Trimble TX6
LASER SCANNER

The Trimble® TX6 laser scanner is a cost effective solution for high speed collection of 3D data. It sets new standards for performance and ease of use. With its state-of-the-art blend of speed, range and precision, the Trimble TX6 delivers high quality results in building MEP, BIM, engineering, construction and other applications that require high levels of accuracy and flexibility.

A Revolution in 3D Scanning
Using Trimble's patented Lightning technology, the Trimble TX6 captures precise data at high speed over its full measurement range. And since Trimble Lightning technology is less susceptible to variations 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 from each station.

The Trimble TX6 streamlines work in the office as well. The scanner’s clean, low-noise data reduces processing time. That data loads directly into Trimble RealWorks® and Trimble Scan Explorer, enabling project collaboration via Internet Explorer. The Trimble TX6 paired with RealWorks also provides efficient data flow into popular CAD programs, Trimble EdgeWise and SketchUp for point cloud modeling.

High Performance for Demanding Applications
The Trimble TX6 is ideal for capturing detailed data on existing conditions. By performing high-speed measurements without compromising range or precision, the Trimble TX6 delivers the high-density 3D point clouds needed by design and analysis professionals.

The Trimble TX6 provides a 360° x 317° field of view. Typical scan times are just three minutes to capture 34 million points or six minutes to capture 138 million points. The Trimble TX6 maintains its high precision over the entire range of 80 m with no need to reduce speed. Plus, it's available with an optional upgrade extending the range to 120 m.

Rugged, Flexible and Easy to Use
The TX6’s 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. Since you capture only the data you need, you’ll 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 TX6 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 TX6 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 TX6 is designed for a broad array of uses and environments. Typical applications include:

► Building Information Modeling (BIM)
► Virtual Design Construction (VDC)
► Pre-construction as-builts
► Quality control
► Preservation and restoration
► Deformation monitoring
► Plant and industrial measurement
► Public safety and forensics

The Trimble TX6’s ability to capture precise high-density 3D data, combined with Trimble RealWorks software’s advanced modeling, analysis and data management tools, make this laser scanner the complete scanning solution for construction professionals.
Trimble TX6 LASER SCANNER

**Overview**
- Scanning principle: Vertically rotating mirror on horizontally rotating base
- Range principle: High speed time-of-flight powered by Trimble Lightning technology
- Scanning speed: 900,000 pts/sec
- Maximum range: 80 m on most surfaces
- Range noise: <2 mm on most surfaces
- Laser beam diameter: 6–10–34 mm @ 10–30–100 m
- Minimum range: 0.6 m
- Max. standard range: 80 m on 18–90% reflectivity
- Extended range: 120 m on 18–90% reflectivity
- Range noise: <2 mm from 2 m to 80 m on 18–90% reflectivity with standard
- Range systematic error: <2 mm on most surfaces

**Scanning**
- Field of view: 360° x 317°
- Angular accuracy: 80 μrad

<table>
<thead>
<tr>
<th>Scan Parameters</th>
<th>Preview</th>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
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</thead>
<tbody>
<tr>
<td>Max range</td>
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<td>05:00</td>
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<td>Point spacing at 30 m</td>
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<td>11.3 mm</td>
<td>5.7 mm</td>
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<td>Point spacing at 300 m</td>
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<td>———</td>
<td>———</td>
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<tr>
<td>Number of points</td>
<td>8.7 Mpts</td>
<td>34 Mpts</td>
<td>138 Mpts</td>
<td>555 Mpts</td>
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</tbody>
</table>

**IMAGING**
- Integrated HDR camera: 10 megapixel resolution, full field of view
- Touchscreen display: 34 Mpts
- Resolution: 800 x 480 (WVGA)
- Luminance resolution: 8 bits
- External bubble, onboard electronic bubble
- Dual axis compensation: Selectable on/off
- Calibration: 0.3°
- 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

**OTHERS**
- Remote control: Operate with Trimble tablet or other mobile device via WLAN or with Windows 7 or higher PC or tablet via USB cable
- 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

**PERFORMANCE**
- Accuracy: 1°
- Resolution: 800 x 480 (WVGA)
- Size: 93 (H) x 55.8 (V), equivalent 4.3” diagonal

**ENVIRONMENTAL**
- Operating temperature range: 0 °C to +40 °C (32 °F to 104 °F)
- Storage temperature: -20 °C to +50 °C (-4 °F to 122 °F)
- Power consumption: 72 W
- Instrument case: 11.2 kg (24.7 lb)
- Battery weight: 0.46 kg (1 lb)
- Battery dimensions: 89.2 mm W x 20.1 mm H x 149.1 mm D
- Scan time per battery: >2 hours
- Instrument case: 500 mm W x 366 mm H x 625 mm D
- Weight: 10.7 kg (23.6 lb) with tribrach and no battery
- Laser beam diameter: 6–10–34 mm @ 10–30–100 m
- Laser wavelength: 1.5 μm, invisible
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- Laser wavelength: 1.5 μm, invisible

**Technical Specifications**
- Dimensions: 335 mm W x 386 mm H x 242 mm D
- Weight: 11.2 kg (24.7 lb) with tribrach and battery
- Power supply: 60 mm W x 43 mm H x 130 mm D
- Weight: 0.66 kg (1.46 lb)
- Battery dimensions: 89.2 mm W x 20.1 mm H x 149.1 mm 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
- Weight: 10.7 kg (23.6 lb) with tribrach and no battery
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Specifications subject to change without notice.

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