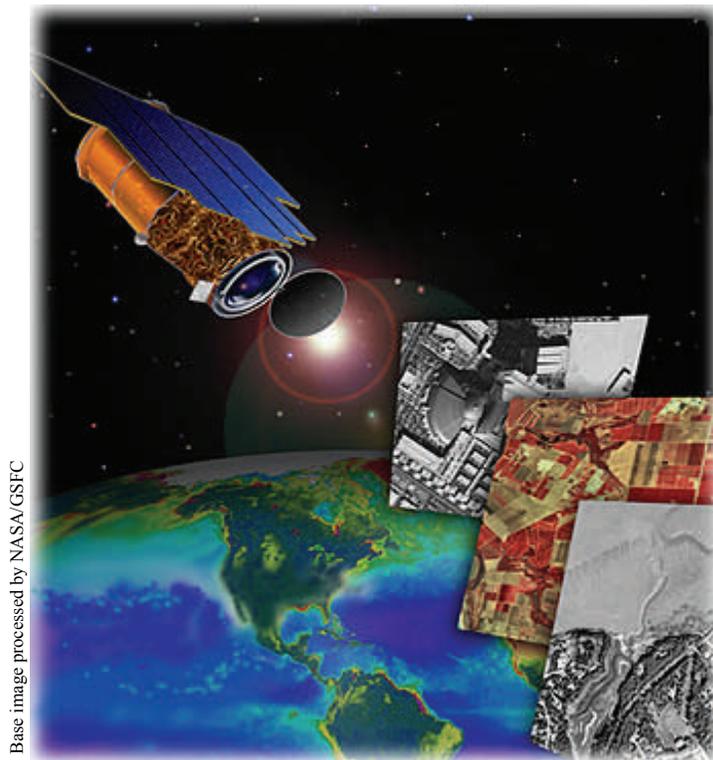




OrbView-3 Commercial Satellite Imagery Product Catalog



Base image processed by NASA/GSFC

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ORBVIEW- 3 SATELLITE IMAGERY

Effective: January 23, 2006

- 1m Panchromatic Imagery
- 4m Multi-Spectral Imagery
- Orthorectified Images
- Digital Elevation Models
- Digital Terrain Models

Rev. 1/23/06

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GeoEye Corporate Information

About GeoEye

Headquartered in Dulles, Va., GeoEye is the world's largest commercial satellite imagery company, delivering the highest-quality, most accurate imagery and products to better map, measure, monitor and manage the world. GeoEye was formed as a result of ORBIMAGE's acquisition of Space Imaging in January 2006. The company is the premier provider of geospatial data, information and value-added products for the national security community, strategic partners, resellers and commercial customers. GeoEye operates a constellation of three Earth imaging satellites – OrbView-2, OrbView-3 and IKONOS – and possesses an international network of more than a dozen regional ground stations, a robust image archive, and advanced geospatial imagery processing capabilities that are unmatched in the satellite imagery industry. Its products are the cornerstone of the remote-sensing industry enabling a wide array of applications including intelligence gathering for national security and defense, mapping, local government planning, and natural resources and environmental monitoring.

Heritage of High Performance Satellites

GeoEye's experience in successfully operating advanced remote sensing satellites began in April 1995 with the successful launch of OrbView-1, an atmospheric monitoring satellite that provided valuable weather-related data to NASA. In August 1997, OrbView-2 was launched to monitor the Earth's oceans and land surfaces. Now in its sixth year of operation, OrbView-2 provides daily images of the world's oceans that facilitate the study of global warming, commercial fishing, environmental, and coastal monitoring. GeoEye's constellation of earth imaging satellites was further expanded on June 26, 2003 with the successful launch of OrbView-3. OrbView-3

produces high-resolution image data—1 meter panchromatic and 4 meter multispectral imagery—and is the focus of this product catalog.

Using High Resolution Imagery

GeoEye customers use our advanced imagery information products for everything from environmental monitoring, to construction planning, to precision mapping and intelligence gathering. A clear, crisp, high resolution image of the earth can help national security agencies monitor borders, gather intelligence on potential conflicts, plan air, ground and naval missions, deploy resources, and assess battle damage. It can also aid with a wide range of commercial applications such as environmental impact assessments, utility infrastructure planning and wireless telecommunications design. Natural resource customers can use information gathered by OrbView-3 for oil and gas exploration, forestry management, and natural disaster assessment. New areas for high-resolution satellite imagery uses include real estate assessment, travel planning, news event coverage and even video game 3D fly-throughs.

Imagery Sales and Partnerships

GeoEye distributes its products directly to U.S. customers as well as through a worldwide network of value-added resellers, regional distributors and sales agents, and through select strategic partners. For additional information, please visit our website at:

[**www.geoeye.com**](http://www.geoeye.com)

GeoEye's headquarters are located in Dulles, Virginia. The company also operates sophisticated image processing facilities in Dulles, Thornton, Colorado and St. Louis, Missouri.

