

# HIGH-RESOLUTION PAYLOADS IN SMALL, **AFFORDABLE PACKAGES**

Today's world moves at the speed of the instant. Decision-makers need timely and accurate insights to keep up, and more than ever the imagery driving those insights is coming from space. Satellite imagery drives strategic and persistent intelligence, tactical support and commercial missions, and L3Harris provides the framework with the SpaceView line of small satellite imaging solutions. The technology makes it more practical and affordable to deploy constellations to obtain high-resolution image intelligence at more frequent revisit rates.

### FLEXIBLE AND CONFIGURABLE TO SUPPORT MULTIPLE MISSIONS

With diverse sensor capabilities and a broad spectral range, L3Harris SpaceView payloads can be tailored to support different missions. These imaging solutions offer a full spectral range of choices — from visible through infrared and up to 8-band multispectral sensing.

Larger SpaceView payloads can support two onboard camera configurations, increasing system coverage dramatically and enabling an expanded area of interest for tracking and analysis. SpaceView payloads can even support multiple missions with two different camera modalities in the same payload.



	SPACEVIEW 80 SV-80	SPACEVIEW 50 SV-50	SPACEVIEW 42 SV-42	SPACEVIEW 35* SV-35	SPACEVIEW 24* SV-24
Satellite class	Smallsat	Smallsat	Microsat	Microsat	Nanosat
Aperture	0.8 m	0.5 m	0.42 m	0.35 m	0.24 m
Payload mass	150 kg – 225 kg	90 kg – 130 kg	25 kg – 40 kg	20 kg – 35 kg	<10 kg
Imaging power	250 W – 350 W	200 W – 275 W	70 W – 170 W	70 W – 170 W	10 W
Resolution at 500km ground sampling distance (GSD)	0.22 m – 0.35 m	0.35 m- 0.5 m	0.5 m – 0.75 m	0.7 m – 1.0 m	0.9 m – 1.1 m
Sensor capabilities	<ul><li>Staring</li><li>Scanning</li><li>Motion imagery/video</li><li>Low light</li></ul>	<ul><li>Staring</li><li>Scanning</li><li>Motion imagery/video</li><li>Low light</li></ul>	<ul><li>Staring</li><li>Scanning</li><li>Motion imagery/video</li><li>Low light</li></ul>	> Staring > Scanning > Motion imagery/video > Low light	<ul><li>Staring</li><li>Motion imagery/video</li><li>Low light</li></ul>
Bands	> Visible panchromatic/color > Panchromatic, 4- or 8-band multispectral	> Visible panchromatic/ color > Panchromatic, 4- or 8-band multispectral	<ul> <li>Visible panchromatic/ color</li> <li>Panchromatic, 4- or 8-band multispectral</li> </ul>	<ul><li>Visible panchromatic/ color</li><li>Panchromatic, 4- or 8-band multispectral</li></ul>	> Visible panchromatic/ color

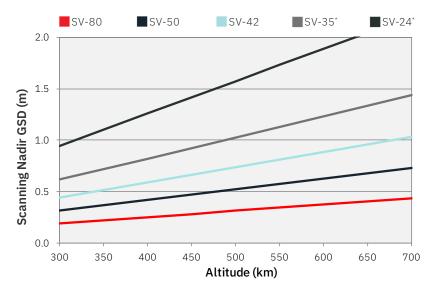
<sup>\*</sup> In addition to standard offerings, custom payloads can be designed to meet specific customer missions

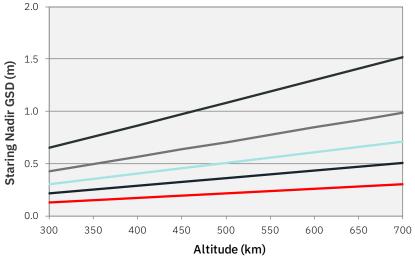
### AFFORDABLE PERSISTENCE

In the past, satellite solutions with sufficient imaging capabilities have been cost prohibitive for many industries and did not provide the persistent coverage required to be truly useful. L3Harris, which has long produced some of the most trusted "eyes" in space, has addressed this need by re-engineering its high-end optics, patented structures and outstanding image quality offerings to produce the SpaceView line of high-performance imaging payloads. Tailored for constellations of smaller satellites, SpaceView systems enable faster revisit rates and greater coverage at an affordable price while still delivering critical intelligence.

