

ViewTec Inc.

TerrainView Product Overview

	TerrainView	TerrainView-Globe Professional	TerrainView-Globe Navigator	TerrainView-Globe Enterprise	TerrainView-Video	TerrainView-Remote Control	TerrainView-CMAX
DATA IMPORT							
Main Features							
Import of image, elevation, vector and annotation data	x	x		x			
Simultaneous import of multiple data sets	x	x		x			
"File per tile" storage mode for large datasets	x	x		x			
Metadata editor	x	x		x			
Specification of the projection type	x	x		x			
Texture compression specification	x	x		x			
Tile size specification	x	x		x			
Mask value and color definition	x	x		x			
TERRAIN RASTER DATA							
Image Formats							
ERMapper Compressed Wavelets (.ecw)		x		x			
TIFF / GeoTIFF (.tif)		x		x			
Erdas Imagine (.img)		x		x			
JPEG2000 (.jp2, .j2k)		x		x			
JPEG JFIF (.jpg)		x		x			
Multi-resolution Seamless Image Database (MrSID)		x		x			
Terrain Formats							
Arc/Info ASCII Grid		x		x			
Arc/Info Binary Grid (.adf)		x		x			
USGS SDTS DEM (*CATD.DDF)		x		x			
TIFF / GeoTIFF (.tif)		x		x			
Military Elevation Data (.dt0, .dt1)		x		x			
USGS ASCII DEM (.dem)		x		x			
Atlantis MFF		x		x			
VTP Binary Terrain Format (.bt)		x		x			
Characteristics							
All common projection systems supported		x		x			
Supported spatial resolution		unlimited	unlimited	unlimited			
Automatic level-of-detail generation		x	x	x			
Massive 3D geodata streaming		x	x	x			
VECTOR & ANNOTATION DATA							
Vector & Annotation Formats							
Arc/Info Binary Coverage		x		x			
ESRI Shapefile		x		x			
Mapinfo File		x		x			
Microstation DGN		x		x			
OGDI Vectors		x		x			
SDTS		x		x			
UK .NTF		x		x			
U.S. Census TIGER/Line		x		x			



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Number of vector elements supported		unlimited	unlimited	unlimited			
Number of annotations elements supported		unlimited	unlimited	unlimited			
Annotations in different fonts, colours and formats		x	x	x			
Annotations in semi-transparent mode		x	x	x			
3D OBJECTS AND 3D TERRAIN FORMATS							
3D Formats							
Autodesk 3D Studio Max 6,7,8,9, Autodesk Viz 2007 & Viz 2008 (Plugin)	x	x	x	x			
Collada (dae)	x	x	x	x			
Nemetschek Allplan (3ds)	x	x	x	x			
Multigen OpenFlight (flt)	x	x	x	x			
ViewTec (ivc)	x	x	x	x			
Openscenegraph (ive)	x	x	x	x			
BAE SocetSet / Socet GXP (flt)	x	x	x	x			
CyberCity (flt/ivc)	x	x	x	x			
VRML 2 (wrl)	x	x	x	x			
Alias/Wavefront (obj)	x	x	x	x			
NewTek LightWave 3D (lwo)	x	x	x	x			
Terrex Terrapage (txp)							
NewTek LightWave 3D (lwo)							
IVC Converter that converts 3D models into encrypted and optimized formats	x	x	x	x			
Characteristics							
Open and position 3D model interactively or with georeferencing	x	x	x	x			
REMOTE CONTROL							
Main Features							
Manipulation of POIs and 3D objects over a network interface and TCP/IP connection						x	
Realtime 3D geolocation, positioning and tracking of dynamic features on the ground or in the air						x	
GPS global positioning system support						x	
Remote creation, deletion and transformation of entities						x	
Remote camera and frustum positioning						x	
Remote video stream positioning and projection						x	
Geolocated realtime video stream rendering and visualization						x	
Support of different remote sensing systems and data						x	
Simulation interface						x	x
Blackbox support and rendering of flight data						x	
Realtime POI representation as text, billboard images or hyperlinks						x	
Platform independent XMLRPC remote procedure calling interface						x	
Host settings and configuration documentation						x	
Client setup and application development documentation						x	
Remote Control workflow documentation						x	
Remote Control procedures description						x	
Remote Control is used with TerrainView and TerrainView-Globe	x	x	x	x		x	



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PRODUCT FEATURES

Geodata Handling

Unlimited import of imagery, elevation, vector and annotation data	x			x		
Online 3D geodata streaming	x	x		x		
Customizable 3D geodata configuration	x	x		x		
Customizable geodata overlay	x	x		x		
Customizable geodata fade in/fade out while zooming	x	x		x		
Image overlay and opacity control	x	x		x		
Online 3D geodata portal, preview and ordering function	x	x		x		



