ONE OF YOUR MOST RELIABLE CREW MEMBERS

Lightweight, compact and streamlined, the Trimble® M3 Total Station provides everything you need to get the job done right in demanding situations.

Trimble Access Field Software Onboard

Featuring Trimble Access™ field software, the Trimble M3 combines trusted mechanical total station reliability with the powerful, functional and modular software that modern users need today. Designed to support your everyday work, including topographic surveys, staking, control, and more; Trimble Access offers a familiar, easy-to-use interface that will ensure your instant productivity with powerful data collection and calculation tools for fast results in the field.

Streamlined Workflows for Specialized Applications

With Trimble Access onboard, users can now take advantage of optional specialized modules that help streamline common application workflows. The Trimble Access Roads module adds powerful tools to simplify road stakeout projects. The step-by-step approach guides users with minimal training, providing all the tools at your fingertips to complete a road stakeout job.

The Trimble Access Tunnels module provides an easy to follow workflow that guides users through tasks such as marking areas of under- and overbreak with the laser pointer of the Trimble M3. The graphical interface provides a clear view of as-designed versus as-built conditions.

The Trimble Access Land Seismic module is designed to simplify seismic stakeout work to increase speed and reduce errors. The easy-to-follow workflow uses common naming conventions for stakeout points and the unique bin based navigation functionality ensures that operators get to the next stake location quickly.

Mechanical Expertise from the Innovation Leader

With long range Trimble DR technology, you can save time by reducing instrument setups to reach your desired measurement points. The high-accuracy EDM provides fast, reliable measurements to get your job done quickly and efficiently. Renowned Nikon optics provide proven clarity, quality and precision for improved aiming and operation.

Ergonomic controls plus an integrated screen and keyboard streamline and simplify your inputs.

With its bright, colorful QVGA touchscreen running Microsoft® Windows® Embedded CE 6.0 operating system, the Trimble M3 display optimizes the graphical-rich features of Trimble Access with improved readability and menu navigation. Graphical staking of points, lines, arcs and alignments is available with the Active Maps feature.

Designed to Keep You Moving

Due to its small and lightweight design, the Trimble M3 is quick and easy to move around the job site. Each instrument comes with the choice of internal optical or laser plummet making for convenient known point setups. The system ships in a rugged and compact hard-shell transport case so it is easy to transport to and from the job site.

With two hot-swappable, long life batteries included, the Trimble M3 is capable of up to 26 hours of continuous operation. This offers users the ability to quickly replace a battery while continuously working when power is getting low, without shutting down.

Trimble M3 DR 5” W

For users working in cold temperatures, the Trimble M3 DR 5” Winterized version is specially designed for use in low temperature conditions. When in use during extreme low temperatures, the rear display heater will switch on automatically at temperature around –15°C.
### DISTANCE MEASUREMENT

**Range with specified prism**

- Good conditions
  - With reflector sheet 5 cm x 5 cm (2 in x 2 in)
    - 1", 2", 3", 5": 1.5 m to 500 m (4.9 ft to 16,404 ft)
  - 5" Winterized
    - 1.5 m to 500 m (4.9 ft to 16,404 ft)

- Single prism 6.25 cm (2.5 in)
  - 1", 2", 3", 5": 1.5 m to 5,000 m (4.9 ft to 16,404 ft)
  - 5" Winterized
    - 1.5 m to 5,000 m (4.9 ft to 16,404 ft)

**Reflectorless mode**

<table>
<thead>
<tr>
<th>Diameter</th>
<th>Good</th>
<th>Normal</th>
<th>Difficult</th>
</tr>
</thead>
<tbody>
<tr>
<td>KGC (18%)</td>
<td>350 m (1,148 ft)</td>
<td>250 m (820 ft)</td>
<td>200 m (656 ft)</td>
</tr>
<tr>
<td>KGC (90%)</td>
<td>500 m (1,640 ft)</td>
<td>400 m (1,312 ft)</td>
<td>250 m (820 ft)</td>
</tr>
<tr>
<td>5&quot; Winterized</td>
<td>Good</td>
<td>Normal</td>
<td>Difficult</td>
</tr>
<tr>
<td>KGC (18%)</td>
<td>280 m (919 ft)</td>
<td>250 m (820 ft)</td>
<td>200 m (656 ft)</td>
</tr>
<tr>
<td>KGC (90%)</td>
<td>500 m (1,640 ft)</td>
<td>400 m (1,312 ft)</td>
<td>300 m (984 ft)</td>
</tr>
</tbody>
</table>

**Accuracy (Standard Deviation based on ISO 17123-4)**

- Prism: ±(3 + 2 ppm × D) mm
- Reflectorless: ±(3 + 3 ppm × D) mm
- Winterized version: ±(3 + 2 ppm × D) mm
  - Temperature range: –10 °C to +40 °C
  - Accuracy (Standard Deviation based on ISO 17123-4)

