



# WORLDVIEW-1

 DATA SHEET

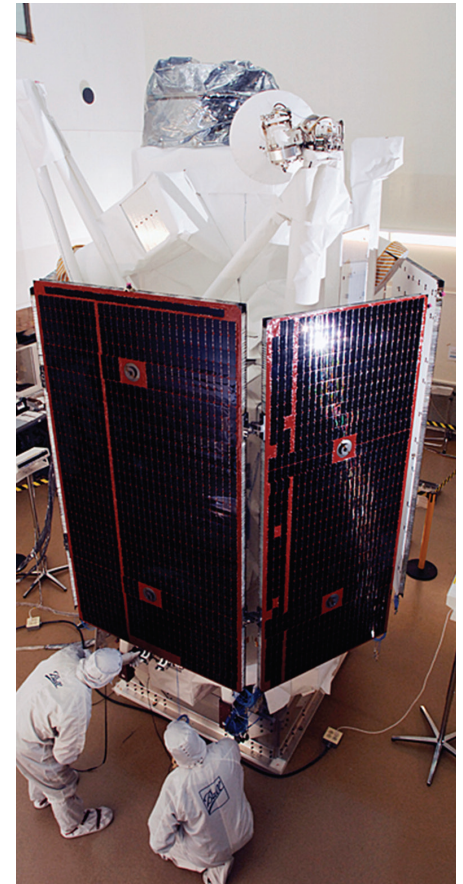


## WorldView-1

WorldView-1, launched September 2007, is the first of our next-generation satellites—the most agile satellites ever flown commercially. The high-capacity, panchromatic imaging system features half-meter resolution imagery. Operating at an altitude of 496 km, WorldView-1 has an average revisit time of 1.7 days and is capable of collecting over one million sq km per day of half-meter imagery. The satellite is also equipped with state-of-the-art geolocation accuracy capabilities and exhibits stunning agility with rapid targeting and efficient in-track stereo collection. WorldView-1 resides in a descending node of 1:30pm.

### Title

- Very high resolution
- Industry-leading geolocation accuracy
  - Ultra-stable platform, high-precision attitude sensors and GPS
- Highest capacity over a broad range of collection types (wider than any competitor)
- Bi-directional scanning
- Rapid retargeting using Control Moment Gyros (>2x faster than any competitor)
- Direct downlink to customer sites available
- World-class telescope
  - High contrast (MTF) and signal-to-noise ratio
  - Selectable Time Delay Integration (TDI) levels
- Frequent revisits at high resolution
- Provides highly detailed imagery for precise map creation, change detection and in-depth image analysis
- Geolocate features to less than 5 m to create maps in remote areas, maximizing the utility of available resources
- Collects, stores and downlinks a greater supply of frequently updated global imagery products than competitive systems
- Stereoscopic collection on a single pass, ensures image continuity and consistency of quality
- Extends the range of suitable imaging collection targets and enhances image interpretability



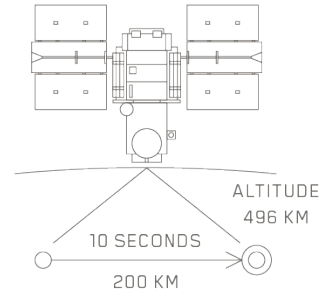
WorldView-1 clean room pre-launch preparations

# MAXAR

# Specifications

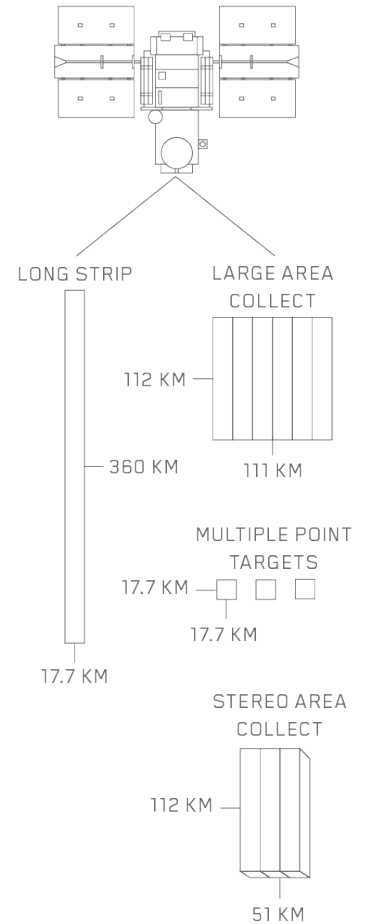
<b>Launch information</b>	Date: 09/18/2007 Launch vehicle: Delta 7920 (9 strap-ons) Launch site: Vandenberg Air Force Base, California	
<b>Orbit</b>	Altitude: 496 km Type: Sun synchronous Period: 95 min	Altitude: 496 km Type: Sun synchronous, 1:30 pm descending node Period: 95 min
<b>Mission life</b>	10-12 years, including all consumables and degradables (e.g. propellant)	
<b>Spacecraft size, mass and power</b>	3.6 m (12 ft) tall x 2.5 m (8 ft) across 7.1 m (23 ft) across the deployed solar arrays 2290 kg (5038 lbs) 3.2 kW solar array, 100 Ahr battery	
<b>Sensor bands</b>	Panchromatic: 400-900 nm	
<b>Sensor resolution</b>	50 cm Ground Sample Distance (GSD) at nadir 55 cm GSD at 20 degrees off-nadir	
<b>Dynamic range</b>	11-bits per pixel	
<b>Swath width</b>	17.7 km at nadir	
<b>Attitude determination and control</b>	3-axis stabilized Actuators: Control Moment Gyros (CMGs) Sensors: star trackers, solid state IRU, GPS	
<b>Pointing accuracy and knowledge</b>	Accuracy: <500 m at image start and stop Knowledge: supports geolocation accuracy below	
<b>Retargeting agility</b>	Time to slew 200 km: 10 sec	
<b>Onboard storage</b>	2199 GB solid state with EDAC	
<b>Communications</b>	Image and ancillary data: 800 mbps X-band Housekeeping: 4, 16 or 32 kbps real-time, 524 kbps stored, X-band Command: 2 or 64 kbps S-band	
<b>Max Contiguous Area Collected in a Single Pass (30 degrees off-nadir angle)</b>	Mono: 111x112 km (6 strips) Stereo: 51x112 km (3 pairs)	
<b>Revisit frequency (at 40 degrees North latitude)</b>	1.7 days at 1 m GSD or less 5.4 days at 20 degrees off-nadir or less (0.55 m GSD)	
<b>Geolocation accuracy (CE90)</b>	Demonstrated <4.0 m CE90 without ground control	
<b>Capacity</b>	1.3 million sq km per day	

## ALTITUDE AND SLEW TIME



## COLLECTION SCENARIOS

(30 degrees off-nadir angle)



## SENSOR BANDS

 Panchromatic