



# GEDO REC

## FOR TRACK DOCUMENTATION

The Trimble GEDO CE system is a fast, efficient tool to measure, record and document detailed information about existing track. With Trimble GEDO CE, you can quickly survey existing lines without the need for alignment data. In a single operation the Trimble GEDO CE captures the 3D coordinate position of the track, together with gauge and cant. The information can be used for GIS, redesign and quality control.

### THE TRIMBLE GEDO CE SYSTEM

Trimble GEDO CE is a suite of tools for measurement, recording, analysis and applications for railway track location, construction and maintenance. Specially tailored for railway tasks and processes, Trimble GEDO CE hardware and software streamlines work in the field and office. The system uses standard techniques and data formats to share information with leading applications for railway track design and maintenance.

### TOOLS FOR TRACK DOCUMENTATION

#### Trimble GEDO CE Trolley

A single operator can quickly and safely capture information to document existing track. Positioning is supplied by Trimble GNSS Receivers or Trimble S-Series Total Stations. The trolley is easily removed to stay clear of railway operations.

#### Trimble GEDO Office

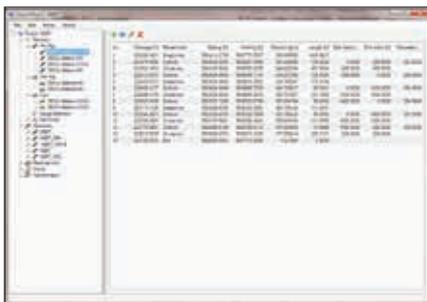
Software for processing and analysis of field data, and for data exchange with external systems.

#### Trimble GEDO Rec

Field software optimized for track documentation and measurement. Trimble GEDO Rec runs on the Trimble TSC3 Controller.

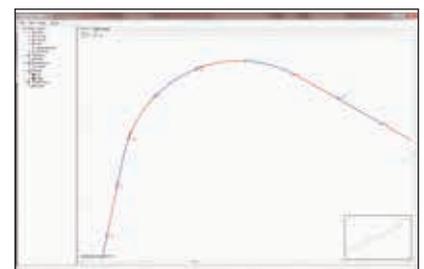
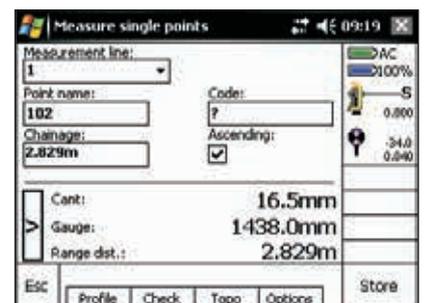
#### Trimble Profiler GEDO CE 2.0

Laser measurement unit to measure object close to the track, As-Built survey, platform gauging and clearance check. The measurement can be taken relative according to the track position or by using total station or GNSS absolute coordinates can be measured additionally.



### Key Benefits:

- ▶ Simple, self-contained trolley captures track position, gauge and cant in a single operation
- ▶ Measure long portions of track without disruption to normal rail traffic
- ▶ Optical or GNSS positioning ensures confidence in location and track conditions
- ▶ Fast operation reduces costs and crew size. Capture detailed information on up to 3,000 meters of track in one hour using GNSS, and more than 1,000 meters per hour with total stations
- ▶ Optimize field work by merging results from multiple surveys
- ▶ Export results to GIS and rail design software, and compare existing conditions to design alignment



# FOR TRACK DOCUMENTATION

**GENERAL**

Application ..... As-built documentation of existing track  
Main track, side track, tram, metro, industrial lines

**System accuracy**  
with total station ..... ±1 mm\* in Stop&Go Mode  
±3 mm\* in Kinematic Mode

with GNSS ..... ±2 cm to 4 cm

**Performance**  
with total station ..... 600 to 1,200 m/hour  
with GNSS ..... Up to 3,000 m/hour

**Measurement speed**  
with total station: ..... 1 Hz (Stop&Go Mode)  
10 Hz (Kinematic Mode, only S8 and S9)

with GNSS ..... 10 Hz Real-time Kinematic

Supported positioning sensors ..... Trimble S5 Total Station  
Trimble S6 Total Station  
Trimble S7 Total Station  
Trimble S8 Total Station  
Trimble S9 Total Station  
Trimble GNSS receivers, including Trimble R8  
and Trimble R10 GNSS systems

