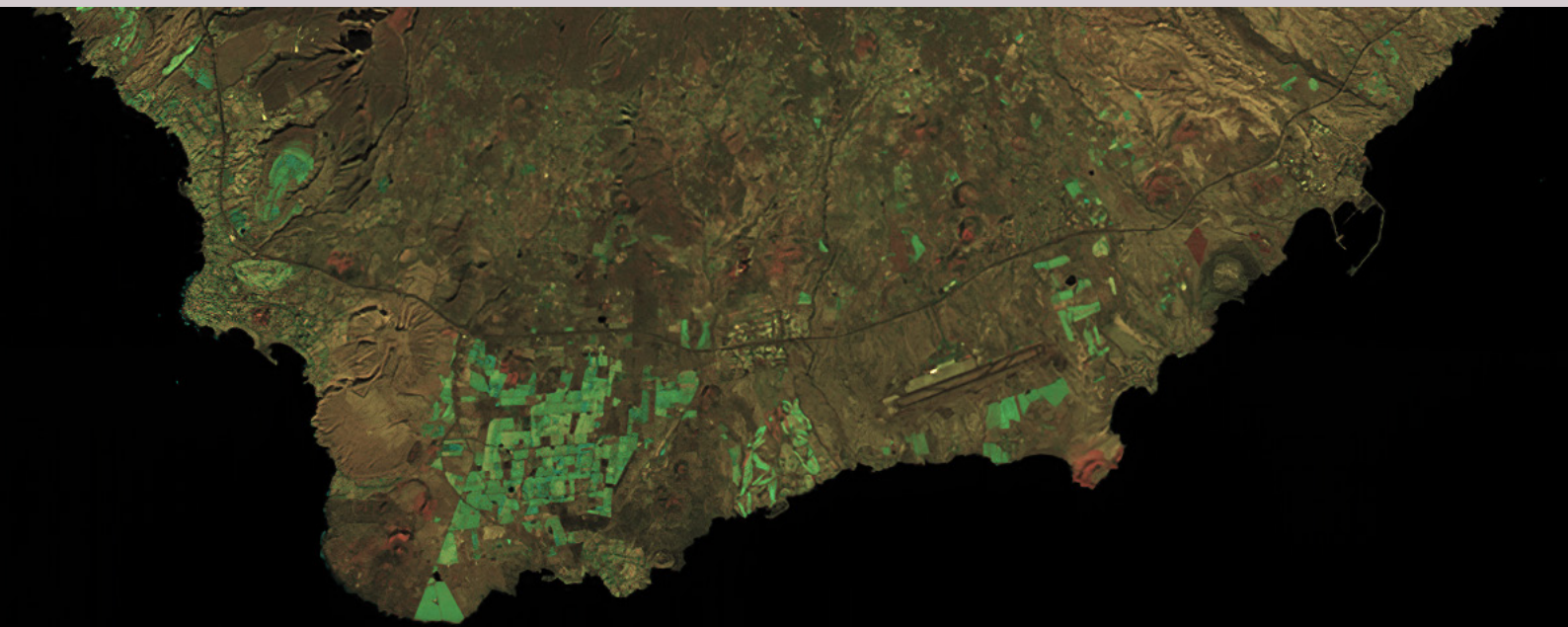
DRAGO-2

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 :	50-105 Hz :	105-125 Hz :
		2 g	5.2 g	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.

