



WORLDVIEW LEGION

 DATA SHEET



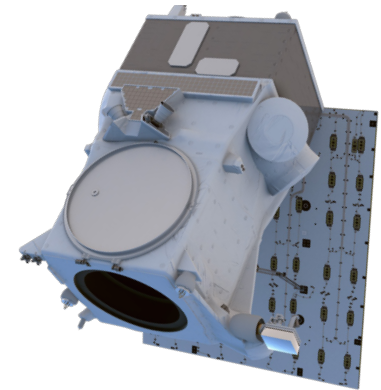
WorldView Legion

WorldView Legion is the next generation of high-resolution Earth observation satellites. WorldView Legion's first block will be a fleet of six high-performance satellites that deliver continuity for existing customer missions and dramatically expand revisit over high-interest areas to better 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
- Direct Access tasking from and to customer sites using customer-unique encryption keys
- Communications system compatible with Maxar's existing ground network and Direct Access Facilities (DAFs)
- 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

Orbit	Altitude: 450 km Type: sun-synchronous and mid-inclination
Life	Expected service life: 10 years
Spacecraft and mass	Size: 3 m tall x 2 m x 2 m (not including width of solar array) Dry mass: < 625 kg
Sensor bands	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
Ground Sample Distance (GSD)	Panchromatic nadir: 29 cm Multispectral nadir: 1.16 m
National Imagery Interpretability Rating Scale (NIIRS)	5.9
Swath width	At nadir: 9 km
Geolocation accuracy	< 5 m CE90 without ground control points <1.5 m RMSE

SENSOR BANDS

- Panchromatic
- 8-band multispectral

RESOLUTION AND ORBIT VARIATIONS

WorldView Legion can be flown at a range of altitudes for between 29 and 50 cm GSD. Additionally, WorldView Legion can be flown in a sun-synchronous or mid-inclination orbit. Technical specifications for these other scenarios and collection capability for the entire WorldView Legion constellation can be provided upon request.