Introduction

The goal of our OrbView-3 Imagery Product Catalog is to provide our customers and reseller partners with all the information necessary to order products from GeoEye. Our initial product offering will later grow to include more product types and processing options, so customers are encouraged to visit our website for frequent updates to this catalog at:

www.geoeye.com

The pricing in this catalog is for a minimum area of 3 contiguous imagery scenes, or 192 km². Smaller areas can be ordered, down to a single scene size of 8 km x 8km, but we have not provided pricing for small areas in this catalog. Please call for a quote if you are interested in an area less than 192 km².

GeoEye will offer eight different OrbView-3 Imagery Products that vary in type and processing levels for geolocation accuracy. Initially, three product types are offered:

OrbView BASIC™

OrbView ORTHO™

OrbView GEO™

Five more product types will be introduced later in 2005 which include the following:

OrbView DEM™ (Digital Elevation Model)

OrbView DSM™ (Digital Surface Model)

OrbView Thematic Map™

OrbView Feature Map™

OrbView DPD™

Please refer to the “Product and Pricing” page for each product for more details on OrbView-3 product specifications, available processing options and targeted users. Information related to product licensing options, image support data, delivery schedules, pricing and other details are also found in the following sections.

Thank you for your interest in GeoEye and our broad portfolio of accurate and timely high-resolution OrbView-3 imagery products. We look forward to serving your product needs and welcome feedback on this catalog via email at:

customer.support@geoeye.com

OrbView-3 Sensor Information

HIGH-RESOLUTION IMAGERY IN REAL-TIME

GeoEye's OrbView-3 satellite is among the world's first commercial satellites to provide high-resolution imagery from space. OrbView-3 collects one-meter panchromatic (black and white) and four-meter multispectral (color) imagery at a swath width of 8 km. One-meter imagery enables the accurate viewing and mapping of houses, automobiles and aircraft, and makes it possible to create highly precise digital maps and three-dimensional fly-throughs. Four-meter multispectral imagery provides color and infrared information to further characterize cities, rural areas and undeveloped land from space.



- OrbView-3's imaging instrument provides both one-meter panchromatic image data and four-meter multispectral image data with a swath width of 8 km.
- The satellite revisits each location on Earth in less than three days with its ability to collect data up to 50 degrees off nadir.
- OrbView-3 imagery can be down linked in real-time to ground stations located around the world or stored on-board the spacecraft and down linked to GeoEye's U.S. ground stations.
- OrbView-3 can collect up to 21,000 km² per 10 minute pass.
- To access OrbView-3 imagery, customers can either purchase imagery products from our family of partners and distributors, or directly from our Customer Support Center.
- OrbView-3 provides imagery products useful for a variety of applications such as utilities, telecommunications, oil and gas, mapping, surveying, agriculture, forestry, and national security.

OrbView-3 Specifications		
Imaging Mode	Panchromatic	Multispectral
Spatial Resolution	1 meter	4 meter
Imaging Channels	1 channel	4 channels
Spectral Range	450-900 nm	450-520 nm (blue) 520-600 nm (green) 625-695 nm (red) 760-900 nm (near IR)
Swath Width	8 km	
Dynamic Range	11 bits per pixel	
Launch Date	June 26, 2003	
Life Cycle	Minimum 5 years	
Image Area	User Defined	
Revisit Time	Less than 3 days	
Orbital Altitude	470 km	
Nodal Crossing	10:30 A.M.	

OrbView-3 Products - An Overview

GeoEye's complete product offering includes seven different types, each with a variety of processing options that are described in the following sections. Our initial product offering consists of three product types, **OrbView BASIC™**, **OrbView GEO™**, and **OrbView ORTHO™**. A summary of the specifications is listed below.

*Archive images are 50% of the OrbView BASIC, GEO and ORTHO pricing. One scene (8km x 8km) minimum for archive products.

