



# WORLDVIEW-4

 DATA SHEET



## WorldView-4

WorldView-4 offers multispectral, high-resolution commercial satellite imagery from the Maxar imagery archive. WorldView-4 is retired from the Maxar constellation, but it provides archive imagery at 31 cm panchromatic resolution and 1.23 m multispectral resolution.

### Title

- Very high-resolution
  - Panchromatic 31 cm
  - Visible & near-infrared 1.24 m
- Industry-leading geolocation accuracy
- High capacity in various collection modes
- Bi-directional scanning
- Rapid retargeting using Control Moment Gyros (>2x faster than any competitor)
- Direct Access tasking from and image transmission to customer sites
- Simultaneous, high resolution, super-spectral imagery
- Large area mono and stereoscopic collection eliminates temporal variations
- Precision geolocation possible without ground control points
- Global capacity of 680,000 sq km per day, which doubled Maxar's 30 cm collection capability and the ability to collect for large-area mapping projects at the highest commercially available resolution



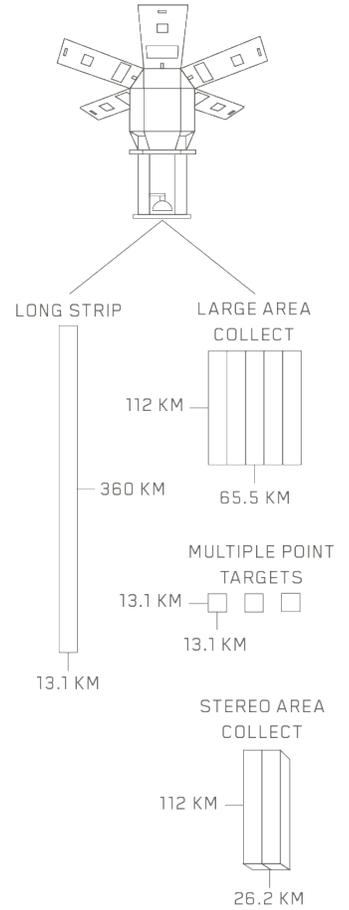
WorldView-4 artist rendering

# MAXAR

# Specifications

<b>Orbit</b>	Altitude: 617 km Type: Sun Synchronous, 10:30 am descending Node Period: 97 min
<b>Spacecraft size and aperture</b>	Size: 5.3 m (17.7 ft) tallx2.5 m (8 ft) across 7.9 m (26 ft) across deployed solar arrays Aperture: 1.1m
<b>Sensor bands</b>	Panchromatic: 450-800 nm 4 Multispectral: Red: 655-690 nm Green: 510-580 nm Blue: 450-510 nm Near-IR: 780-920 nm
<b>Sensor resolution (or GSD, ground sample distance; off-nadir is geometric mean)</b>	Panchromatic Nadir: 0.31 m 20 degrees off-nadir: 0.34 m 56 degrees off-nadir: 1.00 m Multispectral nadir: 1.24 m 20 degrees off-nadir: 1.38 m 56 degrees off-nadir: 4.00 m
<b>Dynamic range</b>	11-bits per pixel
<b>Swath width</b>	At nadir: 13.2 km
<b>Attitude determination and control</b>	Type: 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: 10.6 sec
<b>Onboard storage</b>	3200 GB solid state with EDAC
<b>Communications</b>	Image and ancillary data: 800 mbps X-band Housekeeping: 120 kbps real time, X-band Command: 64 kbps S-band
<b>Max Contiguous Area Collected in a Single Pass (30 degrees off-nadir angle)</b>	Mono: 66.5 kmx112 km (5 strips) Stereo: 26.6 kmx112 km (2 pairs)
<b>Revisit frequency (at 40 degrees North latitude)</b>	1 m GSD: < 1.0 day Total constellation >4.5 accesses/day
<b>Geolocation accuracy (CE90)</b>	Predicted <5 m CE90 without ground control
<b>Capacity when collecting</b>	680,000 sq km per day

# COLLECTION SCENARIOS



# SENSOR BANDS

-  Panchromatic
-  Multispectral