



# WORLDVIEW LEGION

 DATA SHEET



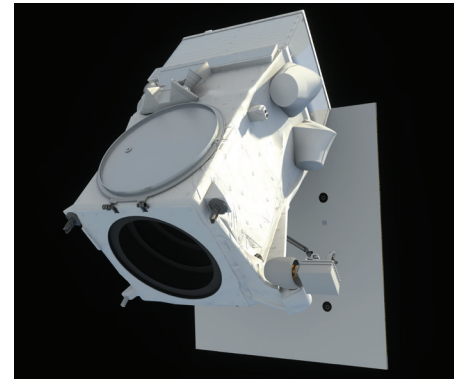
## WorldView Legion

WorldView Legion represents the next generation in Earth observation. Designed and built by Maxar, WorldView Legion's six satellites are tailored to customer needs and deliver continuity for existing missions. With a mix of sun-synchronous and mid-inclination orbits, WorldView Legion will dramatically expand Maxar's ability to revisit high-interest areas and inform critical, time-sensitive decisions.

### Features and benefits

- Very high-resolution imagery (30 cm class)
- 8-band VNIR multispectral imagery for a wide variety of applications
- Industry-leading precision geolocation accuracy (<5 m CE90) without ground control points
- Communications system compatible with Maxar's existing ground network and Direct Access Facilities (DAFs)
- Direct Access tasking from and to customer sites using customer-unique encryption keys
- Simultaneous receive, image and downlink operations
- Large-area mono and stereoscopic collection eliminates temporal variations
- 10-year mission life consistent with WorldView satellites

WorldView Legion will have three product levels. Basic products (Level 1B) provide sensor-oriented, radiometrically-calibrated mono and stereo imagery for users to do their own image geo or orthorectification. Standard products (Level 2A/2B) are map-projected with uniform pixel spacing across products for image manipulation and analysis by image processing software. Finally, Ortho Products (Level 3) are ideal for image viewing and locational reference when high positional accuracy is required.



Artist's rendering of a WorldView Legion satellite

# MAXAR

## Specifications

<b>Orbit</b>	Altitude: 450 km Type: sun-synchronous and mid-inclination
<b>Life</b>	Expected service life: 10 years
<b>Spacecraft and mass</b>	Size: 3 m tall x 2 m x 2 m (not including width of solar array) Dry mass: < 625 kg
<b>Sensor bands</b>	Panchromatic: 450 - 800 nm 8 Multispectral Coastal Blue: 400 - 450 nm Blue: 450 - 510 nm Green: 510 - 580 nm Yellow: 585 - 625 nm Red: 630 - 690 nm Red Edge1: 695 - 715 nm Red Edge2: 730 - 750 nm Near-IR: 770 - 895 nm
<b>Ground Sample Distance (GSD)</b>	Panchromatic nadir: 29 cm Multispectral nadir: 1.16 m
<b>National Imagery Interpretability Rating Scale (NIIRS)</b>	5.9
<b>Swath width</b>	At nadir: 9 km
<b>Geolocation accuracy</b>	< 5 m CE90 without ground control points <1.5 m RMSE



## SENSOR BANDS

- Panchromatic
- 8-band multispectral

## RESOLUTION VARIATIONS

WorldView Legion can be flown at a range of altitudes for between 29 and 50 cm GSD.

Technical specifications for these other scenarios and collection capability for the entire

WorldView Legion constellation can be provided upon request.