Product Offering Summary

Product Name	Configuration	Spectral Bands	GSD	Accuracy CE/LE 90%	Product Description
OrbView BASIC™	Express (Mono or Stereo)	Pan MSI	1.0m 4.0m	≤ 60m/60m ≤ 65m/65m	Radiometrically corrected data that includes satellite telemetry data (orbit and attitude data) and rational functions.
	Enhanced (Mono or Stereo)	Pan MSI	1.0m 4.0m	≤ 25m/44m 37m/51m	Includes satellite telemetry data, rational functions, post processed GPS data and sufficient metadata to allow rigorous photogrammetric triangulation.
	1:50K (Mono or Stereo)	Pan MSI	1.0m 4.0m	≤ 25m/8m ≤ 30m/12m	Accuracy equivalent to 1:50,000 scale map product. Geopositioned based on tie points.
	1:24K (Mono or Stereo)	Pan MSI	1.0m 4.0m	≤ 12m/5m ≤ 15m/10m	Accuracy equivalent to 1:24,000 scale map product. Geopositioned based on tie points and GCPs.
OrbView GEO™	Express	Pan	1.0m	≤ 60m/60m	Imagery resampled to a map projection, rectified using only spacecraft measurements.
		MSI	4.0m	≤ 65m/65m	
		Stereo (Pan)	1.0m	≤ 60m/60m	
	Enhanced	Pan	1.0m	≤ 25m/44m	Identical to the OrbView GEO Express product but also include positioning metadata derived from the refined GPS ephemeris and post processed attitude data.
		MSI	4.0m	≤ 37m/51m	
		Stereo (Pan)	1.0m	≤ 25m/44m	
	1:50K	Pan	1.0m	≤ 25m/8m	Geopositioned based on multiple images or GCPs before rectification.
		MSI	4.0m	≤ 30m/12m	
Stereo (Pan)		1.0m	≤ 25m/8m		
1:24K	Pan	1.0m	≤ 12m/5m	Geopositioned based on GCPs before rectification.	
	MSI	4.0m	≤ 15m/10m		
	Stereo (Pan)	1.0m	≤ 12m/5m		
OrbView ORTHO™	1:50K	Pan	1.0m	≤ 25m	Orthorectified imagery that meets the given geolocation accuracy specification.
		MSI	4.0m	≤ 30m	
	1:24K	Pan	1.0m	≤ 12m	Orthorectified imagery that meets the given geolocation accuracy specification.
		MSI	4.0m	≤ 15m	

Notes:

- GSD = Ground Sample Distance at nadir
- All OrbView ORTHO products greater than 8km x 8km are delivered as seamless mosaics.
- Seamless mosaic products are radiometrically feathered.
- GCP = Ground Control Points
- While the geocorrected image is presented in a map-like manner and is delivered with a reference point (corner coordinate) and spacing parameters, geographic coordinates should be derived from the image by using the supplied 3-D RFCs and not by using the corners and spacing. The corner coordinates and spacing should only be used for deriving gross geographical positions. In most cases, the accuracy of coordinates derived using the corner coordinates and spacing will not meet the product accuracies specified above. On the other hand, coordinates of points derived using the 3-D RFCs along with a stereo-mate or suitable elevation data will allow determination of latitude and longitude to the specified accuracies. In addition, using the RFCs, it is possible to improve accuracies and refine the geopositioning further by introducing additional images and/or control points in the solution.

GeoEye BASIC Products & Pricing

OrbView BASIC™ Imagery Products are typically used by customers with the ability to perform their own advanced image processing. OrbView BASIC™ Imagery Products allow the customer to orthorectify the BASIC imagery product and perform three dimensional feature extraction in addition to more routine image enhancements and processing. All OrbView BASIC™ Imagery Products are radiometrically corrected and include satellite projection information. Features for the entire OrbView BASIC™ Imagery Product portfolio are listed below. See page 9 for detailed descriptions of processing methods applied.

OrbView BASIC Express™

Includes real-time downlinked satellite telemetry data (orbit and attitude data) and rational function coefficients. This product is designed for customers who have imagery needs with quick delivery times and less accurate geometric requirements.

OrbView BASIC Enhanced™

Includes post-processed satellite telemetry data (orbit and attitude data) and rational function coefficients. This product serves as a baseline product for higher level products (e.g. orthorectified images) and includes sufficient metadata to allow customers to perform a rigorous photogrammetric triangulation.

OrbView BASIC 1:50k™

Accuracy equivalent to 1:50,000 scale map product (25m CE 90% for Pan product). Includes satellite and attitude ancillary data, and rational functions. The rational functions have been updated as a result of a geopositioning process with the full satellite model. The geopositioning is performed by measuring common points between two or more strips of imagery.

OrbView BASIC 1:24k™

Accuracy equivalent to 1:24,000 scale map product (12m CE 90% for Pan product). Includes satellite and attitude ancillary data, and rational function coefficients. The rational functions have been updated as a result of a geopositioning process. In this case, the bundle adjustment is performed by measuring common points between two or more strips of imagery, and by registering the imagery to ground control points. For image products outside the US and Canada, required ground control points are to be provided by the customer.

Product Name	Spectral Bands	GSD	CE/LE 90%	US & Canada	International
				Pricing	Pricing
				Per km²	Per km²
OrbView BASIC Express™	Panchromatic	1.0m	≤ 60m/60m	\$10.00	\$10.00
	Multispectral	4.0m	≤ 65m/65m	\$10.00	\$10.00
	Stereo (Pan)	1.0m	≤ 60m/60m	\$34.00	\$34.00
OrbView BASIC Enhanced™	Panchromatic	1.0m	≤ 25m/44m	\$10.00	\$10.00
	Multispectral	4.0m	≤ 37m/51m	\$10.00	\$10.00
	Stereo (Pan)	1.0m	≤ 25m/44m	\$34.00	\$34.00
OrbView BASIC 1:50k™	Panchromatic	1.0m	≤ 25m/8m	\$17.00	\$17.00
	Multispectral	4.0m	≤ 30m/12m	\$17.00	\$17.00
	Stereo (Pan)	1.0m	≤ 25m/8m	\$43.00	\$43.00
OrbView BASIC 1:24k™	Panchromatic	1.0m	≤ 12m/5m	\$19.00	\$19.00
	Multispectral	4.0m	≤ 15m/10m	\$19.00	\$19.00
	Stereo (Pan)	1.0m	≤ 12m/5m	\$48.00	\$48.00