### **SMALL PAYLOAD DESIGN**

L3Harris SpaceView payloads provide highresolution imagery in a small, lightweight form factor. With apertures ranging from 0.24 to 0.8 meters, SpaceView systems meet imaging and size, weight and power requirements for nanosats, microsats and smallsats. With high-resolution imaging ranging from 0.24- to 1.1-meter GSD, SpaceView models 24, 35 and 42 are highresolution payloads that can use standard ESPA configurations.





GSD parametric comparison

## Reduce time to higher-confidence decisions

L3Harris solutions can be expanded to include mission command and control functions, advanced processing, workflow and analytics that can be integrated into new or existing ground systems. Processing offers rich, true-to-life color for more accurate imagery and improves the image for a more accurate reflection of the area in question. This improved processing enables consistency from image to image, which is important in a constellation configuration where multiple satellite payloads are capturing images.

#### SATELLITE IMAGING DATA USES

SpaceView technology can be used to inform decision-making in many important settings. Data can accelerate these decisions when time is of the essence with direct actionable intelligence. SpaceView provides protection and insights for a better world.

- > Strategic intelligence
- > Persistent intelligence
- > Tactical support
- > Commercial missions



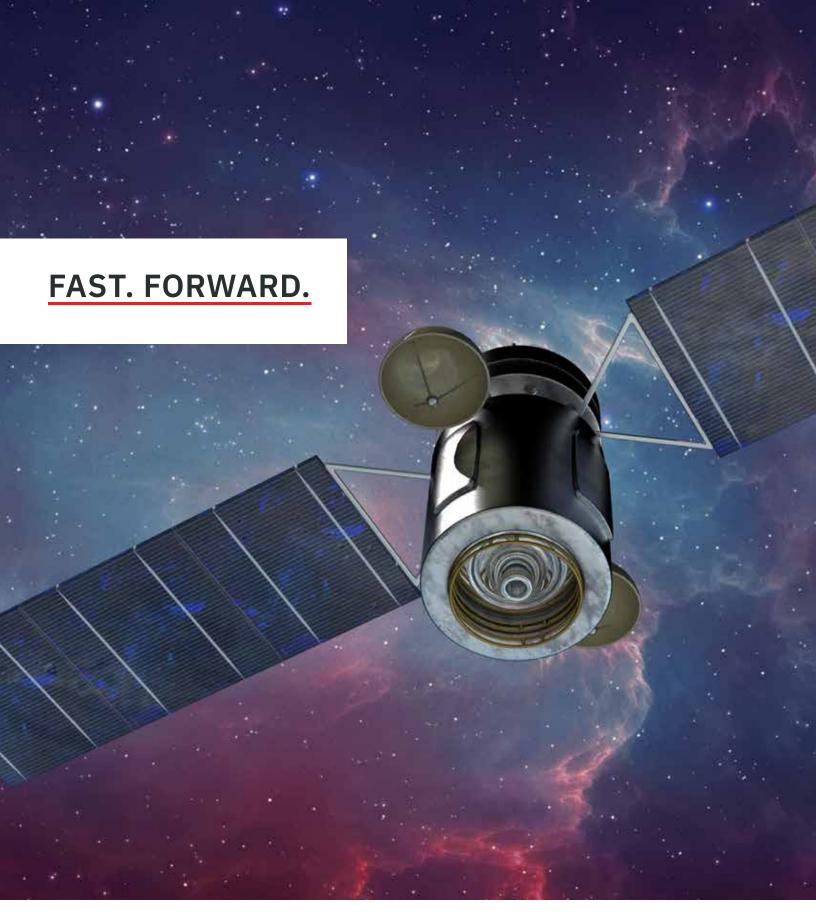
Standard processing

L3Harris processing

### L3HARRIS CAPABILITIES

L3Harris innovation in optics, structures and assembly, integration and testing is now bringing technology evolution to the design and manufacturing of smaller form factors.

- > Precision Optics: L3Harris designs, manufactures and tests optics spanning from 0.2 to 3.5 meters in diameter, delivering world-class, operationally proven solutions.
- Structures: L3Harris designs, manufactures and tests high performance composite and metallic optical metering
- structures, resulting in hundreds of space-qualified, thermally stable, operational structures.
- > Assembly, Integration and Testing: L3Harris provides stateof-the-art facilities and skilled personnel to perform systems assembly and integration.



### SpaceView

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L3Harris Technologies is an agile global aerospace and defense technology innovator, delivering end-to-end solutions that meet customers' mission-critical needs. The company provides advanced defense and commercial technologies across air, land, sea, space and cyber domains.

