



SPACEVIEW™ 50/65/70

SMALL SATELLITE IMAGING SOLUTIONS

RIGHT-SIZED, HIGH-PERFORMANCE EARTH OBSERVATION

Organizations require accurate insight on global concerns. Harris SpaceView™ small satellite imaging systems provide critical situational awareness in small, affordable packages. When incorporated into constellations, SpaceView™ imaging systems enable faster revisit rates and greater coverage.

BENEFITS

Offers the highest resolution imaging system for small satellites

Supports multiple missions with dual-purpose payloads

Reduces power needs with light weight, smaller sized payloads

Reduces burden on the bus with digital scanning technology

AFFORDABLE, HIGH-CAPABILITY PAYLOADS

Harris has provided mission-critical “eyes in space” for more than 50 years. Today we are adapting our high-end optics, patented structures, and outstanding image quality solutions to offer the SpaceView™ line of high-performance, small satellite imaging payloads.

Designed for use with smallsats, SpaceView™ models 50, 65, and 70 are high-resolution payloads with low SWaP. These models are tailored to support the needs of a variety of industry—like agriculture, oil and gas, emergency response, and more—by offering diverse sensor capabilities and broad spectral range.

SpaceView™ models 50, 65, and 70 contain high-quality optics and offer the ability to

use two different camera modalities in one payload. With two camera configurations on board, system coverage grows dramatically, providing an expanded area of interest for tracking and analysis, while addressing multiple mission needs.

Various sensor options may be incorporated into all SpaceView™ models to enable scanning image collection for wide area coverage or temporal offerings that include motion imagery or full-motion video. Capabilities range from visible (panchromatic or color) through multispectral imagery.

Harris solutions extend to include processing and compression aligned with system and mission needs. The optimal solution may be tailored to support needs based on overall SWaP requirements.

FACTS

Ultra low expansion material provides high stability with low coefficient of thermal expansion for optimal performance

Patented structures provide high stiffness/rigidity in a lightweight design

Over 125 Harris imaging payloads successfully launched into space since 1960



SpaceView™ 50/65/70

CAMERA SPECS

CCD Color Cameras

- 4MP @ 20 FPS to 47MP @4 FPS
- 8-bit to 14-bit
- 94MP @ 4 FPS (dual camera)

CMOS Color and Panchromatic Video Cameras

- 4MP @ 20 FPS - 47MP @4 FPS
- Motion imaging and/or full-motion video
- 6MP up to 150+ FPS and 25MP up to 70+ FPS
- J2K compression (optional)
- Seven programmable regions of interest

OPTIONS

Motion Imaging

- 47MP CCD from 2 to 7 FPS
- 29MP CCD from 2 to 4 FPS
- 16MP CCD up to 8 FPS
- PAN or Bayer color filter array (CFA)

Full-Motion Video

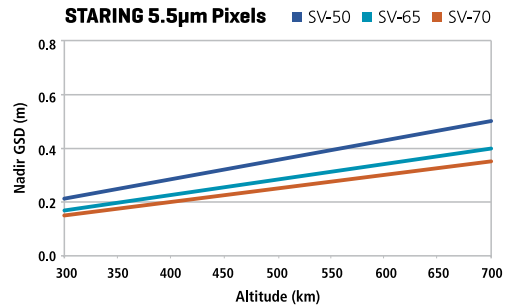
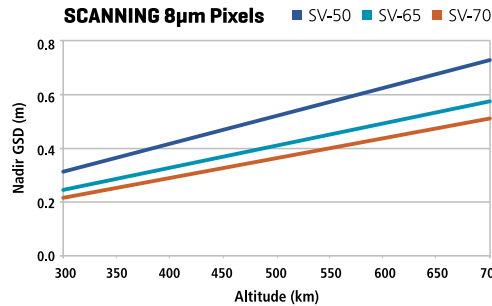
- 12MP to 25MP CMOS
 - 30 to 80 FPS
 - Windowing
- PAN or Bayer CFA

PAN + MS Scanning

- 8,000 to 40,000 pixel TDI linear array
- 10 thousand lines per second (klps) to 40 klps PAN rates
- PAN + 4MS or 8MS

Thermal Control and Focus Control

- Enable on-orbit adjustment for optimal image quality



	SPACEVIEW™ 50 SV-50	SPACEVIEW™ 65 SV-65	SPACEVIEW™ 70 SV-70
Satellite Class	SmallSat	SmallSat	SmallSat
Aperture	0.5 m	0.65 m	0.7 m
Payload Mass	90 kg – 130 kg	110 kg – 150 kg	120 kg – 160 kg
Imaging Power	200 W – 275 W	245 W – 305 W	250 W – 320 W
Resolution @500km (GSD)	0.35 m– 0.5 m	0.3 m – 0.45 m	0.25 m– 0.4 m
Sensor Capabilities	<ul style="list-style-type: none"> • Staring • Scanning • Motion Imagery/ Video • Low Light 	<ul style="list-style-type: none"> • Staring • Scanning • Motion Imagery/Video • Low Light 	<ul style="list-style-type: none"> • Staring • Scanning • Motion Imagery/Video • Low Light
Bands	<ul style="list-style-type: none"> • Visible Pan / Color • Pan, 4- or 8-band MS • SWIR/MWIR 	<ul style="list-style-type: none"> • Visible Pan / Color • Pan, 4- or 8-band MS • SWIR/MWIR 	<ul style="list-style-type: none"> • Visible Pan / Color • Pan, 4- or 8-band MS • SWIR/MWIR

Additional aperture sizes and custom optical configurations available

About Harris Corporation

Harris Corporation is a leading technology innovator, solving customers' toughest mission-critical challenges by providing solutions that connect, inform and protect. Harris supports government and commercial customers around the world. Learn more at harris.com.

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