# QUICKBIRD

Sector Sheet

## QuickBird

Maxar's retired QuickBird satellite is no longer collecting imagery but continues to offer sub-meter resolution imagery with high geolocational accuracy through the imagery archive. With global collection of panchromatic and multispectral imagery, QuickBird imagery supports a wide range of geospatial applications.

### 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





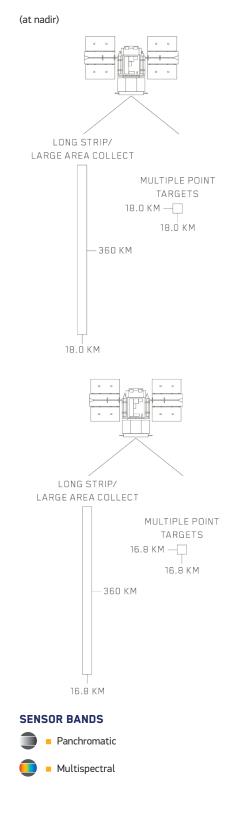
QuickBird clean room pre-launch preparations



### **Specifications**

Launch information	Date: 10/18/2001 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 482 KM		
Orbit	Type: sun-synchronous, 10:00 am descending node Period: 94.2 min	Type: Sun-synchronous, 10:30 am descending node Period: 100 min
Sensor resolution and spectral bandwidth	Panchromatic: 65 cm GSD at nadir Black & white: 405-1053 nm Multispectral: 2.62 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: 18.0 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 degrees North latitude)	2.5 days at 1 m GSD or less 5.6 days at 20 degrees off-nadir or less	2.4 days at 1 m GSD or less 5.9 days at 20 degrees off-nadir or less
Metric accuracy	23 m CE90, 17 m LE90 (without ground control)	
Capacity	200,000 sq km per day	

#### **COLLECTION SCENARIOS**





MXR-DS-QUICKBIRD 06/20