3D Radar

Examiner

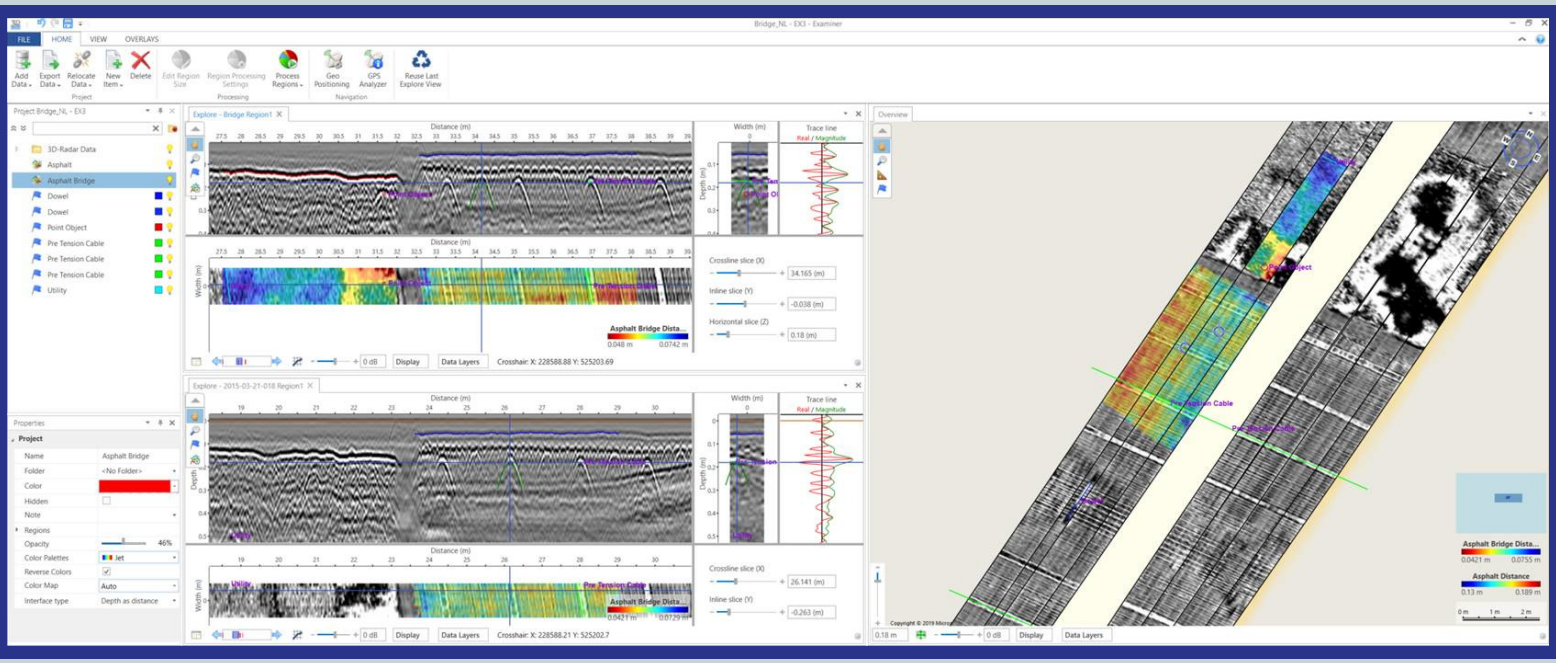
3D GPR DATA PROCESSING AND ANALYSIS SOFTWARE

Examiner™ software revolutionizes the processing and analysis of three-dimensional Ground Penetrating Radar (GPR) data. An intuitive and user-friendly environment for visualization, analysis, interpretation and creation of exports, it is specifically designed for working with large 3D GPR projects and dramatically reduces the time required for extracting information from the data.