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Interactive Navigation							
2D map navigation support	x	x	x	x			
Interactive definition of azimuth and elevation	x	x	x	x			
Manual entry of 3D coordinates	x	x	x	x			
Selection of local coordinate system	x	x	x	x			
Interactive speed and speedometer settings	x	x	x	x			
Optimized flight navigation or view mode	x	x	x	x			
Spherical navigation mode		x	x	x			
Object exploration mode	x	x	x	x			
Constant above ground level (AGL) or low level navigation mode	x	x	x	x			
Configurable joystick navigation mode - back and forth, vertical, rotate, rocket mode, clamp pitch	x	x	x	x			
Terrain collision control	x	x	x	x			
Flight Path Generation							
Flight path Tab and Menu	x	x	x	x			
Professional camera and flight path generation	x	x	x	x			
Interactive, intuitive and multiple flight and camera path definition	x	x	x	x			
Control point at camera position	x	x	x	x			
Ground camera path option	x	x	x	x			
Flight path and control point edition	x	x	x	x			
Cubic spline interpolation	x	x	x	x			
Different vector interpolation models	x	x	x	x			
Different orientation interpolation and viewing mode	x	x	x	x			
Scale setting for path smoothing	x	x	x	x			
Camera attachment	x	x	x	x			
Entity selection and attachment	x	x	x	x			
3D model import and attachment	x	x	x	x			
Internal object orientation and scaling	x	x	x	x			
Flight path groupings	x	x	x	x			
Simultaneous use of different flight paths	x	x	x	x			
Attached camera and objects on different flight paths	x	x	x	x			
Temporal and spatial offset definition	x	x	x	x			
Time delayed object following	x	x	x	x			
"Look at" mode	x	x	x	x			
Looped path	x	x	x	x			
Flight speed control	x	x	x	x			
Forward & backward viewing mode, rewind, pause, stop function	x	x	x	x			
Flight path configuration storage	x	x	x	x			
Flight distance information	x	x	x	x			
Flight and camera path based video generation	x	x	x	x	x		



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Panorama, Multiscreen & Immersive Visioning

Seamless multi-channel, multi-projections and visualizations on multiple screens, walls and CAVE							x
For realtime applications, simulations and training systems							x
Precise software genlock							x
Camera synchronization on all participating computers							x
Multicast technology support							x
Control of all display parameters by CMAX user interface							x
Userfriendly viewport setup and configuration							x
Scalability with minimal performance decrease							x
TerrainView-CMAX runs on TerrainView and TerrainView-Globe	x	x	x	x			x
Comprehensive CMAX documentation							x

Professional Video Generation

Support of high-definition (HD) video formats					x		
AVI movie output more than 640x480 pixels					x		
AVI movie output supported	x	x	x	x	x		
Video recording option 3D window or entire screen	x	x	x	x	x		
Different frame rate specifications supported	x	x	x	x	x		
Flight-/camera path based video generation	x	x	x	x	x		
Interactive video production	x	x	x	x	x		
Video generation on the basis of logged information	x	x	x	x	x		
Standard video codecs supported	x	x	x	x	x		
Video compression manipulated by installed video codec	x	x	x	x	x		
Preset video resolutions	x	x	x	x	x		
Interactive definition of video resolution	x	x	x	x	x		
Resolution limited by current screen resolution	x	x	x	x	x		
TerrainView-Video runs on TerrainView and TerrainView-Globe	x	x	x	x	x		
Video documentation	x	x	x	x	x		

Professional Print Products

User defined output format	x	x	x	x			
Unlimited resolution (e.g. 16'000 x 9'000)	x	x	x	x			
Automatic frame ratio calculation	x	x	x	x			
Viewing window size by default	x	x	x	x			
Interactive LOD bias definition	x	x	x	x			
Delay definition allowing full resolution terrain loading	x	x	x	x			

Point of Interest

Terrain model annotation	x	x	x	x			
POIs with text, textured billboards, images, brand marks, logos, 3D objects, hyperlinks and multimedia content	x	x	x	x			
Group definition	x	x	x	x			
POI name and font editor	x	x	x	x			
POI opacity and visibility	x	x	x	x			
Capture of camera settings for POI viewing	x	x	x	x			
POI names support International characters	x	x	x	x			
POI line to object or ground	x	x	x	x			



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Environmental Conditions

Various weather and lighting conditions	x	x	x	x			
Exact date and time of day definition with changing lighting conditions	x	x	x	x			
Daylight saving time and time acceleration factor	x	x	x	x			
Skybox, sky background and complex gradient based coloring	x	x	x	x			
Distant haze, interpolation type, viewing distance and color	x	x	x	x			
Volumetric clouds definition	x	x	x	x			
Predefined cloud types and cloud layer intervals	x	x	x	x			
Interactive cloud parameter, cloud coverage and density definition	x	x	x	x			
Rain and rain intensity simulation	x	x	x	x			
Snow and snow intensity simulation	x	x	x	x			
Wind with interactive wind speed and wind direction settings	x	x	x	x			

Measurements

Interactive measurement point insertion	x	x	x	x			
Measurement point editor	x	x	x	x			
Point placement through manual point coordinates entry	x	x	x	x			
Distance measurement	x	x	x	x			
Angle measurement	x	x	x	x			
Relief profile measurement	x	x	x	x			
Area measurement	x	x	x	x			
3D coordinates at cursor location	x	x	x	x			
Distance from camera to cursor ground location	x	x	x	x			
Flight path length information	x	x	x	x			
Multiple measurements and measurement groupings	x	x	x	x			

Plan Blender

Import of flat image or plan	x	x	x	x			
Plan manipulations - rotate, mirror, move, scale, toggle on/off	x	x	x	x			
Alpha value slider	x	x	x	x			
Nadir viewing option	x	x	x	x			

Model Fading

Fading one object into the other	x	x	x	x			
Bringing up a new object / make an existing object disappear	x	x	x	x			
Single or list of object selection from the Entity area	x	x	x	x			
Fading time for individual objects and group of objects	x	x	x	x			
Object window for object management, ranking and void entry	x	x	x	x			
Fading animation and object appearance according to object fading time	x	x	x	x			