



DATASHEET

LizardTech® GeoExpress® Your Go-To Image Manipulation and Compression Software – Now Four Times Faster

With  MG4

LizardTech GeoExpress software reduces storage costs by compressing images to less than five percent of their original size using either the industry-standard MrSID® image compression format – including MrSID Generation 4 (MG4™) – or the ISO standard JPEG 2000 format, all while retaining the visual quality of the originals.

How Can You Use GeoExpress?

Save Time Creating and Viewing Imagery

GeoExpress software enables you to save time creating or repurposing imagery for new projects by offering powerful, fast, and easy-to-use image editing and manipulation tools such as reprojection, color balancing, mosaicking, cropping, despeckling and more. And MrSID and JPEG 2000 images load faster in applications than other file types, so your users save time, too.

Encode with Confidence

GeoExpress software takes the guesswork out of generating compressed imagery conforming to government requirements for ISO and other standards, including Department of Defense and NGA JPEG 2000 encoding specifications (such as NPJE and EPJE) and long-time industry-standard MrSID. Predefined and user-defined encoding profiles ensure that your organization delivers the same high-quality imagery, every time.

Tailor Your Imagery to Every Need

Make existing imagery more useful with the powerful suite of editing and manipulation tools found in GeoExpress. Take advantage of mosaicking, cropping, color balancing, reprojection, and

more. If you don't need image compression or if you already have compression capability but want to improve your image processing workflow, these image editing tools are available separately in GeoExpress Tools.

Ensure Interoperability with Geospatial Applications

GeoExpress is designed for interoperability with the widest range of leading geospatial applications, including native support in applications like Esri, Autodesk, Intergraph, MapInfo, Bentley, and GE/Smallworld, to name a few, enabling your users to view MrSID and JPEG 2000 imagery using their existing software.

Streamlined User Interface

GeoExpress is no longer a jumble of tabs and buttons to choose from. You can now view and run all jobs from one simple job list—just drag your images into the job list to add them and select the image compression and manipulation operations that you want to perform. If you want to minimize lengthy encoding times, you don't have to remember which operations can use the update and optimization features in GeoExpress. Thanks

to the new *Intelligent Encoding* feature, GeoExpress 9 automatically uses these features whenever possible to save you time and give you the fastest performance.

Faster Than Ever Before

GeoExpress 9 is four times faster than prior versions and supports distributing multiple jobs across multiple cores. GeoExpress also supports 64-bit operating systems so that you can take advantage of more memory to create mosaics of imagery multiple terabytes in size. With GeoExpress software you can encode your MrSID imagery faster than ever before.

Customize Your Multispectral Imagery

GeoExpress supports **MG4**, the latest version of the industry standard geospatial image format. With **MG4**'s support for compressing multispectral and hyperspectral data, you can use GeoExpress software to compress up to 255 bands of geospatial data to MrSID, select any subset of output bands from multispectral source images, and specify an individual compression ratio for each band or groups of bands. Whether you need to compress 4-band color images containing an infrared chan-

How Can You Use GeoExpress? Continued

nel, take advantage of the latest 8-band satellite imagery, or compress high-resolution RGB datasets, GeoExpress has you covered.

Integrate with Express Server®

GeoExpress software enables you to export imagery directly to LizardTech Express Server image-serving software.* You can select Express Server as the output destination for newly encoded imagery, or you can publish your existing MrSID and JPEG 2000 images to your Express Server without having to re-encode them. A few clicks move your imagery from editing in GeoExpress to distribution via Express Server to WMS, ArcGIS Server or web applications. This improved interoperability makes GeoExpress the ideal command center for your real-world geospatial imaging workflows.

Take Advantage of Improved Mosaicking Options

Previously, mosaics were either quick to create but slower for users to open, or mosaics took a long time to create but opened rapidly in viewing applications. With GeoExpress, you can combine thousands of MrSID files without spending valuable time reprocessing them. **MG4** mosaics open as quickly as a single image, so you save time creating images and your users save time viewing them.