**TRIMBLE GEDO CE 2.0 TRACK MEASURING**

Description ..... Track-mounted trolley  
Gauge ..... 1000 mm, 1067 mm, 1435 mm, 1520 mm, 1600 mm, 1668 mm  
other gauges on request

Weight ..... 16,0 kg

**Gauge measurement**  
Range ..... -20 mm to + 60 mm  
Accuracy ..... ±0.3 mm

**Cant measurement**  
Range ..... ±10° or ±265 mm  
Accuracy ..... ±0.5 mm (static)

**Battery life**  
Type ..... Trimble S-Series Li-Ion, rechargeable  
Life ..... 6-8 hours

**TRIMBLE PROFILER GEDO CE 2.0**

Weight ..... 3.5 kg  
Measurement range ..... 0.3 m to 30 m  
Typical accuracy for distance measurement ..... ±1.5 mm

**TRIMBLE TSC3 CONTROLLER**

Operating system ..... Windows® Embedded Handheld 6.5 Professional  
Operation ..... Touchscreen, Keyboard

Interfaces ..... USB, RS232, Bluetooth®, WiFi (802.11b/g)

Environmental Protection ..... IP67; MIL-STD-810G

Temperature range ..... -30 °C to +60 °C

Weight ..... 1.04 kg

**Battery**  
Type ..... 28.9 Wh Li-Ion  
Life ..... 34 hours

**TRIMBLE TABLET PC**

Operating system ..... Microsoft Windows 7 Professional  
Operation ..... Touchscreen

Interfaces ..... HDMI, USB, Bluetooth® 4.0, WLAN (b/g/n)

Environmental Protection ..... IP65; MIL-STD-810G

Temperature range ..... -30 °C to +60 °C

Weight ..... 1.4 kg

**TRIMBLE S9 TOTAL STATION**

Weight ..... 3.5 kg  
Angle accuracy ..... 0.5" or 1"  
Typical accuracy for distance measurement ..... 0.8 mm + 1 ppm or 1 mm + 2 ppm

**TRIMBLE R10 GNSS SYSTEMS**

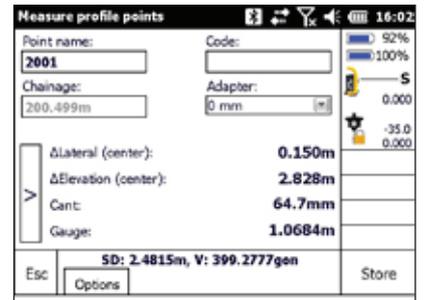
Interfaces ..... USB, Bluetooth®, WiFi

Environmental Protection ..... IP67; MIL-STD-810F

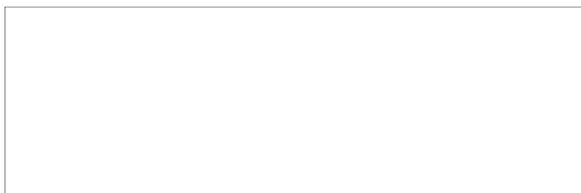
Temperature range ..... -40 °C to +60 °C

Weight ..... 1.12 kg

**Battery**  
Type ..... 3.7 Ah Lithium-ion smart battery  
Life ..... 5 hours



\* depending on environment and setup  
Specifications subject to change without notice



**NORTH AMERICA**  
Trimble Navigation Limited  
10368 Westmoor Dr  
Westminster CO 80021  
USA

**EUROPE**  
Trimble Railway GmbH  
Korbacher Straße 15  
97353 Wiesentheid  
GERMANY  
www.trimble-railway.com

**ASIA-PACIFIC**  
Trimble Navigation  
Singapore Pty Limited  
80 Marine Parade Road  
#22-06, Parkway Parade  
Singapore 449269  
SINGAPORE