

Trimble TX8

THE TRIMBLE TX8 LASER SCANNER SETS NEW STANDARDS FOR PERFORMANCE AND EASE OF USE IN HIGH-SPEED COLLECTION OF 3D SCAN DATA. DELIVERING STATE-OF-THE-ART SPEED, AND HIGH PRECISION, THE TRIMBLE TX8 DELIVERS THE HIGH QUALITY RESULTS NEEDED FOR COMPREHENSIVE WORKSITE DATA COLLECTION. THE TX8 LETS CONTRACTORS GATHER DATA MORE QUICKLY FROM EACH SETUP WHILE THE LONG RANGE CAPACITY REDUCES THE NUMBER OF SETUPS NEEDED TO GET THE JOB DONE. ALL WHILE PROVIDING HIGH LEVELS OF ACCURACY AND FLEXIBILITY.

Industry leading analysis and extraction software makes it easy to turn point cloud data into actionable models fast. With Trimble RealWorks, ScanExplorer and EdgeWise, contractors can generate and share BIM models or CAD files in a fraction of the time it might take with other image analysis tools.

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. Less susceptible to variation in surface types and atmospheric conditions, you can capture complete datasets from each station.

High PERFORMANCE for DEMANDING BIM APPLICATIONS

The Trimble TX8 is ideal for capturing detailed scans of existing site conditions. Making high-speed measurements without compromising range or precision, the Trimble TX8 delivers high-density 3D point clouds

needed to develop accurate models of the job site. The

Trimble TX8 provides a 360 degree x 317 degree field of view and captures data at one million points per second with a typical scan time of only 3 minutes. The Trimble TX8 maintains its high precision over its entire range of 120 m and is available with an optional upgrade

extending the range to an impressive 340 m.

RUGGED, FLEXIBLE AND RIGHT FOR THE JOBSITE

A touchscreen display and one-button scanning make data capture easy and efficient. The intuitive onboard software lets you quickly manage scan resolution and define scan areas. Because you capture only the data you need, you'll save time in the field and office.

With its eye-safe Class 1 non-visible laser, the Trimble TX8 is safe to use even in busy public places. The Trimble TX8 features a rugged design, IP54 environmental rating, protected mirror and ability to capture data in bright sunlight.

Designed for mobility, the Trimble TX8 weighs just 24 lb (11 kg) and is powered by lightweight, long-life lithium ion batteries. The wheeled transportation case conforms to requirements of most airlines for checked luggage which allows you to easily transport the Trimble TX8 between job locations

Ideal for Construction Projects

The Trimble TX8 is used by contractors for a wide range of jobsite applications:

- Pre-construction as-builts
- Building Information Modeling (BIM)
- Virtual Design Construction (VDC)
- Quality control during construction
- Comparing design intent to as-built conditions

With the Trimble TX8's ability to capture precise high-density 3D data combined with advanced Trimble software modeling, analysis, and data management tools, the Trimble TX8 laser scanner is the complete scanning solution for contractors.

Key Features:

- **Fast and accurate as-built data collection**
- **Increase field productivity with the fastest, high resolution scans on the market today**
- **Confidence in data accuracy, clarity and richness**
- **analyze and extract scanned data fast**
- **Intuitive and easy to operate**



gEnERAL SPECIFICATIOnS

PERFORMANCE

Overview

Scanning principle	Vertically rotating mirror leveling 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 340 m with optional upgrade
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 @ 10-30-100m
Minimum range	0.6 m
Max. standard range	120 m on 18-90% reflectivity 100 m on very low reflectivity (5%)
Extended range	340 m
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

Scanning

field of view	360°x317°
Angular accuracy	80 µrad

Scan Parameters	Preview	Level 1	Level 2	Level 3	Extended ¹
Max range	120 m	120 m	120 m	120 m	340 m
Scan duration (minutes) ²	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	11.3 mm	5.7 mm	—
Point spacing at 300 m	—	—	—	—	75.4 mm
Mirror rotating speed	60 rps	60 rps	60 rps	30 rps	16 rps
number of points	8.7 Mpts	34 Mpts	138 Mpts	555 Mpts	312 Mpts

OTHERS

Luminance resolution	16 bits
External bubble, onboard electronic bubble	Selectable on/off
Resolution	±10'
Range	±10'
Accuracy	±0.5"
Data storage	USB 3.0 Flash Drive
Remote control	operate with Windows 7 or higher PC or tablet via USB connection
Color acquisition	External camera kits available for high resolution and HDR images

Physical

Dimensions	335 mm W x 386 mm H x 242 mm D (13.2 in W x 15.2 in H x 9.5 in D)
Weight	10.6 kg (23.3 lb) with tribrach and no battery; 11.0 kg (24.3 lb) with tribrach and battery
Power supply	76 mm W x 43 mm H x 130 mm D (3.0 in W x 1.7 in H x 5.1 in D); Weight: 0.66 kg (1.46 lb)
Battery dimensions	89.2 mm W x 20.1 mm H x 149.1 mm D (5 13/16 in W x 3 1/2 in H x 5/8 in D);
Battery weight	0.46 kg (1 lb)
Power consumption	72 W
Scan time per battery	>2 hours
Instrument case	500 mm W x 366 mm H x 625 mm D (19.7 in W x 14.4 in H x 24.6 in D)

Environmental

operating temperature range	(non-condensing atmosphere) -0 °C to +40 °C (32 °F to 104 °F)
Storage temperature	-20 °C to +50 °C (-4 °F to 122 °F)
operating humidity range	non-condensing
Lighting conditions	All indoor & outdoor conditions over entire range (no lighting limitations)
Protection class	IP54

1 optional upgrade increases range to 340 m.
2 Scan duration time is longer with High Precision scan mode.
3 Scan duration times for Standard scan modes.
4 Remote control requires optional Trimble TX8 USB cable Pn 23704034.

Specifications subject to change without notice.



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