



WorldView-4

Launched in 2016 and the newest edition to the DigitalGlobe satellite fleet, WorldView-4 enhances European Space Imaging's customer offering. Operating at an expected altitude of 617 km, in coordination with WorldView-3, WorldView-4 provides 31 cm panchromatic resolution and 1.24 m multispectral resolution. WorldView-4 has an average revisit time of <1 day and is capable of collecting up to 680,000 km² per day.

Utilizing the WorldView-4 satellite, European Space Imaging is capable of delivering very high resolution imagery options. We can currently offer our customers large area single pass (synoptic) collection which eliminates temporal variations. In addition WorldView-4 offers industry-leading geolocation accuracy and bi-directional scanning with daily revisits. Furthermore, our customers have access to direct access tasking to ensure you get the right image every time and an archive library that spans more than 4,000,000,000 km².



Company Information

European Space Imaging is a leading supplier of global very high-resolution (VHR) satellite imagery and derived services to customers in Europe, North Africa and CIS countries.

Operating a multi-mission capable ground station enables optimized image collection results taking into account real-time weather information and giving customers the highest degree of flexibility.

With a reputation for expert and personalized customer service it has been providing tailored VHR imagery solutions to meet the diverse project requirements of its customers since 2002.

WorldView-4 Design and Specifications

Orbit	Altitude: 617km Type: SunSync, 10:30 am descending node Period: 97 minutes
Life	Estimated service life: 10- 12 years
Spacecraft size, mass and power	Size: 5.3 m H x 2.5 m W, 7.9 m across deployed solar arrays Aperture: 1.1m
Sensor bands	Panochromatic: 450 - 800 nm 4 Multispectral Red: 655 - 690 nm Green: 510 - 580 nm Blue: 450 - 510 nm Near IR: 780 - 920 nm
Sensor resolution	Panochromatic Nadir: 0.31 m 20° Off-Nadir: 0.34 m 56° Off-Nadir: 1.00 m 60° Off-Nadir: 3.51 m Multispectral Nadir: 1.24 m 20° Off-Nadir: 1.38 m 56° Off-Nadir: 4.00 m 60° Off-Nadir: 14.00 m
Dynamic range	11-bits per pixel
Swath width	At nadir: 13.1 km
Attitude determination and control	Type: 3-axis stabilized Actuators: Control moment gyros (CMGs) Sensors: Star trackers, precision IRU, GPS
Retargeting agility	Time to slew 200 km: 10.6 sec
Onboard storage	3200 Gb solid state with EDAC
Communications	Image and ancilliary data: 800 Mbps X-band Housekeeping: 120 kbps real time, X-band Command: 64 kbps S-band
Max contiguous area collected in a single pass	Mono: 66.5 km x 112 km (5 strips) Stereo: 26.6 km x 112km (2 pairs)
Revisit frequency	1 m GSD: <1.0 day Total constellation >4.5 accesses / day
Geolocation accuracy	Predicted <4 m CE90 without ground control
Capacity	680,000km2 per day

Features

- Very high-resolution*
 - Panchromatic 31 cm
 - Visible and 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
- Daily revisits

Benefits

- Simultaneous, high resolution, multi-spectral imagery
- Large area single-pass (synoptic) collection eliminates temporal variations
- Precision geo-location possible without ground control points

Sensor Bands

 Panchromatic

 Multispectral

