

Trimble Access Track Gauge Survey

SIMPLE GEODETIC TRACK GAUGE SURVEY APPLICATION

Track Gauge Survey is a Trimble Access based field software for optimized determination of track position with gauge and cant using a mechanical track measurement bar.

SYSTEM CONFIGURATION

Trimble Access (General Survey)

Trimble Access with its basic module General Survey is a powerful and easy-to-use field software with graphical user interface, interactive map display and extensive functions for general surveying tasks. Trimble total stations of the Trimble S, SPS, SX series and GNSS receivers are optimally supported.

Trimble Access Track Gauge Survey

Trimble Access Track Gauge Survey is a Trimble Access based field software for measuring track parameters. After the total station setup with control points, the coordinates of the track axis, left and right rail, gauge and cant can be determined using a track measurement bar. The total station measurement to the prisms of the movable or fixed track measuring bar can take place in a constant sequence, with fixed side first, with movable side first, or in alternating measurement sequence. Export formats are available for the measured track geometry. Further data evaluation can be performed in Trimble GEDO Office. For automatic track monitoring purposes, there is a direct interface to the Trimble 4D Control Rail module.

Trimble GEDO Office

Import and preparation of alignment data and exchange with external systems. The data can be imported in digital form, i.e. from the standardized LandXML format. The alignment is displayed in the curvature alignment or in a 2D plan together with reference points.

Trimble GEDO Office module Rec

Software for processing and analyzing Trimble Access Track Gauge Survey measurement data, as well as exchange with external systems. In addition, the calculation of deviations from a design track position can be performed.

Trimble GEDO Office module Quality

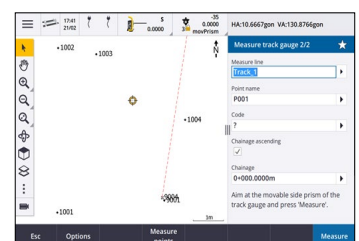
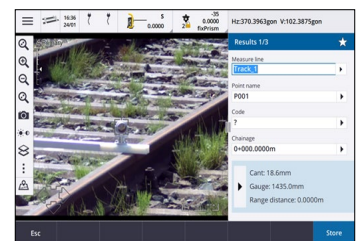
Software for generating reports to ensure compliance with track safety and quality parameters.

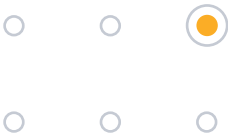
Trimble GEDO Office module Monitoring

Software for comparison of measurements from different epochs for track monitoring purposes.

Key Benefits

- ▶ Trimble Access based software with support for motorized Trimble total stations
- ▶ Optimized track as-built survey with track measurement bar and time savings due to predefined measurement sequence with automatic rotation to the respective prism
- ▶ Precise, lightweight track measurement bar with one fixed and one movable prism holder for gauge measurement
- ▶ Calculation of track point coordinates, gauge and cant after measuring both prisms with export function directly in the field
- ▶ Process, analyze and compare measurements and generate reports and outputs in Trimble GEDO Office
- ▶ Direct interface to the Trimble 4D Control Rail module for track monitoring





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SIMPLE GEODETIC TRACK GAUGE SURVEY APPLICATION

GENERAL	
APPLICATIONS	
	Basics for calculating an improved track design Control measurement Preservation of evidence Track monitoring measurements
SYSTEM REQUIREMENTS	
Supported instruments ⁽¹⁾	Trimble S-series total stations (i.e. S7, S9) Trimble scanning total stations (i.e. SX10, SX12)
Controllers	Trimble TSC7, T7 and T100 controllers (Windows® OS) Trimble TSC5 (Android OS)
Trimble Access Version	2021.00 or above (für Windows OS) 2023.10 or above (für Android OS)

⁽¹⁾ Analog to the support in Trimble Access

⁽²⁾ Optional software

MEASUREMENT OF RAILWAY TRACK	
TRACK AS-BUILT	
Measurement	Presetting of the cant base, reference gauge, track measurement bar configuration, prism types, as well as the measurement order
	Total station setup as resection or on known point
	Measurement of the prisms by predefined measuring sequence with automatic rotation to the respective prism
Display	Graphical overview map of measured and calculated track points
	Display of the calculated chainage, cant and track gauge
	Video display for total station with Vision technology
RESULTS	
	Logging into ASCII file
	Job file for further processing in Trimble GEDO Office module Rec ⁽²⁾
	Track file for further processing in Trimble 4D Control module Rail ⁽²⁾
TRACK MEASUREMENT BAR	
Two prism mounting positions above inner rail edge	
	Fixed prism mounting position above rail inner edge and fixed prism mounting position with distance to nominal track gauge
	Fixed prism mounting position above rail inner edge and movable prism mounting position on opposite side for measuring the track gauge
Gauges	1.000 mm, 1.067 mm, 1.435 mm, 1.520 mm, 1.524 mm, 1.600 mm, 1.668 mm, 1.676 mm (other gauges on request)



Specifications are subject to change without notice.

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