

NEW

- Includes free Amberg SetUp module
- Supported on Leica Viva and Captivate instruments

Amberg Applications

Datasheet



Amberg Applications – The powerful on-board application for Leica Viva and Captivate instruments

To minimize costs in tunnel construction, it is necessary to build as close as possible to the design. To avoid interruptions of the heading, daily work steps should be made as efficient as possible.

Amberg Applications makes surveying tasks in tunnel construction faster and simpler. At the same time, the user gets the flexibility to react to changing requirements.

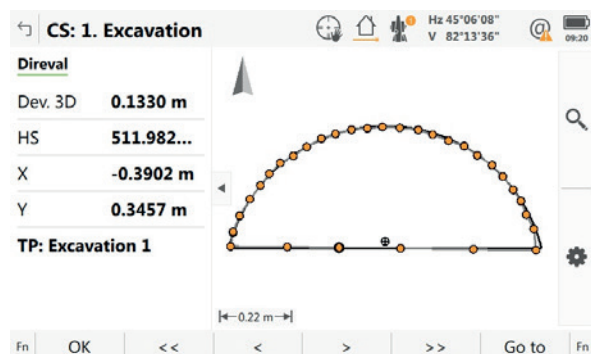
Amberg Applications is the powerful on-board application for Leica Viva and Captivate total stations. A seamless workflow is guaranteed by using the Amberg Control module. This ensures trouble-free data transfer of project data and measurements from the tunnel to the office.

Amberg Applications comes in two modules

- Amberg SetOut for guidance of the tunnel heading
- Amberg ProScan Plus for 3D profile control

Both modules also include the free Amberg SetUp feature, which allows you to setup a total station automatically.

Amberg Applications – your tunnel under control



Amberg Applications

Software overview

Design data definition for Amberg Applications is made in Amberg Tunnel

Functions and Features of Amberg Tunnel (General Office Software)
Comfortable and interactive project data input with direct graphical visualisation and plausibility checks
Intermediate point calculation, axis-related point projection (2D / 3D) for independent project data control
Comprehensive support for the import / export of project data (e.g. Cremer, LandXML, Leica LandXML, SBG, DXF or ASCII)
Unlimited number of construction stages consisting of theoretical profiles, section definitions and transverse slope elements
Definition of theoretical profiles vertically or inclined relative to longitudinal profile
Comprehensive profile editor for simplifying routine tasks (blow-up function, mirroring, etc.)
Support for transition zones between various profile geometries (linear or centroid-based interpolation)
Graphical visualisation of project geometry data in the 3D viewer
Amberg Tunnel supports all underground projects, even with heavily inclined tunnels (e.g. hydropower projects)
Amberg Tunnel also supports vertical shafts
Management of the control points for each drive, including a time history

The free application for automatic setup of a total station¹⁾

Amberg SetUp
Automatic setup of a total station without knowing the point ID number
Choose between manual or automatic mode to measure the control points
Definition of max. coordinate and orientation sigma of setup

The powerful on-board software for automatic stake out in relation to the tunnel axis

Amberg SetOut
Import of complete project data from Amberg Tunnel
Automatic setting out of single points (axis, stationing, height markers, joints, walkways, etc.)
Setting out of points in ATR lock-mode with a prism (optional with a pole height)
Single or interval point setting out relative to project axis
Manual or timer-controlled setting out of interval points
Display of offset coordinates relative to project axis for a measurement
Availability of different projects on the same instrument

The powerful software for automatic 3D-profile measurements

Amberg ProScan Plus
Automatic scanning of vertical, horizontal and sloped 3D parallel profiles
Manual profile control "String" with reflectorless measurement
Manual profile control with prism on pole or prism with tunnel disc by ATR lock-mode
Automatic tolerance control of measured points in parallel profiles
User selectable angle or distance spacing
In addition to tunnel tubes, vertical shafts (horizontal profile) are also supported
Project data management on total station
Automatic profile measurement on predefined stationing
Numerical on-board processing during measurement with deviations to axis and theoretical profile
Graphical and numerical on-board processing after measurements
Visualisation of profile sectors (overprofile / underprofile) with red laser
Automatic visualisation of graphically selected profile points with red laser on tunnel surface
2D profile visualisation of the as-built data
Data are stored in the Leica *.dbx database for a comprehensive and fast reporting in Amberg Control module

¹⁾ If purchasing either Amberg SetOut or Amberg ProScan Plus you get Amberg SetUp for free.