LandScape is an essential software tool for editing large terrain point sets such as LiDAR files. It provides an advanced, efficient, fast, and easy-to-understand portal into the world of 3-dimensional LiDAR points. LandScape is equipped with utilities for editing, modifying, and classifying 3D points (point clouds) and for generating new data based on the points. LandScape’s tools can be configured by the user to enhance understanding of the data view.

The editing tools in LandScape allow easy modification of point cloud data including a single point, all points in a project, or a selection built using LandScape’s sophisticated filtering tools. LandScape includes the DAT/EM Drawing Tools, a simple built-in vector editor which may be used to collect and save vector features in a variety of formats. For more advanced digitizing tools, one or more companion DAT/EM Capture™ modules may be added.

LandScape may optionally integrate with Summit Evolution™ to display the point cloud superimposed over stereo imagery. Use the Summit Evolution cursor to select and edit points and collect vector data.

Features

- View points in perspective stereo with many coloring and viewing options. Roam, zoom, pan, and rotate from any angle or distance.
- Colorize the view of the point cloud by elevation, return, flight line, intensity, RGB color (orthophoto), or classification.
- No limit to the number of simultaneous input files.
- Tools for controlling the detail on display.
- Full 3D mouse support for navigating, selecting, and digitizing.
- Support for mouse button programming and macro creation using DAT/EM Button Manager.
- Edit and reclassify points. Output the revised point set to a new file.
- Digitize new 3D vectors such as breaklines based on the points.
- View existing .dxf, .dwg, .dgn, or .shp vector files with the points.
- Draw and edit objects with the built-in vector editor, DAT/EM Drawing Tools.
- Optionally, digitize directly into AutoCAD®, MicroStation®, or ArcGIS® using DAT/EM Capture.
- Superimpose existing objects directly from AutoCAD, MicroStation, or ArcGIS.
- Fully integrated with Summit Evolution, DAT/EM’s world-class digital photogrammetric workstation.
- Superimpose LandScape’s points on a Summit stereo model for direct validation of work.

Several tools for working with large point datasets are incorporated in LandScape and are also available with a Summit Evolution Professional installation:

- **Generate LiDAR Frame**
  Generates images and their stereo mates from point data files, enabling 3D stereoscopic imaging.
- **Generate Stereo Mate**
  Generates stereo mates (.tif) from existing LiDAR images (i.e. “LiDARgrammetry”)
- **Point Translator**
  Management tool to combine, extract, and merge point files in a wide variety of formats, spacings, and orientations.
- **Superimposition Tool**
  Load vector and orthophoto files to view together with the points in LandScape.
- **Brush Z Edith Tool**
  An interactive point edit tool for smoothing the points inside the Brush Size circle by using point elevations surrounding the cursor.