

# 5MP Space Camera



## FEATURES

- **Radiation Tolerant Design**
  - 30 krads EEE parts
  - 100 krads Optional
  - Rad Hard Glass > 800 Mrad
  - SEL > 37 MeV-cm<sup>2</sup>/mg
- **Very Low Read Noise Based on Scientific CMOS Imager**
- **Space Heritage Lens Designs Available**
- **SpaceWire Interface**
- **Applications Include Space Situational Awareness, Earth Imaging**

## 5MP SPACE CAMERA SPECIFICATIONS

<b>Active Array Size</b>	2560 (H) x 2160 (V)
<b>Pixel Size</b>	6.5 µm x 6.5 µm
<b>Chroma</b>	RGB or Monochrome
<b>Shutter Type</b>	Rolling Shutter (RS), Global Shutter (GS)
<b>Maximum Frame Rate</b>	100 fps (RS), 50 fps (GS)
<b>ADC Resolution</b>	22 bits (2 x 11-bit)
<b>Dynamic Range</b>	> 83.5 dB

**Dimensions** ≤ 10.7 cm L x 8.4 cm W x 23.8 cm H with baffle

**Mass** < 1 kg

**Power** 4W maximum

**Read Noise** < 2 e- RMS (RS), <5 e- RMS (GS)  
Median value, high gain output (30x)

**Field Of View** 29°, 39°, 80° standard optical lenses  
Custom Field of View Available

### Electrical Interfaces

**Input Voltage** 5V

**Data Interface** SpaceWire at 80 Mbps

### Operating States and Modes

Still Image Capture, Health and Status, Code Upgrade

### Mission Assurance

**Temperature Range** -20 to +55° C (Operational)  
-30 to +85° C (Non-operational)

**Vibration** Up to 20 Grms Acceptance

**Parts Level Options** Commercial Space, NASA Level I, II, III

**Design Life** Up to 10 years LEO/GEO