OrbView GEO Products & Pricing

OrbView GEO products are intended for display on exploitation systems where hardware or software constraints do not allow for real-time image rectification/orientation and it is desired to view the image in map orientation. All GEO image products are delivered in a nominal map (north up) geometry and are referenced to the WGS-84 ellipsoid and datum. The image undergoes the same radiometric corrections as the BASIC products. In addition, the image is resampled to a local geographic projection at a nominal geodetic elevation. The GEO image products are single image products that are primarily differentiated by the accuracy that is attained when geopositioning using the supplied rational function projection models.

OrbView GEO Express

Intended to support users who have an immediate need for current imagery mainly for interpretation applications. These images are shipped with rational function coefficients (RFC) derived from the unrefined orbits of the satellite and therefore have less precise positioning accuracy. These images may also be used for geospatial product generation especially by customers with access to ground control points and geopositioning capability.

OrbView GEO Enhanced

Includes improved positioning capability derived from the refined GPS ephemeris and post processed attitude data. The enhanced RFCs allow significant improvement in geolocation accuracy for geospatial production, especially when no ground control information is available. This data set is primarily designed for customers with geopositioning capability based on RFC sensor modeling.

OrbView GEO 1:50K

Accuracy equivalent to 1:50,000 scale map product (25m CE 90% for Pan product; 30m CE 90% for MSI product), when utilizing the supplied RFCs. Image sets include RFCs that have been derived from the results of a block triangulation using tie points between strips of adjacent images. The availability of this product is dependent on adjacent image availability.

OrbView GEO 1:24K

Accuracy equivalent to 1:24,000 scale map product (12m CE 90% for Pan product; 15m CE 90% for MSI product), when utilizing the supplied RFCs. Includes RFCs that have been derived from the results of a block triangulation with apriori parameter weighting and ground control points.

NOTE: While the geocorrected image is presented in a map-like manner and is delivered with a reference point (corner coordinate) and spacing parameters, geographic coordinates should be derived from the image by using the supplied 3-D RFCs and not by using the corners and spacing. The corner coordinates and spacing should only be used for deriving gross geographical positions. In most cases, the accuracy of coordinates derived using the corner coordinates and spacing will not meet the product accuracies specified above. On the other hand, coordinates of points derived using the 3-D RFCs along with a stereo-mate or suitable elevation data will allow determination of latitude and longitude to the specified accuracies. In addition, using the RFCs, it is possible to improve accuracies and refine the geopositioning further by introducing additional images and/or control points in the solution.

Product Name	Spectral Bands	GSD	CE/LE 90%	US & Canada Pricing	International Pricing
				Per km ²	Per km ²
OrbView GEO Express™	Panchromatic	1.0m	≤ 60m/60m	\$10.00	\$10.00
	Multispectral	4.0m	≤ 65m/65m	\$10.00	\$10.00
	Stereo (Pan)	1.0m	≤ 60m/60m	\$34.00	\$34.00
OrbView GEO Enhanced™	Panchromatic	1.0m	≤ 25m/44m	\$10.00	\$10.00
	Multispectral	4.0m	≤ 37m/51m	\$10.00	\$10.00
	Stereo (Pan)	1.0m	≤ 25m/44m	\$34.00	\$34.00
OrbView GEO 1:50k™	Panchromatic	1.0m	≤ 25m/8m	\$17.00	\$17.00
	Multispectral	4.0m	≤ 30m/12m	\$17.00	\$17.00
	Stereo (Pan)	1.0m	≤ 25m/8m	\$43.00	\$43.00
OrbView GEO 1:24k™	Panchromatic	1.0m	≤ 12m/5m	\$19.00	\$19.00
	Multispectral	4.0m	≤ 15m/10m	\$19.00	\$19.00
	Stereo (Pan)	1.0m	≤ 12m/5m	\$48.00	\$48.00

OrbView ORTHO Products & Pricing

GeoEye’s OrbView ORTHO™ Imagery Products are typically used by customers who need a GIS-ready product with a high degree of geolocation accuracy, for applications such as urban planning. Users will be able to input any OrbView ORTHO™ imagery product directly into a GIS or Image Processing system as a base map or as a source for feature extraction. All OrbView ORTHO™ products are radiometrically and geometrically corrected, and have been corrected for the effects of systematic distortions, earth rotation and curvature effects, variations in orbital altitude and variations in the earth’s surface. OrbView ORTHO™ products are delivered in the UTM projection as the default, but can be provided in other projections as required by the customer. For image products outside the U.S. and Canada, required ground control points and elevation models are to be provided by the customer.

Additional features for each OrbView ORTHO™ data product are listed below. See page 9 for more detailed description of processing methods applied.

