

spaceCam c4000

4 Megapixel
1" CMOS Image Sensor
12-Bit Digitalization
High Resolution
Custom Interface
Space C



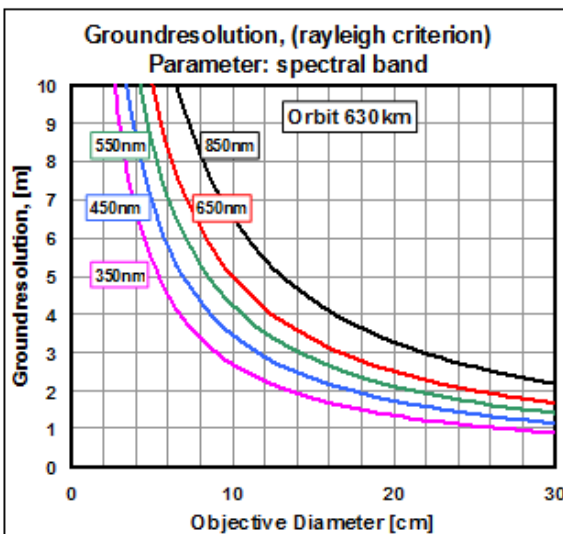
The spaceCam c4000 is a very high-resolution 12-bit camera system designed for scientific imaging in space applications. The square pixel with the small size of $5.5\mu\text{m} \times 5.5\mu\text{m}$ and the high image resolution of 4 megapixel is optimally qualified for all applications in space imaging in particular for high ground resolution earth observation.

Features

- ▶ High sensitivity
- ▶ 12-bit digitalization
- ▶ 50% quantum efficiency
- ▶ Low dark current
- ▶ High Dynamic Range (HDR) modes up to 90 db
- ▶ Antiblooming function
- ▶ External timing control
- ▶ Partial Scan readout
- ▶ Remote control of all Settings
- ▶ Custom interface design
- ▶ Compatibility with space environment

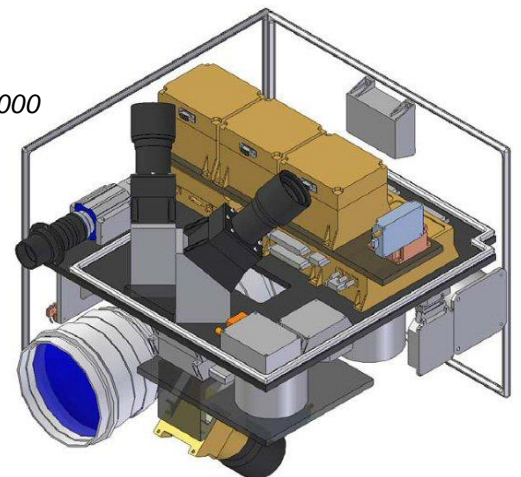
Specifications

CMOS Image Sensor	CMOSIS 4000
Sensor Type	Progressive Scan, CMOS, Global Shutter
Sensor Format	1 : 1, 1"-Bildsensor
Image Size	11.3mm x 11.3mm, 15.9mm Diagonal
Pixel Size	$5.5\mu\text{m} \times 5.5\mu\text{m}$
Pixel Number	2048 (H) x 2048 (V)
Electron Capacity, FWC	$13,500e^-$
Noise, rms	$13e^-$
Dynamic	1,038 : 1
Dark Current @ 25° C	$10e^- / \text{Pixel} / \text{s}$
Quantum Efficiency	50 %, with lens on chip
Anti-Blooming	200 x e^- capacity
Digitalization	12-Bit,
Mech. Dim.	126 x 106 x 54mm
Operational Temperature	-15° to 45°C



Ground-Resolution for selected spectral bands and different objective aperture. Orbit height 630km

spaceCam c4000
 integrated in
 LAPAN-A2



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