# DATASHEET



#### **KEY FEATURES**

A rugged design you can count on every day

Proven Nikon optics and Trimble onboard software

Improved long-range reflectorless measurement

300 meter DR measures hard-toreach points without a prism

Precision laser pointer ensures that you measure exactly what you need



## ONE OF YOUR TOUGHEST AND MOST RELIABLE CREW MEMBERS

The Trimble M3 Total Station combines tough construction with practical hardware and software functionality:

- Rugged aluminum housing ensures IPX6 water resistance.
- Long battery life provides 8 hours of continual measurement or one full day of work without needing to recharge.
- A large internal memory stores up to 10,000 data lines in the field... several days' worth of data collection.
- The onboard software supports multiple jobs simultaneously. You can work on different jobs or projects at the same time without downloading your data in-between.
- DR (direct reflex) technology lets you safely measure hard-to-reach points without a prism. This feature also enables single-crew operation, freeing up the time of other crew members.

The Trimble M3 Total Station is also extremely easy to use. Its intuitive software and workflow mean your crew won't lose time and productivity on a steep learning curve.

#### THE ACCURACY YOU NEED EVERY TIME

No matter what the conditions, you can rely on the Trimble M3 to consistently deliver the accuracy you need for every job. To ensure accuracy, the Trimble M3 offers the following features:

- An internal optical plummet expedites setup and ensures high accuracy stationing.
- Choose the Trimble M3 model with the accuracy you need: 3" or 5".
- Proven Nikon optics ensure clear, quality and precise aiming.
- 2 mm + 2 ppm EDM provides fast, accurate and reliable measurements.

With a precision laser-pointer and long-range DR technology you always know that what you see is what you're measuring.

## BY THE SURVEYORS AT TRIMBLE FOR SURVEYORS LIKE YOU

Only a surveyor knows what a surveyor needs. And at Trimble, qualified surveyors develop products they know will help surveying professionals like you get the job done... every time. So when you're investing in a total station, Trimble is the name you can trust.

The Trimble M3 Total Station gives you access to Trimble's long reputation in developing the highest quality surveying instruments. And our 24/7 worldwide support means you're never alone; the surveyors at Trimble are ready to lend a hand whenever you need it.



### TRIMBLE M3 TOTAL STATION

| PERFORMANCE   |
|---|
| Angle Measurement   |
| (Standard deviation based on DIN 18732)3" (1.0 mgon) or 5" (1.5 mgon) |
| Angle reading (least count)1"/0.2 mgon (for 3" DR),                   |
| 1"/0.5 mgon (for 5" DR)   |
| Automatic level compensator Dual-axis compensator                     |
| ±3', (±50 mgon)   |
| , , , , , , , , , , , , , , , , , , ,                                 |
| Distance Measurement  |
| Accuracy  |
| Prism mode  |
| Reflex tape   |
| DR mode   |
| Shortest possible range to target                                     |
| Measuring time <sup>3</sup>   |
| Prism mode  |
| Standard  |
| Tracking  |
| DR mode   |
| Standard  |
| Tracking  |
| Range (under standard clear conditions <sup>4</sup> )                 |
| Prism mode  |
| 1 prism   |
| Reflective foil 5 cm x 5 cm   |
| DR mode   |
| Kodak Grey Card (90% reflective)                                      |
|   |
| GENERAL SPECIFICATIONS  |
| Atmospheric correction Manual setting temperature and pressure        |
| Leveling Plate level vial 30"/2 mm, circular level vial 10'/2 mm      |

| GENERAL SPECIFICATIONS   |
|--|
| Atmospheric correction Manual setting temperature and pressure   |
| Leveling Plate level vial 30"/2 mm, circular level vial 10'/2 mm |
| Clamps and slow motions  |
| Centering  |
| Centering systemTrimble 3-pin                                    |
| Optical plummetErect   |
| Magnification  |
| Shortest focusing distance 0.5 m (1.64 ft)                       |
| Telescope  |
| Magnification  |
| Aperture   |
| Field of view  |

**Environmental** Operating temperature . . . . . . . . . . . . . . . . . -20 °C to +50 °C (-4 °F to +122 °F) Dust and water proofing......IP56 Display..... Graphic LCD (128x64) with LED backlight Power supply Internal battery......Rechargeable Ni-MH 7.2 V, 3.8 Ah Operating time<sup>5</sup> ...... Approx 8 hours Instrument . . . . . . . . . . . . . . . . . 5.0 kg (11 lb) without battery Dimensions Dimensions (instrument) (DxWxH)......173 mm × 168 mm × 347 mm  $(6.81 \text{ in} \times 6.61 \text{ in} \times 13.66 \text{ in})$ 

#### **Software and Recording**

Software features ........Resection; known station; station elevation; measure topo; stakeout (known stake out elements); RefLine 2D; DivLine 2D; eccentric measurement; connecting distances (radial, polygonal); remote object; station and offset; vertical plane; computation area Data input/output . . . . . . . . . . . . . . RS232, baud rate up to 38,400 bps, data formats: M5 and Nikon External recording via RS232 ..... Nikon

#### CERTIFICATION

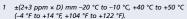
Class B Part 15 FCC certification, CE Mark approval and C-tick approval. Laser safety IEC 60825-1 am2:2001 Reflectorless mode: Class 3R

Laser pointer: Class 3R Prism mode: Class 1

#### RECYCLING INFORMATION

For product recycling instructions and more information, please go to www.trimble.com/environment/summary.html.





±(3+3 ppm × D) mm -20 °C to -10 °C, +40 °C to +50 °C (-4 °F to +14 °F, +104 °F to +122 °F).

- Measuring time may vary depending on measuring distance and conditions. Initial measurement may take longer.
- No haze, visibility over 40 km (25 miles). Battery life specification at 25 °C. Operation time may be shorter if battery is not new.

Specifications are subject to change without notice



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