System Requirements	Operating System: Microsoft Windows XP, Windows VISTA, Windows 7 or Windows 8 CPU: Intel Pentium 4, AMD Athlon or Equivalent Processor with minimum of 1,5 GHz Memory: Minimum of 1 GB, recommended 2 GB RAM, 20 GB Free Hard Disk Space for Data processing Graphics Adapter: Minimum of 1024 x 768 pixel resolution with 16/32 Bit Depth and 64 Mb Graphics Memory, recommended 1280 x 1024, 32 bit double screen Interfaces: 1 free USB-port; Direct or USB-Hub for software security key	**Supported Road Measurement Equipment Data Formats**	GPR: Geophysical Survey Systems Inc (GSSI), Malå GeoScience, Sensors & Software, IDS, 3D-Radar. User Defined format - 8, 12, 16 or 32 bits signed or unsigned integer or single or double precision IEEE floating point value having 32 - 8192 samples per scan. Supports sample and scan aligned multi-channel Data. Falling weight: Kuab, Dynatest, Carl Bro, User Defined list formats Profilometer: Dynatest RSP, Finnish PTM, RST and Greenwood. User definable formats Video: All Windows supported Video Formats – mpg, wmv, avi, etc GPS: All GPS-equipment with NMEA-standard output or user defined tabulated format.
Project Handling	Tree view: File based database for data storage. All data aligned to Lines, Projects and Project Groups, Line and Data order changeable. Backup: Specified data in projects can be back-upped to ZIP-files, or copied to a new folder. Log keeping: program keeps record of users, changes to data, linked files etc.	**General Features**	Support for SI- and US-units both for distance and data units Data conversion to SI-units for internal handling Several supported user interface languages: English (default), Swedish, Finnish, German, French, Spanish On-line documentation (F1-key)
GPR-Data Processing	File editing: Merging, Cutting, reversing, rubber-sheeting, channel separation File processing: Static Background removal, DC-level removal, Automatic and user defined signal amplification, Arithmetic operations, Time and Frequency domain filtering, Moving background removal, Hilbert transform, Kirchoff-Migration, Trace and Data Section Muting, Correlation filtering operations, Bouncing removal operation, Diagonal filtering etc. Views can be saved with GPR processing settings. Air coupled antenna data processing: Bouncing removal, surface reflection removal, air-pulse removal, Er-value calculation and Calibration. Separate 3D-module for processing, visualization and interpretation of 3D GPR data. Multiple time-slices, cross-section view, Slices from user defined levels etc.	**GPR-Data Interpretation**	Coding: All interfaces can be coded to have layer name, layer quality and material Er-value. All values are editable. All layers can have different colours. Interface tracking: manually or semi-automatically using user-defined parameters. Objects: Layers are tracked as vectors, which can have start, end and breaks or as table values in the case of Air-coupled data. Single reflectors can be pointed and annotated with text. Up to 1000 different interfaces can be coded, 4 for Air-coupled data. Editing: Vector Points and Annotations can be edited and deleted separately or multiple at once. Hyperbola fitting: Er-estimation using hyperbola fitting

GPR-data Display	B-scan view: from 16 to 256 simultaneous colours, User definable colour transform threshold and selectable from 16 transforms. Multiple profiles in the same view, combined or in different subwindows. Shown distance section freely selectable. Cross-section view: in the case of multiple profiles from the same line. A-Scan view: from selected subwindow Er-value, layer depth, layer thickness	**GPR Interpretation Output**	Vector Interpretation: All layer and set object information can be printed to user defined formats. Formats can be saved for later use. Ouputted parameters are for example: layer thickness, depth, code, quality, location as distance, xyz-coordinate, offset, reflection amplitude, vector point number, layer number etc. Air-coupled data interpretation: multiple predefined and user defined formats for printing Average, Min, Max, St Deviation.
Road Analysis Tools	Pavement voids content measurement: Based on Er-calculation and reference points. Manual road analysis: Up to 20 different user definable analysis parameters and annotation fields. Analysed sections are highlighted using the mouse. Automatic analysis: Utility to classify road sections based on road measurement data and given rules. Pavement distress inventory: Visual pavement inspection tools utilizing video or image-list. Both continuous and fixed distance analysis modes available. Pavement Life-time estimation based on rutting or roughness values Bearing capacity analysis based on falling weight and layer thickness measurements.	**Road Rehabilitation Design**	Road structure design without geometric changes in the road Operations, material properties and costs are user definable. Total masses and costs can be automatically calculated during and after the desing. Order of operations can be visually defined. Structure dimensioning using Odemark method. Elmod link for calculation of layer modules. Elmod needs to be bought seprarately from Dynatest. Forward calculation of pavement, base and subgrade modules. Design visualization using list of operation view and/or structure view.
Falling weight	Outputting the falling weight results as deflection curves with or without profile average curve. Surface module and layer module output. SCI and BCI output (also as user definable)	**Profilometer**	Roughness and rutting data format output. Operator can select the outputted parameter.
Database	Supported databases are: Tabulated text tables, MS Excel, MS Access, Oracle, dBase, Paradox, MySQL Database can be linked as project a database, which is linkable to all lines Data searches can be done to all database types View types: Data value, bar graphs, line graphs, area graphs, surface plots. Surface plots makes it possible to create contour images. Powerfull and flexible From-To display. Database data can overlay any other data. Database can have an offset row, which can be used for contour plots Single column can be used as an arrangement column (dates etc). Text Databases can have up to 2040 columns. Text database can be rescaled using special distance fixing files.	**MAP view**	Supported image formats are TIFF, JPG, PNG, PCX, BMP, WMF, EMF Reads georeference information from ArcGis and Mapinfo linked images, otherwise manual georeferencing using 2 points. Supports Road Doctor analysis and database formats for data reading. Direct link between Data view and Map view. Several display formats, draw offset, data classification (from 1 to 9 classes), automatic legend, distance pole, north arrow and company logo display. Map savings to image, clipboard, and project tree. Linking the lines to GPS makes realtime data scrolling and displaying possible in the field

Video	Video shown and synchronized with other data. Includes tools for subtitling the locations and date/time to video. Handles also extra long videos, which are splitted to multiple video files, and reversed videos. Tool for estimating road width and object sizes from a video or image. Several videos can be synchronized to show the same location although measured at different time and speed.	**Images**	Images are linked as image-lists which can be shown in separate multi-image view or in the place of a video in a dataview. Images can be shown also in data subwindows with or without scaling
General View Properties	Several Views, in which all data is linked to each other, can be shown simultaneously. Every view can have several subwindows with different or similar datatypes. Ligends can be defined for all data in the view. Views can be saved as is for later use or as view templates for use with other lines. All data is syncronized to each other. Views from the same line can be synchronized together.	**Coordinates**	Uses Franson coordinates transform library for exact transformation between GPS and different Grid-coordinate systems. Supports all UTM and EUREF-transformations and several other country specific formats. Other format support added if required. Line chainage and measurement positioning using Areal/Road Network coordinates