Reproject Imagery

Reproject your imagery from one coordinate reference system to another and output directly to MrSID or JPEG 2000 format—all using the familiar GeoExpress workflow. You don't need to revert to TIFF or other raw formats in order to reproject your imagery, so you can save time and storage space by keeping your imagery compressed. Addition-

ally, save time by storing and sharing custom coordinate reference systems. The “recently used” functionality in GeoExpress makes it easier to select the coordinate reference systems that you use most often, and you can automatically generate AUX files to ensure your image metadata can be read in Esri applications.

Color Balance Images and Mosaics

Make your imagery more eye-pleasing and easy-to-use by color balancing single images or mosaics. Manually or automatically adjust brightness, contrast and gamma to correct uniform imbalances and make one image more like its neighbors. For non-uniform imbalances like tilt, seam lines and vignetting, GeoExpress software enables you to set automatic corrections.

Use Alpha Channels for Transparency

The MrSID format supports alpha channels so that you can add true transparency to your geospatial imagery. Now you can make portions of your image transparent or opaque so you have greater control over how your imagery looks, even at high compression ratios. You can also use alpha channels on existing compressed images to remove compression artifacts known as speckling. Images with alpha channels will seamlessly combine into artifact-free mosaics for accurate analysis and visualization in your favorite GIS applications.

Add and Edit Custom Metadata

GeoExpress software offers improved metadata editing tools so you can add and edit custom metadata tags in MrSID and JPEG 2000 imagery. Change the coordinate reference system of your imagery without having to re-encode, and use your custom metadata tags to build flexible and

robust web applications that can be served with LizardTech Express Server software.

More Editing Tools

Use the export tools in GeoExpress to demosaic or “tile out” your imagery so that it fits better on CDs or DVDs. There is no need to learn command line tools—simply draw a rectangle to decode all or part of your MrSID or JPEG 2000 imagery to GeoTIFF directly from the GeoExpress graphical user interface. Take advantage of the GeoExpress watermarking tool to add your own watermark to compressed imagery, and then quickly export your imagery to multiple image formats for easy distribution.

Take Advantage of Flexible Licensing

Share image compression and editing tools across your organization with GeoExpress software. Floating licenses combined with powerful wavelet-based image compression and a robust suite of image manipulation tools, enable you to maximize value from your application licensing budget while increasing your organization's productivity both on the desktop and in the field. When users travel from one office to another, they can check out “commuter” licenses to work offline. Administrators can use GeoExpress to control how many floating licenses are available as commuter licenses.

Learn more about GeoExpress 9 at www.lizardtech.com/products/geo

System Recommendations

*Express Server 6 or later

Windows

- Windows Server 2012
- Windows 8
- Windows 7
- Windows Server 2008 R2
- Windows Server 2008 Service Pack 2
- Windows Vista Service Pack 2
- Windows Server 2003 R2
- Windows Server 2003 Service Pack 2
- Windows XP Service Pack 3 or Service Pack 2

Linux

- Red Hat Enterprise Linux 6
- Red Hat Enterprise Linux 5

Solaris

- Solaris 10
- Solaris 9

All Platforms

- 2.5 GHz Quad Core CPU
- 4 GB RAM
- 200 MB of disk space for installation and additional space for images

Purchase Options

GeoExpress 9 Standard Edition

- Level 1 - 100 GB of annual encoding
- Level 2 - 500 GB of annual encoding
- Level 3 - 1 TB of annual encoding

GeoExpress 9 Unlimited Edition

- Unlimited MrSID and JPEG 2000 encoding and

powerful image manipulation tools

GeoExpress 9 Tools Edition

- Unlimited manipulation of MrSID and JPEG 2000 images

GeoExpress 9 Remote Edition

- Unlimited MrSID and JPEG 2000 encoding and manipulation in a Terminal Services or Citrix environment

Floating License

LizardTech's optional Floating License System allows you to deploy GeoExpress on workstations throughout your organization with a flexible, token-based licensing system. The “commuter license” now enables you to work offline.