SPACEVIEW™ 24/35/42

SMALL SATELLITE IMAGING SOLUTIONS

HIGH-PERFORMANCE EARTH OBSERVATION IN A SMALL, AFFORDABLE PACKAGE

BENEFITS

- Offers the highest resolution imaging systems for small satellites
- Supports multiple missions with dual-purpose payloads
- Enables opportunity for standard ESPA APL envelope configurations through low size, weight, and power (SWaP)
- Reduces time to higher confidence decision making with advanced processing and analytics options

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.

RIGHT-SIZED, HIGH-PERFORMANCE EARTH OBSERVATION

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 offerings to offer the SpaceView™ line of high-performance, small satellite imaging payloads.

Designed for use with nanosats and microsats, SpaceView™ models 24, 35, and 42 are high-resolution payloads with low SWaP. The SpaceView™ 24 payload weighs less than 10 kg. SpaceView™ 35 and 42 start at 20 kg and 25 kg respectively, and offer the potential to capitalize on standard ESPA APL envelope configurations.

SpaceView™ 35 can support multiple missions with two camera modalities in the same payload. With two camera configurations on board, system coverage grows dramatically, enabling an expanded area of interest for tracking and analysis.

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 imaging payloads successfully launched into Space since 1960

SpaceView 24

SpaceView 35

SpaceView 42

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

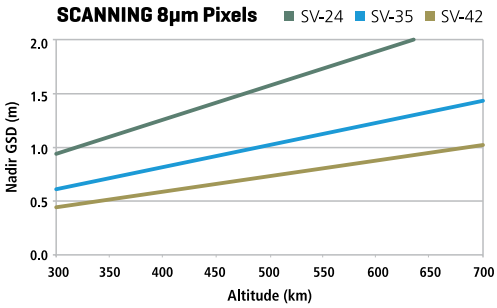
- 12MP to 25MP CMOS
  - 30 to 80 FPS
  - Windowing
- Pan or Bayer CFA

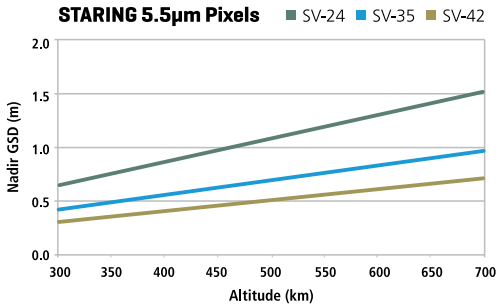
PAN + MS Scanning

- 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™ 24 SV-24	SPACEVIEW™ 35 SV-35	SPACEVIEW™ 42 SV-42
Satellite Class	NanoSat	MicroSat	MicroSat
Aperture	0.24 m	0.35 m	0.42 m
Payload Mass	<10 kg	20 kg – 35 kg	25 kg – 40 kg
Imaging Power	10 W	70 W – 170 W	70 W – 170 W
Resolution @500km (GSD)	0.9 m – 1.1 m	0.7 m – 1.0 m	0.5 m – 0.75 m
Sensor Capabilities	• Staring • Motion Imagery/ Video • Low Light	• Staring • Scanning • Motion Imagery/Video • Low Light	• Staring • Scanning • Motion Imagery/Video • Low Light
Bands	• Visible Pan / Color	• Visible Pan / Color • PAN, 4- or 8-band MS	• Visible Pan / Color • PAN, 4-or 8-band MS

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.