OrbView ORTHO 1:50k™ - Radiometrically and geometrically corrected.

One or more OrbView-3 images that have been orthorectified, radiometrically balanced, and mosaicked together. As part of the production process, the imagery undergoes a geopositioning process. The geopositioning is performed by measuring common points between two or more strips of imagery. This product is derived from OrbView BASIC 1:50k products.

OrbView ORTHO 1:24k™ - Radiometrically and geometrically corrected.

One or more OrbView-3 images that have been orthorectified, radiometrically balanced, and mosaicked together. As part of the production process, the imagery undergoes a geopositioning process. In this case, the geopositioning is performed by measuring common points between two or more strips of imagery, and by registering the imagery to ground control points. This product is derived from OrbView BASIC 1:24k products.

Product Name	Spectral Bands	GSD	CE 90%	US & Canada Pricing	International Pricing
				Per km2	Per km2
OrbView ORTHO 1:50k™	Panchromatic	1.0m	≤ 25m	\$20.00	\$20.00
	Multispectral	4.0m	≤ 30m	\$20.00	\$20.00
OrbView ORTHO 1:24k™	Panchromatic	1.0m	≤ 12m	\$24.00	\$24.00
	Multispectral	4.0m	≤ 18m	\$24.00	\$24.00

Product Processing Descriptions

Imagery Geopositioning Models

Different levels of geopositioning processing are applied to the entire OrbView product line. A brief description of the imagery Geopositioning Models used by GeoEye are detailed below:

Rational Function Model

The OrbView BASIC product series include a rational function based geopositioning model that corresponds to a specific geolocation accuracy. Note that the accuracy of any derived product is also dependent upon the customer's supplied terrain data and ground control for this product series. Rational Functions provide a replacement for the full satellite model making it easier for customers to use commercial software to obtain accurate geolocation information.

Full Satellite Model

The OrbView BASIC Enhanced™ product uses position information derived from post-processed satellite position information and Global Positioning System data. The additional data consists of satellite attitude and position information as a function of time. This data can be used to perform a rigorous photogrammetric triangulation. The OrbView BASIC 1:24k and 1:50k products have been geopositioned using the Full Satellite Model data. The location accuracy of orthorectified products will depend upon the accuracy of the customer supplied external data (terrain elevation data and control points), if applicable.

Image Processing

Dynamic Range Adjustment will be applied to 8 bit products, but will not be done for 11 bit products.

Resampling Kernel*: During geometric correction the input image is resampled to a regular output grid. The resampling kernel specifies how the input pixels are sampled, how many are used and how they are weighted. Options/default:

- Nearest-neighbor
- Bi-linear
- 4-point Cubic Convolution

*Resampling applies to ORTHO products only.

Modulation Transfer Function (MTF) Compensation: GeoEye will apply MTF compensation to the OrbView Basic Products.

Geospatial Solutions

Comprehensive Geospatial Solutions

GeoEye is one of the world's premier satellite and aerial image processing resources. For more than a decade, it has been pioneering and refining new digital image processing technologies and providing sophisticated image processing services, and standard and custom products for a diverse group of commercial and government customers and global resellers.

GeoEye Specializes In:

- Geopositioned Images
- Digital Elevation Data
- Orthorectified Images
- Seamless Image Mosaics
- Land Cover/Use Maps
- Pervious/Impervious Maps
- Data Fusion Mosaics
- Feature Maps
- Site Analysis Reports
- Custom Thematic Products

Highest Quality Standards

GeoEye uses exact quality specifications and industry standards to produce our imagery products. We provide high quality image processing services based on the world's most advanced digital image processing techniques. We provide affordable products by selecting the ideal combination of imagery sources and image processing to insure products satisfy your project requirements and your budget. GeoEye has agreements with a host of satellite and aerial imagery providers so we can guarantee complete and timely delivery of a broad range of products.

GeoEye Quality Management

GeoEye's Quality Management processes include Quality Control checks throughout the workflow and Quality Assurance reviews as part of the product generation process. GeoEye's emphasis on Quality Management is proven with a better than 99% first-time acceptance rate for products going back to 1997.

Geospatial Solutions

Information Products and Services

Multi-source Product Generation

GeoEye specializes in product generation from multiple image sources. We produce top quality products and offer value added services using OrbView-3, IKONOS, QuickBird, SPOT, LANDSAT, standard aerial mapping cameras and digital airborne imaging systems.

Geopositioning

GeoEye is a pioneer in the development of a truly simultaneous multi-sensor geopositioning capability, with the ability to geoposition sources such as IKONOS, QuickBird, SPOT, LANDSAT and aerial image data. GeoEye continues to incorporate other commercial satellite and airborne imagery sources into our Multi-Sensor Triangulation (MST) system.

Orthorectified Image Mosaics

GeoEye has a long history in the creation of large area seamless orthomosaics. GeoEye pioneered the use of commercial satellite imagery in the early 1990s with the prototyping and production of 1600 imagery tiles for the U.S. Air Force. GeoEye has successfully completed countrywide orthomosaic projects including an orthomosaic of SPOT panchromatic imagery for the entire country of Japan.

