DATA SHEET

DigitalGlobe™

QuickBird

DigitalGlobe's QuickBird satellite continues to offer sub-meter resolution imagery with high geolocational accuracy. With global collection of panchromatic and multispectral imagery, QuickBird is designed to support a wide range of geospatial applications. QuickBird is currently operating at an altitude of 400 km and will continue in a gradual descent until its end of mission life at an altitude of 300 km.

Features

- Sub-meter resolution imagery
  - 55 cm panchromatic at nadir
  - 2.16 m multispectral at nadir
- High geolocational accuracy
  - Stable platform for precise location measurement
- Fast large area collection
  - 14.9 km width imaging swath
- High image quality
  - Off-axis unobscured design of QuickBird's telescope - Large field-of-view
  - High contrast (MTF)
  - High signal to noise ratio
- Large on-board data storage
  - 128 gigabits on-board image storage capacity

Benefits

- Acquire high quality satellite imagery for map creation, change detection, and image analysis
- Geolocate features to create maps in remote areas without the use of ground control points
- Collect a greater supply of frequently updated global imagery products
- Extend the range of suitable imaging collection targets and enhance image interpretability

QuickBird clean room pre-launch preparations. The first of DigitalGlobe's state-of-the-art high-resolution commercial imagery satellites.

Corporate (U.S.) +1.303.684.4561 or +1.800.496.1225 | London +44.20.3695.0920 | Singapore +65.6389.4851

DATA SHEET

QUICKBIRD

DigitalGlobe™

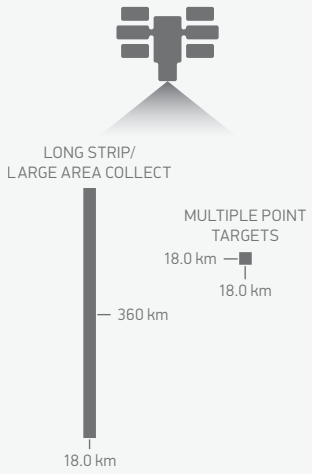
Design and specifications

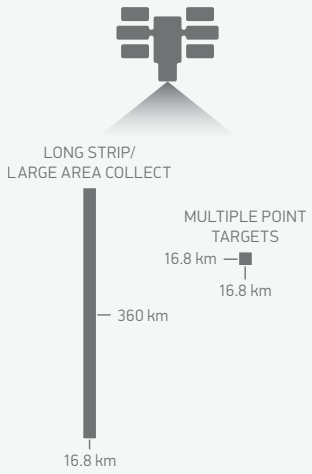
Launch information	Date: October 18, 2001 Launch vehicle: Delta II Launch site: SLC-2W, Vandenberg Air Force Base, California
Mission life	Extended through early 2014
Spacecraft size	2400 lbs, 3.04 m (10 ft) in length

	Altitude 400 km	Altitude 450 km
Orbit	Type: Sun synchronous, 10:00 am descending node Period: 92.4 min.	10:25 am descending node Period: 93.6 min
Sensor resolution and spectral bandwidth	Panchromatic: 55 cm GSD at nadir Black & White: 405 - 1053 nm Multispectral: 2.16 m GSD at nadir Blue: 430 - 545 nm Green: 466 - 620 nm Red: 590 - 710 nm Near-IR: 715 - 918 nm	Panchromatic 61 cm GSD at nadir Multispectral 2.44 m GSD at nadir
Dynamic range	11-bits per pixel	
Swath width	Nominal Swath Width: 14.9 km at nadir	Nominal swath width: 16.8 km at nadir
Attitude determination and control	Type: 3-axis Stabilized Star tracker/IRU/reaction wheels, GPS	
Retargeting agility	Time to slew 200 km: 37 sec	38 sec
Onboard storage	128 Gb capacity	
Communications	Payload Data: 320 Mbps X-band Housekeeping: X-band from 4,16 and 256 Kbps, 2 Kbps S-band uplink	
Revisit frequency (at 40°N Latitude)	Revisit time may vary from 2 to 12 days depending on target location as the orbit decays.	
Metric accuracy	23 m CE90, 17 m LE90 (without ground control)	
Capacity	200,000 sq km per day	

Collection scenarios

(at nadir)





Sensor bands

Panchromatic

Multispectral

DS-QB 10/14

Corporate (U.S.) +1.303.684.4561 or +1.800.496.1225 | London +44.20.3695.0920 | Singapore +65.6389.4851