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

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.

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.
### General Specifications

**Overview**

Scanning principle: Vertically rotating mirror on horizontally rotating base.

Remote control: Requires optional Trimble TX8 USB cable Pn 23704034.

Remote control: Can operate with Windows 7 or higher PC or tablet via USB connection.

Data storage: USB 3.0 flash drive.

Scan duration times: For Standard scan modes.

Scan duration: Longer with High Precision scan mode.

### Scanning

**Angular accuracy**: 80 μrad

**Field of view**: 360° x 317°

**Laser wavelength**: 1.5 μm, invisible

**Laser beam diameter**: 6–10–34 mm @ 10–30–100 m

**Luminance resolution**: 8 bits

**Color acquisition**: Selectable on/off

**External camera kits**: Available for high resolution.

**Dual axis compensation**: Selectable on/off

**External bubble**: Onboard electronic bubble

**Leveling**: Selectable on/off

**Remote control**: Requires optional Trimble TX8 USB cable Pn 23704034.

### Range measurement

**Range noise**: <2 mm on most surfaces with Standard scan modes.

**Range systematic error**: <1 mm with High Precision scan mode.

**Maximum range**: 120 m on 18–90% reflectivity in High Precision mode.

**Extended range**: 340 m with optional upgrade.

### Scan Parameters

<table>
<thead>
<tr>
<th>Scan Parameters</th>
<th>Preview</th>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Extended¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max range</td>
<td>120 m</td>
<td>120 m</td>
<td>120 m</td>
<td>340 m</td>
<td>340 m</td>
</tr>
<tr>
<td>Scan duration (minutes)</td>
<td>01:00</td>
<td>02:00</td>
<td>03:00</td>
<td>10:00</td>
<td>20:00</td>
</tr>
<tr>
<td>Point spacing at 10 m</td>
<td>15.1 mm</td>
<td>——</td>
<td>——</td>
<td>——</td>
<td>——</td>
</tr>
<tr>
<td>Point spacing at 30 m</td>
<td>22.6 mm</td>
<td>11.3 mm</td>
<td>5.7 mm</td>
<td>——</td>
<td>——</td>
</tr>
<tr>
<td>Point spacing at 300 m</td>
<td></td>
<td>75.4 mm</td>
<td>——</td>
<td>——</td>
<td>——</td>
</tr>
<tr>
<td>Mirror rotating speed</td>
<td>60 rps</td>
<td>60 rps</td>
<td>60 rps</td>
<td>30 rps</td>
<td>16 rps</td>
</tr>
<tr>
<td>number of points</td>
<td>8.7 Mpts</td>
<td>34 Mpts</td>
<td>138 Mpts</td>
<td>555 Mpts</td>
<td>312 Mpts</td>
</tr>
</tbody>
</table>

¹ optional upgrade increases range to 340 m.

### OTHERS

**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); 10.6 kg (23.3 lb) with tribrach and no battery.

**Battery dimensions**: 89.2 mm W x 20.1 mm H x 149.1 mm D (5 13/16 in W x 3 ¾ in H x 5 7/8 in D); 11.0 kg (24.3 lb) with tribrach and battery.

**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 temperature range**:

- 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)
- Testing temperature range: –20 °C to +50 °C (–4 °F to 122 °F)

**Lighting conditions**: All indoor & outdoor conditions over entire range (no lighting limitations)

**Protection class**: IP54

Specifications subject to change without notice.

© 2015 Trimble Navigation Limited. All rights reserved. Trimble, the globe & Triangle logo, and RealWorks are trademarks of Trimble Navigation Limited, registered in the United States and in other countries. Lightning is a trademark of Trimble Navigation Limited. All other trademarks are the property of their respective owners. Pn 022519-138 (10/15)

Trimble Navigation Limited
10368 Westmoor Drive
Westminster, CO 80021
800.234.3758

http://mep.trimble.com