



# Trimble TX6

## LASER SCANNER

The Trimble® TX6 laser scanner is a cost effective solution for high speed collection of 3D data at crime and accident scenes. With its state-of-the-art blend of speed, range and precision, it sets new standards for performance and ease of use, delivering highly precise results in all forensics applications.

### A Revolution in 3D Scanning

The Trimble TX6 Laser Scanner's patented Lightning technology captures precise data at high speed over its full measurement range, enabling you to work faster and more efficiently. It's also less susceptible to variations in surface types and atmospheric conditions, offering unparalleled precision.

With the Trimble TX6, you can create complete datasets and take full field-of-view HDR images in just two minutes from each station. Plus, you can colorize scans using the integrated camera.

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 Scan Explorer, enabling project collaboration via Internet Explorer. The Trimble TX6 paired with RealWorks Forensics also provides efficient data flow into popular CAD programs, Trimble EdgeWise and SketchUp for point cloud modeling.

### High Performance for the Most-Demanding Scenes

The Trimble TX6 is ideal for capturing detailed data at any crime or accident scene. The color touchscreen display and one-button scanning make the collection process easy. The intuitive interface lets you quickly manage scan resolution and define scan areas. The Trimble TX6 maintains its accuracy over the entire 80 m range—with an optional upgrade that extends that range to 120m—with no need to reduce speed.

The Trimble TX6 delivers the high-quality, high-density 3D point clouds law enforcement demands, performing high-speed measurements with a 360° x 317° field of view, all without compromising range or precision. Typical scan times are just three minutes to capture 34 million points or six minutes to capture 138 million points. So you can work as quickly as you want.

Since you capture only the data you need, you'll save time in the field and office. You can even operate the scanner remotely with a Trimble tablet or other mobile device via integrated WLAN.

### Rugged, Flexible and Easy to Use

The Trimble TX6 handles the tough assignments easily. Its rugged design, IP54 rating and protected mirror mean you can 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 baggage requirements for easy transport.

### The Total Solution

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 forensics applications.

## Key Features

- ▶ Increase field productivity with fast, high resolution scans
- ▶ Confidence in data accuracy, clarity and richness
- ▶ Exceptional performance in real world environments
- ▶ Fast image capture to colorize scans with VISION™ technology
- ▶ Intuitive and easy to operate
- ▶ Data integrates with Trimble survey instruments and Trimble RealWorks Forensics software



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## PERFORMANCE

### Overview

Scanning principle ..... Vertically rotating mirror on horizontally rotating base  
 Range principle ..... High speed time-of-flight powered by Trimble Lightning technology

Scanning speed<sup>2</sup> ..... 500,000 pts/sec  
 Maximum range ..... 80 m on most surfaces  
 120 m with optional upgrade  
 Range noise<sup>5</sup> ..... <2 mm on most surfaces

### 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 ..... 80 m on 18–90% reflectivity  
 Extended range<sup>1</sup> ..... 120 m on 18–90% reflectivity  
 100 m on very low reflectivity (5%)

Range noise<sup>5</sup> ..... <2 mm from 2 m to 80 m on 18–90% reflectivity with standard  
 <2 mm from 2 m to 120 m on 18–90% reflectivity with extended range  
 Range systematic error<sup>5,6</sup> ..... <2 mm

### Scanning

Field of view ..... 360° x 317°  
 Angular accuracy<sup>5</sup> ..... 80 µrad

Scan Parameters	Preview	Level 1	Level 2	Level 3
Max range <sup>1</sup>	80/120 m	80/120 m	80/120 m	80/120 m
Scan duration (minutes) <sup>3</sup>	02:00	03:00	05:00	19:00
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	----	----	----	----
Number of points	8.7 Mpts	34 Mpts	138 Mpts	555 Mpts

## IMAGING

Integrated HDR camera ..... 10 megapixel resolution, full field of view  
 Image capture duration ..... 1 min for Standard, 2 min for HDR  
 External camera kits are available for higher resolution HDR images

## OTHERS

Touchscreen display ..... TFT-LCD with 24-bit color  
 Size (mm) ..... 93 (H) x 55.8 (V), equivalent 4.3" diagonal  
 Resolution ..... 800 x 480 (WVGA)  
 Luminance resolution ..... 8 bits  
 Levelling ..... External bubble, onboard electronic bubble  
 Dual axis compensation ..... Selectable on/off  
 Resolution ..... 0.3"  
 Range ..... ±5"  
 Accuracy<sup>5</sup> ..... 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<sup>4</sup>

## PHYSICAL

Dimensions ..... 335 mm W x 386 mm H x 242 mm D  
 Weight ..... 10.7 kg with tribrach and no battery;  
 11.2 kg with tribrach and battery  
 Power supply ..... 76 mm W x 43 mm H x 130 mm D;  
 Weight: 0.66 kg  
 Battery dimensions ..... 89.2 mm W x 20.1 mm H x 149.1 mm D  
 Battery weight ..... 0.46 kg  
 Power consumption ..... 72 W  
 Scan time per battery ..... >2 hours  
 Instrument case ..... 500 mm W x 366 mm H x 625 mm D

## ENVIRONMENTAL

Operating temperature range  
 (non-condensing atmosphere) ..... -0 °C to +40 °C  
 Storage temperature ..... -20 °C to +50 °C  
 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 from 80m to 120 m.  
 2 Effective scan speed for optimum scan quality.  
 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 At distance of 1.5 m to 100 m for albedo >20%.

Specifications subject to change without notice.



Contact your local Trimble Authorized Distribution Partner for more information

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