Processing & visualization

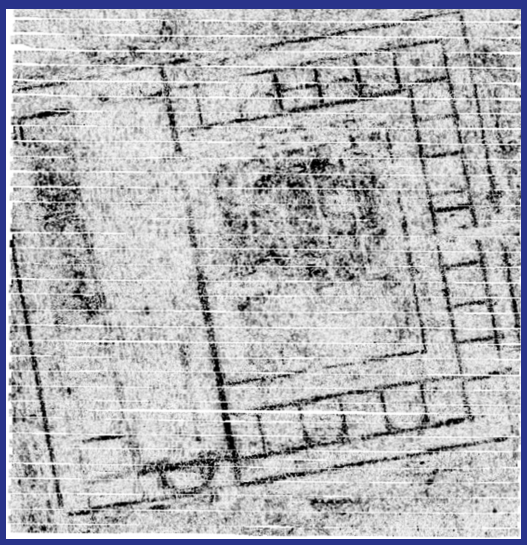
Examiner™ seamlessly handles and displays large projects with multiple 3D GPR data files. A three-slice view allows to easily navigate within the data volumes for detailed analysis. Users are offered a full resolution presentation to pan, zoom and deep dive the data with real-time rendering. The data is displayed and traversed for an initial review and quick identification of subsurface areas that require further investigation. Analysis and interpretation can be performed in parallel on multiple three-slice views and in the georeferenced view with full synchronization, so that features can be identified and traced throughout the entire set of data. Data processing in Examiner™ cannot be easier, thanks to a dedicated preview window and to the possibility to create, save and share processing templates.

- **Fastest 3D GPR processing tool on the market**
- **No limitations on project and data set size**
- **Broad range of export formats**
- **Synchronize GPR data with field recorded video**
- **3-dimensional interface tracing and annotation functionality**
- **Import and process data automatically as they are being collected**
- **Fully documented Software Development Kit for customizing tools and visualization**



Map overlays

Examiner™ features a map view showing georeferenced depth slices. The near-reality display makes it easier to interpret features across the data. Data georeferencing is based on advanced filtering of the GPS information to ensure the best possible accuracy. Examiner™ provides global map and satellite imagery through the integrated map service from Bing Maps, and it is also possible to receive imagery by connecting to a Tile Map Service (TMS) or Web Map Tile Service (WMTS). Examiner™ can import georeferenced images from aerial photography, satellite imagery, maps, etc., in any projection, placing the GPR data quickly and accurately in the surrounding environment.



Depth slices showing underlying archaeological evidence in a 100m x 100m area.

Annotations and 3D interface tracing

Examiner™ showcases a powerful and user-friendly tool for drawing point and multi-segment annotations. The user can work seamlessly in the georeferenced overview and in the three-slice views to create and modify annotations across different data cubes. Interface tracing in Examiner™ is performed through advanced automatic and semi-automatic tools operating in three dimensions. With a single click, it is possible to follow and trace an interface for kilometers and across the entire scan width. A traced interface can be displayed as a color coded overlay to the data so to represent, for example, the depth of a layer or the amplitude of the reflected signal.

Image of the processed data exported as KMZ and displayed in Google Earth.

Export and extensibility

Imagery can be directly copied from Examiner™ and pasted into other applications for reporting, or saved in common image formats. It is also possible to generate a video of the georeferenced overview to show how the data varies over a depth range. Processed data cubes can be exported in SEGY and ASCII formats and then imported into a third-party software for additional processing, analysis or reporting. Annotations, interfaces and data imagery can be exported with rendered GPS data to georeferenced images and formats compatible with popular software such as GIS (GeoJSON), CAD (DXF/DWG) and Google Earth (KMZ). Interfaces can also be saved as simple matrices or point-clouds in comma separated value files, or summarized in a comprehensive report with detailed statistics.

System requirements

Operating system	64-bit Windows 8, 8.1 or 10
CPU	64-bit, Intel Core i7 recommended
Memory	16 GB or greater
Disk capacity	Recommended minimum 250 GB SSD

Ordering information

Part number	3DR-EX-PRO-101

3D-RADAR AS

Klæbuveien 196 B
NO-7037
Trondheim
Norway

Brynsveien 13
NO-0667
Oslo
Norway

sales@3d-radar.com