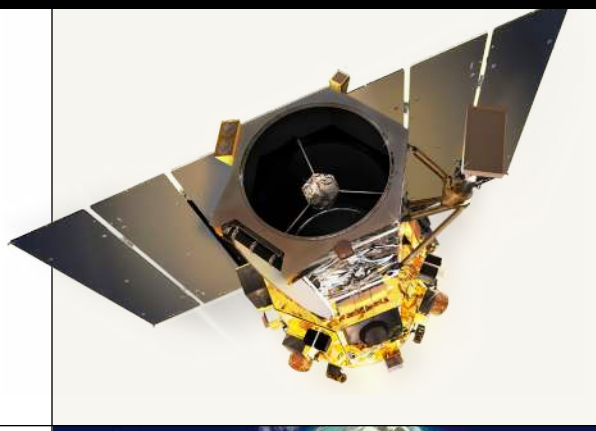
Vantor

PACGEO

For information, please contact:
Pacific Geomatics Limited
sales@pacgeo.com | +1 604-372-3300

GeoEye-1



Vantor's GeoEye-1 satellite is equipped with some of the most advanced technology ever used in a commercial remote-sensing system. The satellite collects images at 0.46 m panchromatic (black-and-white) and 1.84 m multispectral resolution. GeoEye-1 can collect up to 500,000 sq km of pan-sharpened multispectral imagery per day, making it ideal for large-scale mapping projects. GeoEye-1 can revisit any point on Earth once every three days or sooner.

Features

+ Highest-resolution imagery
+ Industry-leading geolocation accuracy
+ High capacity over a broad range of collection types
+ Frequent visits at highest resolution

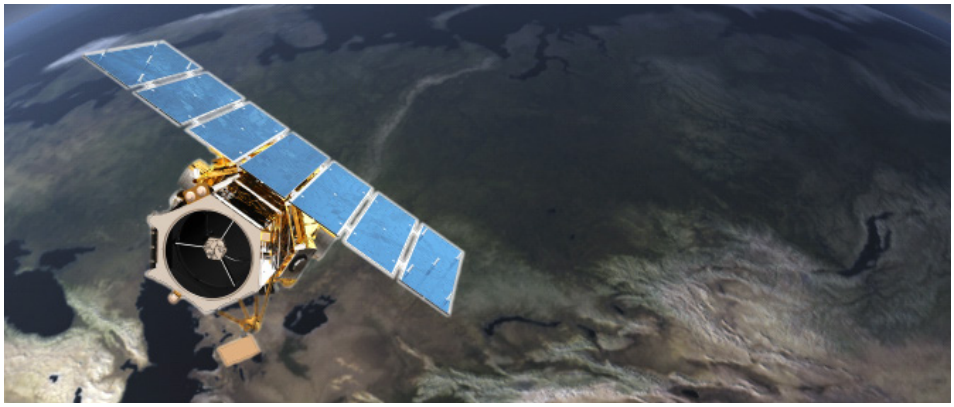
Benefits

+ 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 ensure image continuity and consistency of quality

Bora Bora

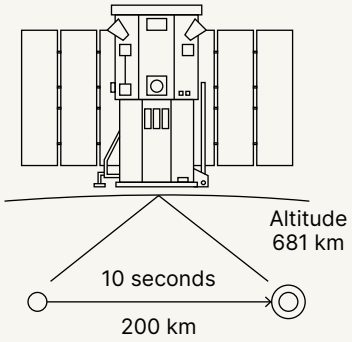
Specifications

Launch information	Date: 09/6/2008 Launch vehicle: Delta II Launch site: Vandenberg Air Force Base, California
Mission life	Expected >10 years
Spacecraft size	4186 lbs, 4.34 m in length

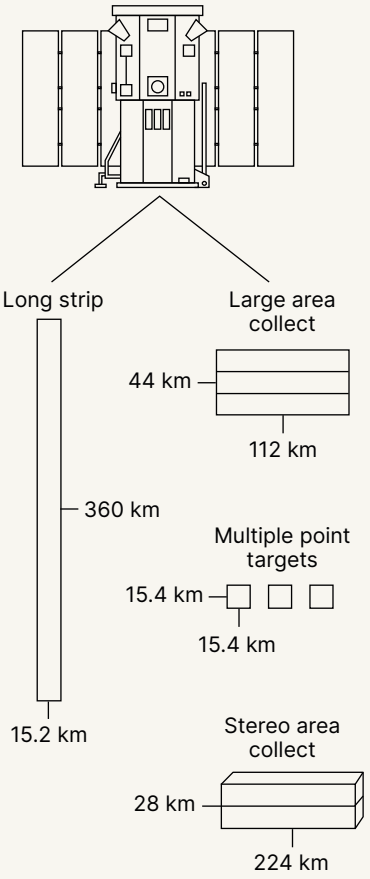


Feature	Altitude 681 km
Orbit	Type: sun-synchronous, 10:30 am descending node Period: 98 min
Sensor resolution and spectral bandwidth	Panchromatic: 41 cm GSD at nadir Black & white: 450-800 nm Multispectral: 1.65 m GSD at nadir Blue: 450-510 nm Green: 510-580 nm Red: 655-690 nm Near-IR: 780-920 nm
Dynamic range	11-bits per pixel
Swath width	Nominal swath width:15.3 km at nadir
Attitude determination and control	Type: 3-axis Stabilized Star tracker/IRU/reaction wheels, GPS
Retargeting agility	Time to slew 200 km: 20 sec
Onboard storage	1 Tbit capacity
Communications	Payload data: X-band 740/150 Mbps AES/DES encryption Housekeeping: X-band 64 kbps AES encryption
Revisit frequency (at 40 degrees North latitude)	2.6 days at 30 degrees off-nadir
Metric accuracy	5 m CE90, 3 m CE90 (measured)
Capacity	350,000 sq km/day multispectral

Altitude and slew time



Collection Scenarios



Sensor bands

- Panchromatic
- Multispectral