Elevation Models

GeoEye offers a comprehensive line of elevation model products, delivered as gridded products at post spacings of 100m, 30m or 10m. These products can be delivered either as a bald earth/terrain model or as a surface model. Surface model products include man-made features such as buildings, elevated road surfaces, etc.

Thematic Maps

GeoEye creates a number of thematic map products and services, including land cover and pervious / impervious products.

Details and Pricing

For further technical details and product pricing for geospatial products and services, please contact GeoEye Sales at (703) 480-7500 x7537 , or sales@geoeye.com.

Future Products

GeoEye will further expand its initial offering to include the following products later in 2006:

<i>Product Name</i>	<i>Configuration</i>	<i>Spectral Bands</i>	<i>GSD</i>	<i>CE/LE 90%</i>	<i>Product Description</i>
OrbView BASIC 1:12K™	1:12K	Pan MSI	1.0m 4.0m	≤ 10m/4m ≤ 12m/5m	Satellite projection imagery with both rational functions and satellite position and attitude ancillary metadata. Uses post processed GPS. Useful for making orthorectified imagery with user determined location accuracy. (Radiometrically corrected with satellite geometry). Geopositioned based on multiple look tie points and GCPs.
OrbView ORTHO 1:12K™	1:12K	Pan MSI	1.0m 4.0m	≤ 6m ≤ 10m	Orthorectified imagery that meets the stated geolocation accuracy specification.
OrbView Digital Elevation Model™ (DEM)	30m Post Spacing 10m Post Spacing		30m 10m	≤ 20m/10m ≤ 10m/5m	DEM with 30m post spacing. DEM with 10m post spacing.
OrbView Digital Surface Model™ (DSM)	100m Post Spacing 30m Post Spacing 10m Post Spacing		100m 30m 10m	≤ 30m/15m ≤ 20m/10m ≤ 10m/5m	DSM with 100m post spacing. DSM with 30m post spacing. DSM with 10m post spacing.
OrbView Thematic Map™	1:24K Veg Index 1:24K Biomass Map	MSI MSI	4m 4m	N/A N/A	Portrays NDVI as an indicator of green biomass.
OrbView Feature Map™	1:50K 1:24K 1:12K	N/A N/A N/A	N/A N/A N/A	≤ 30m/15m ≤ 20m/10m ≤ 10m/5m	Digital topographic vector data derived from OrbView imagery.

* Values given are nominal accuracies and do not include error due to terrain displacement.

Licensing

All OrbView imagery products are subject to the terms of an end-user license that will be provided to the user at the time of delivery. The following commercial licenses are currently available from GeoEye:

<i>License Type</i>	<i>Summary</i>
Single Organization User	Permits internal use of OrbView-3 imagery product within ONE organization as identified by the customer at the time of purchase*
Multiple Organization User	Permits internal use of OrbView-3 imagery product within TWO organizations as identified by the customer at the time of purchase*
Group I	Permits internal use of OrbView-3 imagery product within ONE group as identified by the customer at the time of purchase**
Group II	Permits internal use of OrbView-3 imagery product within TWO groups as identified by the customer at the time of purchase**
Group III	Permits internal use of OrbView-3 imagery product within ANY groups as identified by the customer at the time of purchase**

* Definition of Organization includes:

- One private individual
- One company or corporation but not subsidiaries
- One state or provincial agency
- All departments of one county government
- All departments of one city government
- One Non Governmental Organization (NGO) or Non Profit Organization (NPO)
- All departments within a single educational organization within a single country
- One International Agency (such as the United Nations) and the sponsoring host nation

** Definition of Groups include:

- Multiple private companies and/or corporations to include subsidiaries
- All state or provincial government agencies of a single state or province
- All local municipal government agencies (county and city) of single municipality
- Multiple Non Governmental Organizations (NGO) and/or Non Profit Organizations (NPO)
- All departments within a single educational organization within a single country
- Multiple International Agencies (such as the U.N.) and host nations

Contact Customer Support for information on our Government license levels (including DOD/Title 50, Federal Civil and Clearview).

NOTE: Government customers can buy commercial licenses.

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By mail: General Counsel
 GeoEye.
 21700 Atlantic Boulevard
 Dulles, Virginia 20166

By phone: (703) 480-7500

By email: customer.support@geoeye.com

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Warranty Information and Notices

Warranty Information

GeoEye warrants that the GeoEye product will, for 30 days from the date of shipment, be free from defects in media and substantially conform to GeoEye's specifications when used on appropriate computer hardware.

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In agreement with GeoEye licenses, customers are permitted to:

- Use the imagery products on computer systems owned or leased by the customer at the site that is licensed to use the products.
- Incorporate any OrbView Data or representation thereof within any data, documents or products, provided that such data, documents or products are used solely within the customer's enterprise.
- Make one copy of the product for the customer's internal backup purposes.
- Modify the imagery product through image processing techniques or combining it with additional data for internal use.
- Produce and distribute derivative data, for example, vector or classification information that cannot be reverse engineered to the source imagery.
- Post a sub-sampled original imagery product in JPEG format on an internet site provided that visible credit is provided as follows: "Includes material ©2006 GeoEye. All rights reserved."

