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### Key features

- A high-performance mechanical total station designed for general and concrete contractors
- Includes an integrated Windows CE touch screen device; no external controller required
- Runs powerful Trimble LM80 Layout Manager software directly onboard
- Proven, precision optics and a fast, long-range EDM ensure precise aiming and accurate measurements
- Choose prism or reflectorless measurements



**The Trimble tS835 Total Station is an advanced 5 second mechanical instrument with an integrated Microsoft Windows CE device running Trimble LM80 Layout Manager software. Designed for general and concrete contractors, the TS835 is uniquely able to perform a full range of positioning and layout tasks on the building construction job site. The TS835 instrument provides the user with a bright, easy to read, intuitive graphical interface without the need for an external controller. This reduces the number of hardware devices that require charging and syncing providing the user with a less complicated more user friendly tool.**

#### a Premium mechanical total Station for building construction

The Trimble TS835 Total Station delivers the accuracy necessary for the layout of foundations, forms, and footers . Using the TS835 you can leverage digital data for layout to reduce mistakes and increase productivity, as well as check the accuracy of points set out by others .

- Features of the rugged yet lightweight TS835 include: Superior 30x optics provide clear sighting and precise aiming, so you can keep working even in less-than-ideal lighting . Short- and long-distance focusing is faster .
- Measure to a single prism up to 5000m or use in a reflectorless mode to up to 300 m (984 ft) for either one- or two- person measurements .
- A Lumi-Guide or Tracklight can be turned on during stakeout to set points faster and more efficiently The bright lights emitted just below the telescope assists the rod person in finding the correct instrument alignment .
- USB High-Speed Data transfer port and support for USB memory sticks on side cover of instrument enable users to move data from device to device very easily .

#### Streamlined total Station operation Via integrated Windows CE Device

With its powerful fully integrated Windows CE touch screen interface, the TS835 streamlines workflow and makes its operation faster and easier . Its clear display and touch screen ensure an interface that is user friendly even when outdoor lighting is bright or very low .

By eliminating the need for an external controller, the TS835 spares you the additional cost, inconvenience, and management of external hardware and cables . And before operation, only one device—the instrument—must be charged .

#### Powerful trimble lm80 layout manager Software onboard

With Trimble LM80 software directly onboard the TS835 you can carry, manage, work with, and lay out job site blueprints for fast and accurate building-foundation layout . The software handles numerous data types, and lets you create points in the field directly from a DXF file .

Despite its powerful functionality, the LM80 software is simple to use . Its graphical interface is vastly superior to other onboard software, so viewing and referencing jobs and analyzing data is fast and easy .

The TS835 includes a mini USB port for job and file transfer between the instrument and a PC, so you can easily transfer data from Trimble LM80 Desktop to the instrument . Software updates are also handled directly: At your convenience simply load software updates posted on the Trimble Web site directly to the TS835 .

#### Seamless transition to a trimble robotic Solution

The TS835 uses the same full-featured LM80 software as Trimble robotic total stations for building construction . Whenever you are ready to transition from the TS835 to a robotic solution, your team will experience just the smallest learning curve .

#### a construction layout Solution from the Positioning leader

Trimble is the industry leader in high-accuracy and precision positioning, delivering the latest in technology for construction layout solutions . So with the Trimble TS835 Total Station you can be assured of the quality of your work, and confidently stake your reputation on your results . In addition, Trimble 24/7 worldwide support means you are never alone; the surveying and construction professionals at Trimble are ready to lend a hand whenever you need it .

## Performance Specifications

### Angle Measurement

|                                       |                       |
|---------------------------------------|-----------------------|
| Accuracy (DIN 18723) . . . . .        | 5" (1.5 mm)           |
| Angle reading increments . . . . .    | 1" (0.2 mm)           |
| Automatic level compensator . . . . . | Dual-Axis Compensator |
| Reading System . . . . .              | Dual Absolute Encoder |

### Distance Measurement

#### Prism Mode

|   |                             |
|---|-----------------------------|
| Accuracy – Prism (Precise mode) . . . . . | ±3mm + 2ppm (.01 ft +2 ppm) |
| Accuracy – Reflectorless . . . . .        | ±3mm + 2ppm (.01 ft +2 ppm) |

#### Measuring Time

|  |             |
|--|-------------|
| Prism (Normal mode) . . . . .          | 1.0 seconds |
| Prism (Precise mode) . . . . .         | 1.5 seconds |
| Reflectorless (Normal mode) . . . . .  | 1.0 seconds |
| Reflectorless (Precise mode) . . . . . | 1.5 seconds |

#### Maximum Measuring Range (Standard Clear)

|   |                    |
|---|--------------------|
| Single Prism (50mm diameter) . . . . .        | 5000m (16,400 ft.) |
| Kodak Gray (90% reflective surface) . . . . . | 300m (984 ft.)     |

## General Specifications

|                                       |  |
|---------------------------------------|--|
| Instrument plummet . . . . .          | Alidade laser plummet – 4 levels – Class 2 Laser |
| Display Face 2 . . . . .              | Backlit, graphic LCD (128 x 64 pixel)            |
| Memory . . . . .                      | 128 MB RAM, 128MB Flash mem                      |
| Processor . . . . .                   | Marvel PXA300 X-Scale 624 MHz                    |
| Dimensions (W x D x H) . . . . .      | 149mm x 145mm x 306mm<br>(5.8 x 5.7 x 12.0 inch) |
| Main Unit Weight (approx.) . . . . .  | 4.0 kg (8.82 lbs)                                |
| Carry Case Weight (approx) . . . . .  | 2.3 kg (5.1 lbs)                                 |
| Dust and Water Protection . . . . .   | IP66   |
| Operating Temperature Range . . . . . | -20°C to +50°C (-4 °F to +122°F)                 |
| Storage Temperature Range . . . . .   | -25°C to +60°C (13 °F to +140°F)                 |

### Telescope

|   |                                   |
|---|-----------------------------------|
| Magnification . . . . .                   | 15x                               |
| Field of View . . . . .                   | 1.5 degrees                       |
| Minimum Focus Distance . . . . .          | 1.5m (4.9 ft)                     |
| EDM Diameter . . . . .                    | 50m                               |
| Effective Diameter of Objective . . . . . | 45mm (1.8 in)                     |
| Laser Pointer . . . . .                   | Coaxial red light – Class 2 Laser |

### Battery

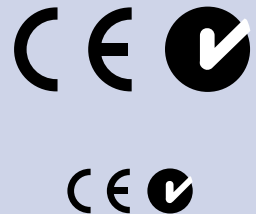
|                          |  |
|--------------------------|--|
| Type . . . . .           | Internal Li-Ion Batteries 3  |
| Charge time . . . . .    | Approx. 4 hours . . . . .<br>(Dist/Ang. measurement every 30 sec.) |
| Operating time . . . . . | Approx. 16 hours   |

### communication

|                                   |  |
|-----------------------------------|--|
| Communication Ports . . . . .     | 1x serial (RS-232C, 2x USB<br>(host and client)) |
| Wireless communications . . . . . | Integrated Bluetooth                             |

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Specifications subject to change without notice.



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