The Trimble® TX8 laser scanner sets new standards for performance and ease of use in high-speed collection of 3D data. Using a state-of-the-art blend of speed, long range and precision, the Trimble TX8 delivers high quality results in civil survey, industrial measurement, engineering and construction. It’s the scanner of choice for high levels of productivity, accuracy and flexibility.

A Revolution in 3D Scanning
Using Trimble’s patented Lightning technology, the Trimble TX8 can measure one million points per second while capturing precise data over its full measurement range. Because Trimble Lightning technology is less susceptible to variation in surface types and atmospheric conditions, you can capture complete datasets from each station. To colorize scans, an integrated camera can quickly take full field of view HDR images in just two minutes.

The Trimble TX8 streamlines work in the office as well. The scanner’s clean, low-noise data reduces processing time and the data loads directly into Trimble RealWorks® and Scan Explorer, enabling easy project collaboration via Internet Explorer. RealWorks also provides efficient data flow into popular CAD programs and Trimble EdgeWise and SketchUp, for point cloud modeling.

High Performance for Demanding Applications
The Trimble TX8 is ideal for capturing detailed data on existing conditions. Making high-speed measurements without compromising range or precision, the Trimble TX8 delivers the high-density 3D point clouds design and analysis professionals need.

The Trimble TX8 provides a 360° x 317° field of view and captures full high density scans in only three minutes. The Trimble TX8 maintains its high precision over the entire range of 120 m with no need to reduce speed. Plus, it’s available with an optional upgrade extending the range to an impressive 340 m.

Rugged, Flexible and Easy to Use
A color touchscreen display and one-button scanning make data capture easy and efficient. The intuitive interface lets you quickly manage scan resolution and define scan areas. Capture only the data you need and save time in the field and office. You can also operate the scanner remotely with a Trimble tablet or other mobile device via integrated WLAN.

The Trimble TX8 has a rugged design with an IP54 rating and protected mirror to capture data in demanding environments and bright sunlight. And its Class 1 eye-safe laser make it safe to use in busy public places.

Designed for mobility, the Trimble TX8 weighs just 11 kg and is powered by lightweight, long-life lithium ion batteries. The wheeled transportation case conforms to most airlines’ checked luggage requirements enabling easy transport between job sites.

The Total Solution
The Trimble TX8 is designed for a broad array of uses and environments. Typical applications include:

- Civil engineering
- Surveying
- Plant and industrial measurement
- Mining and quarries
- Urban areas
- Preservation and restoration
- Building and commercial construction
- Deformation monitoring
- Quality control
- Public safety and forensics

The Trimble TX8’s ability to capture precise high-density 3D data, combined with Trimble RealWorks software’s advanced modeling, analysis and data management tools, make the Trimble TX8 laser scanner the complete scanning solution for geospatial professionals.
**Trimble TX8 LASER SCANNER**

**PERFORMANCE**

**Overview**
- Scanning principle: Vertically rotating mirror on horizontally rotating base
- Range principle: Ultra-high speed time-of-flight powered by Trimble Lightning technology
- Scanning speed: 1 million pts/sec
- Maximum range: 120 m on most surfaces
- Range noise: <2 mm on most surfaces with Standard scan modes
- <1 mm with High Precision scan mode

**Range measurement**
- Laser class: 1, eye safe in accordance with IEC EN60825-1
- Laser wavelength: 1.5 μm, invisible
- Laser beam diameter: 6–10–34 mm @ 10–30–100 m
- Minimum range: 0.6 m
- Max. standard range: 120 m on 18–90% reflectivity
- Extended range: 100 m on very low reflectivity (5%)
- Range noise: <2 mm from 2 m to 120 m on 18–90% reflectivity in Standard modes
- <1 mm from 2 m to 80 m on 18–90% reflectivity in High Precision mode

**Range systematic error**
- <2 mm from 2 m to 120 m on 18–90% reflectivity
- <1 mm with High Precision scan mode

**Specifications**
- Max range: 120 m
- Scan duration (minutes): 01:00 02:00 03:00 10:00 20:00
- Point spacing at 10 m: 15.1 mm
- Point spacing at 30 m: 22.6 mm
- Point spacing at 300 m: 75.4 mm
- Number of points: 8.7 Mpts 34 Mpts 138 Mpts 555 Mpts 312 Mpts

**IMAGING**
- Integrated HDR camera: 10 megapixel resolution, full field of view
- Image capture duration: 1 min for Standard, 2 min for HDR

**OTHERS**
- Touchscreen display: TFT-LCD with 24-bit color
- Size (mm): 93 (H) x 55.8 (V), equivalent 3.5” diagonal
- Resolution: 800 x 480 (WVGA)
- Luminance resolution: 8 bits
- Leveling: External bubble, on-board electronic bubble
- Dual axis compensation: Selectable on/off
- Resolution: 0.3”
- Range: 1
- Accuracy: ±1
- Data storage: USB 3.0 Flash Drive
- Remote control: Operate with Trimble tablet or other mobile device via WLAN or with Windows 7 or higher PC or tablet via USB cable

**ENVIRONMENTAL**
- Operating temperature range: –20 °C to +50 °C (–4 °F to 122 °F)
- Storage temperature: –40 °C to +60 °C (–40 °F to 140 °F)
- Operating humidity range: 30% to 95% (non-condensing atmosphere)
- Non-condensing lighting conditions

**PHYSICAL**
- Dimensions: 335 mm W x 386 mm H x 242 mm D
- Weight: 10.7 kg (23.6 lb) with tribrach and no battery, 11.2 kg (24.7 lb) with tribrach and battery
- Power supply: 76 mm W x 43 mm H x 110 mm D
- Power consumption: 0.46 kg (1 lb)
- Scan time per battery: 2 hours
- Instrument case: 500 mm W x 366 mm H x 625 mm D
- System weight: 11.2 kg (24.7 lb) with tribrach and battery
- Battery weight: 10.7 kg (23.6 lb)
- Battery life: >2 hours
- Power cord: 3.5 m (11.5 ft)
- Power supply: 24.6 in D

**Power supply**
- 76 mm W x 43 mm H x 110 mm D
- Power consumption: 72 W
- Battery weight: 10.7 kg (23.6 lb)
- Battery life: >2 hours
- Power cord: 3.5 m (11.5 ft)
- Power supply: 24.6 in D

**Contact your local Trimble Authorized Distribution Partner for more information**

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1. Optional upgrade increases range from 120 m to 340 m.
2. Scan duration time is longer with High Precision scan mode.
3. Scan duration times for Standard scan modes.
4. Wired remote control requires optional USB cable PN 23704034.
5. Specification given as 1 sigma.
6. Wired remote control requires optional USB cable PN 23704034.
7. Effective scan speed for optimum scan quality.

Specifications subject to change without notice.