Prohibited Uses

In agreement with GeoEye licenses, customers are prohibited from:

- Copying or reproducing imagery products other than as described in the permitted uses.
- Re-use, re-sale, or transfer of GeoEye imagery products for any purpose is strictly prohibited without permission from GeoEye.
- Altering or removing any copyright notice from an GeoEye product.

Imagery Tasking Options and Delivery Schedules

Minimum Order Size

The minimum order size is currently 3 contiguous imagery scenes, or 192 km².

Cloud Cover Specification

All imagery products, unless otherwise mutually agreed upon between the customer and GeoEye will contain not greater than 20 percent cloud cover.

Acquisition Angle

OrbView-3 has the ability to collect imagery at up to 50 degrees off-nadir. The acquisition angle at which an image is collected will have an impact on the GSD, the look of the image, and the re-visit time, which in turn may impact the delivery schedule. The following table describes the acquisition angle ranges and their impact on GSD and delivery. The acquisition angle has no impact on price.

<i>Acquisition Angle</i>	<i>GSD</i>	<i>Impact to Delivery Schedule</i>
0° - 10°	~ 1.0m	Increases ¹ : Greatest time to collect a region
10° - 30°	~ 1.03m - ~1.3m	Decreases ¹ : Average time to collect a region
30° - 45°	~1.3m - 1.82m	Decreases ¹ : Less time to collect a region
50°	~2.2m	Decreases ¹ : Least time to collect a region

¹Contact Customer Support for collection estimates and delivery schedules.

Tasking Priority

GeoEye will initially offer only Routine collection. Priority and Premium tasking options will be introduced later in 2005.

Delivery Schedule

Depending upon order attributes such as the product type, area of interest, collection parameters, weather conditions, processing method etc., delivery times will vary.

Ordering Information

How to Order

Imagery product orders may be placed by calling GeoEye's customer support representatives or sales team. Steps in the ordering process for newly tasked imagery are as follows:

1. Contact GeoEye Customer Support or Sales.
2. Provide details of your project. Refer to the sample order form on page 19 and 20 for information that will be required to place an order.
3. Based on the information you provide, our Customer Support team will perform a feasibility analysis and provide a proposal with a price quote for your order.
4. If the proposal is acceptable, then a 25% deposit is required to initiate the order process.

Payment

All payments must be made in US Dollars. GeoEye accepts the following forms of payment:

- Credit Card (VISA, MasterCard, and American Express,
- Approved Purchase Order
- Wire Transfer

Sales tax is applicable in Missouri and Virginia.

Warranty

GeoEye warrants that its products will, for 30 days from the date of shipment, be free from defects in media and substantially conform to GeoEye's specifications when used on appropriate computer hardware.

Delivery

Standard shipping is by ground courier at a flat fee of \$25 per order (or partial shipment) in the US. Shipments using ground courier to the East Coast are generally received in 1 to 2 days; shipments to the West Coast can take between 2 to 5 days. Priority shipping provides overnight

delivery (from the day of processing) to the customer at a flat fee of \$45 per order (or partial shipment). International shipping fee is \$60 per order (or partial shipment). Customer Support will advise you as to when a product will be processed, and how soon it can be delivered.

Cancellation Policy

GeoEye believes in successful relationships for ultimate satisfaction of our customers, especially in the quality of our products and timeliness of deliveries. To ensure this, it is critical that we operate the satellite with these goals in mind and avoid any unused satellite time. To this end, a cancellation fee will be applicable to orders that are cancelled after the order has been committed. A detailed cancellation schedule will be included with all final proposals.

Media

GeoEye products are delivered on CD, DVD or electronically via FTP. Please specify media preference when placing an order.

Contact Information

Customer Support:

Phone: 1-703-480-7539
Fax: 1-703-450-9570
Email: customer.support@geoeye.com

Sales:

Phone: 1-703-480-7500 (International)
Fax: 1-703-480-7544
Email: info@geoeye.com

Frequently Asked Questions

OrbView-3 Product Information

Where can I find out more information about GeoEye and the OrbView-3 satellite and products?

All public information about GeoEye and our satellites can be found on our website at www.geoeye.com. We invite you to check back periodically, as additional information and updates become available. If you have any questions or concerns that are not addressed on our website, please feel free to contact GeoEye Customer Support at customer.support@geoeye.com.

When will additional OrbView-3 products be available from GeoEye?

Additional products will be released later in 2005. For more information about those products, see the "Future OrbView Products" on Page 10 of the Product Catalog.

When will archive imagery products be available and how can I access them?

GeoEye will launch a searchable online data archive of OrbView-3 high-resolution imagery in the future. Much of our newly tasked data is currently being used to build this archive. Until this becomes available, please contact Customer Support at customer.support@geoeye.com to search for archive data. Please check our website for updates on our upcoming OrbView-3 On-line Data Archive.