#### Measuring interval

<table>
<thead>
<tr>
<th>Prism mode</th>
<th>Standard mode</th>
<th>Fast standard mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>1&quot;, 2&quot;, 3&quot;, 5&quot;</td>
<td>16 s</td>
<td>0.8 s</td>
</tr>
<tr>
<td>5&quot; Winterized</td>
<td>1.5 s</td>
<td>0.8 s</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reflectorless mode</th>
<th>Standard mode</th>
<th>Fast standard mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>1&quot;, 2&quot;, 3&quot;, 5&quot;</td>
<td>2.1 s</td>
<td>1.2 s</td>
</tr>
<tr>
<td>5&quot; Winterized</td>
<td>1.8 s</td>
<td>1.0 s</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Least count</th>
<th>1 mm (0.002 ft)</th>
<th>10 mm (0.02 ft)</th>
</tr>
</thead>
</table>

### ANGLE MEASUREMENT

- DIN 18723 accuracy (horizontal and vertical): 1" / 0.5 mgon, 3" / 1.0 mgon, 5" / 1.5 mgon
- Absolute encoder
- Diameter: 62 mm (2.4 in)
- Minimum increment (Degree, Gon, MIL6400):
  - Degree: 0.1° / 1° / 5° / 10°
  - Gon: 0.2° / 2° / 4°
  - MIL6400: 0.005° / 0.02° / 0.05 mil

### Telescope

- Tube length: 125 mm (4.9 in)
- Image: Erect
- Magnification: 30x (18x/36x with optional eyepieces)
- 1", 2", 3", 5" Effective diameter of objective: 40 mm (1.6 in)
- 1", 2", 3", 5" EDM diameter: 45 mm (1.8 in)
- 5" Winterized Effective diameter of objective: 45 mm (1.8 in)
- 5" Winterized EDM diameter: 50 mm (2.0 in)
- Field of view: 1° 20′
- Resolving power: 3”
- Minimum focusing distance: 1.5 m (4.9 ft)
- Laser Pointer: Coaxial Red Light

### COMMUNICATIONS

- 1 x serial (RS-232C), 2 x USB (host and client)
- Bluetooth communications
- Integrated Bluetooth
- 5" Winterized: approx. 16 hours (distance/angle measurement every 30 seconds)
- 280 m (919 ft) KGC (18%)
- 250 m (820 ft) KGC (90%)
- 200 m (656 ft) 5" Winterized

### General Specifications

- Level vials: Sensitivity of Circular level vial: 10”/2 mm
- Tilt sensor: Dual-axis
- Barometric pressure: 400 mmHg to 999 mmHg / 533 hPa to 1332 hPa
- Temperature range: –40 °C to +60 °C (–40 °F to +140 °F)
- Humidity: 0% to 100% relative humidity
- Barometric pressure: 300 mmHg to 1000 mmHg / 40 kPa to 133 kPa
- Weight: approx. 4.2 kg (9.3 lb)
- Battery: approx. 1.2 hours
- Battery life: approx. 16 hours (distance/angle measurement every 30 seconds)

### ENVIRONMENTAL

- Operating temperature range: –20 °C to +50 °C (–4 °F to +122 °F)
- Storage temperature range: –30 °C to +70 °C (–22 °F to +158 °F)
- Atmospheric correction: –40 °C to +60 °C (–40 °F to +140 °F)
- Barometric pressure: 0 mmHg to 1013 mmHg / 0 kPa to 1013 kPa

### Certification

- Class II Part 15 FCC certification, CE Mark approval, C-Tick
- Compliant with IEC 60825-1:2001 and LA94-113:1993
- Laser Class: Class 2 laser
- Barometric pressure: 400 mmHg to 999 mmHg / 533 hPa to 1332 hPa

### Specifications

- Measuring time may vary depending on measuring distance and conditions
- Specifications subject to change without notice

**Environment:**
- Trimble M3 Total Station
- General Specifications
- Specifications subject to change without notice

**Dimensions (W x D x H):**
- 149 mm x 145 mm x 306 mm

**Display:**
- Backlit, graphic LCD (128x64 pixel)

**Point Memory:**
- 128 MB RAM, 1 GB Flash Memory

**Weight (approx.):**
- 4.1 kg (9.0 lb)

**Battery Life:**
- approx. 26 hours (distance/angle measurement every 30 seconds)
- approx. 16 hours (distance/angle measurement every 30 seconds)

**Operating Temperature:**
- –25 °C to +60 °C (–13 °F to +140 °F)

**Power Consumption:**
- 3.8 V DC

**Model:**
- Trimble M3 Total Station

**Contact:**
- Trimble Navigation North America
  - USA: 10368 Westmoor Dr
  - USA
- Trimble Navigation Asia-Pacific
  - Singapore: #22-06, Parkway Parade

**Website:**
- www.trimble.com