Do you have sample data available for my area of interest?

Sample imagery products (JPEG files) from our OrbView-3 satellite will be available for download on our website. Unfortunately, we are not able to take requests for specific areas for sample images or products.

What formats are OrbView-3 imagery products delivered in?

The default format for our OrbView-3 products is 8-bit TIFF, however our products are also available in 16-bit Tiff, 8-bit GeoTiff, 16-bit GeoTiff, 8-bit NITF 2.0 and 2.1, and 16-bit NITF 2.0 and 2.1 per the customer's request.

In what projection and datum will OrbView-3 data be delivered?

We offer all common projections including Universal Transverse Mercator (default), State Plane and Lambert Conformal Conic. Datums include WGS84 (default), WGS72 and NAD83. Please contact Customer Support at customer.support@geoeye.com if you are interested in other projections and/or datums.

What is the minimum order size for new tasking?

The minimum order size for a new collection is 192km² (3 contiguous scenes) for OrbView BASIC, OrbView GEO and OrbView ORTHO products. For a smaller area, please call or email us for a custom quote. We can be reached at customer.support@geoeye.com and +1.703.480.7539.

What is the maximum product (tile) size?

The largest single standard product (tile) size offered at this time is 28.8 km x 28.8 km (829.44 km²). Orders that require coverage over large areas will be broken into our standard product (tile) sizes and delivered on separate media.

Frequently Asked Questions (continued)

How do I order products from GeoEye if I am an International customer?

GeoEye has established a network of international partners for our customers outside of the United States and Canada. Please check our website at <http://www.geoeye.com> for the appropriate partner and contact information.

If you cannot locate a GeoEye International Partner for your area, please contact GeoEye Customer Support at customer.support@geoeye.com for assistance.

Ordering OrbView-3 Products

What information do I need to provide GeoEye to place an order for OrbView-3 products?

Please contact GeoEye Customer Support at customer.support@geoeye.com with the following information to initiate the ordering process:

- contact information
- intended application
- target area and coordinates
- timeframe for acquisition
- product type (accuracy)
- imagery parameters
- delivery option
- payment method

Or contact Customer Support by phone at 703.480.7539.

How do I know that the region of interest I ordered can be collected?

Once the product type and parameters are selected by the customer, the order is submitted for collection feasibility. This analysis considers various factors including climatology, time of year, production capacity and competing orders for your area of interest. Based on this analysis, a proposal will be generated and submitted for your approval.

Can I choose a tasking priority? If so, what are my options?

GeoEye will initially offer only Routine collection. Priority and Premium tasking options will be introduced later in 2006.

What is your order cancellation policy?

GeoEye believes in successful relationships for ultimate satisfaction of our customers, especially in the quality of our products and timeliness of deliveries. To ensure this, it is critical that we operate the satellite with these goals in mind and avoid any unused satellite time. To this end, a cancellation fee will be applicable to orders that are cancelled after the order has been started. A detailed cancellation schedule will be included with all final proposals.

How does the acquisition angle affect the delivery time of my imagery product?

The amount of time it will take OrbView-3 to revisit your area of interest is dependent on the size of the area and your specified maximum acquisition angle for collection. Generally, the revisit time for an acquisition angle greater than 40 degrees is less than 3 days. The revisit time for 0 (nadir) to 15 degrees is 12-30 days, depending on the latitude and proximity to the equator of your target area. See

Frequently Asked Questions (continued)

page 17 for details.

What is the product delivery time after collection is complete?

Product delivery time is determined by many factors such as the product type, area of interest, collection parameters, weather conditions, processing method and type of media. As a result, estimated delivery times are provided once we have the necessary parameters and have completed a collection feasibility.

What is your policy on clouds in the imagery products?

GeoEye's standard cloud coverage policy is an approximate maximum of 20% clouds. GeoEye uses an automated process to calculate the percent cloud cover of each image collected. Cloud Cover percentages may vary by +/- 5%. For example, 15% cloud cover may range from 10% to 20% of the total number of pixels being cloudy.

What will be delivered with my OrbView-3 imagery products?

In addition to the image data, all products will include the following:

- metadata
- an overview map of the collection area
- satellite information at the time of capture, including sensor attitude and position information
- a reduced resolution TIFF of the image
- a "readme" text file describing all of the included files
- licensing information

What type of software do I need to view OrbView-3 imagery products?

OrbView-3 data is delivered in GeoTIFF or TIFF format by default, which may be viewed in any graphics software that supports these file formats. In order to use the image product for further analysis and utilize the geographic information imbedded in the image product, a GIS or image processing software package may be required.

Is technical support available from GeoEye once I receive my order?

GeoEye has a technical support team dedicated to troubleshooting and resolving any data issues. They can be reached at customer.support@geoeye.com.



21700 Atlantic Blvd.
Dulles, VA 20166
703.480.7500

info@geoeye.com
www.geoeye.com

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