The Trimble® TS215 Total Station is a rugged, entry-level mechanical total station designed to meet the needs of building construction contractors performing two-person construction layout. Use the Trimble TS215 alone, or partner it with the Trimble LM80 Layout Manager for enhanced layout capabilities, blueprint entry, and the added convenience of a graphic display.

**TRIMBLE ACCURACY FOR CONSTRUCTION LAYOUT … THAT YOU CAN ACHIEVE YOURSELF**
The Trimble TS215 Total Station lets you perform a wide range of building construction layout tasks without relying on third parties. You can independently achieve industry-leading Trimble distance and measurement accuracy—and enjoy complete control over your layout needs.

Saving you money and increasing your efficiency, the TS215 provides best accuracy for jobs such as:
- Measuring angles and distances
- Setting out angles and distances
- Laying out building lines
- Setting point locations for concrete form placement
- Setting anchor bolts
- Establishing excavation lines

**A TOTAL STATION THAT DELIVERS WHATEVER YOUR JOB CONDITIONS**
When you arrive on the job site, just pull the Trimble TS215 Total Station out of its case and get to work. This rugged and reliable instrument accurately delivers whatever the conditions.

**Durable High-Performance Hardware**
The TS215 offers features designed to deliver quality results and increase your productivity:
- Superior Nikon optics provide clear sighting and precise aiming even in low light. Short- and long-distance focusing is faster.
- Rugged aluminum housing ensures IP55 dust and water resistance.
- An internal optical plummet expedites setup and ensures high accuracy stationing.

- Just four rechargeable AA batteries are required for approx 6–15 hours of operation. When the instrument is low on power, replacing the batteries is quick and convenient, resulting in less downtime.

**Trusted, Easy-to-Learn Programs**
The TS215 operates with Trimble onboard software that has been proven in the field. It is easy to use and learn, so new TS215 users can be up and running with the instrument in no time. Onboard layout programs include:
- Point-to-point or missing-line distance measurement
- Layout-to-point via down-and-out distance entry
- Reference-line measurement

Distances are clearly displayed in feet and inches, decimal feet, and meters; and multiple display pages enable users to easily access the data in the field.

The software is accessed via a simple onboard interface, or through the enhanced graphic display of the LM80 Layout Manager.

**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 TS215 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 (Standard deviation based on DIN18723) . . 5° (1.5 mgon)
Angle reading increments . 1°/5°/10° (0.2 mgon/ 1 mgon/ 2 mgon)
Automatic level compensator ........ Single-axis compensator

Distance Measurement
Prism Mode
Standard measurement ............ ±3 mm + 2 ppm (0.01 ft + 2 ppm)
Tracking ............................ ±10 mm + 2 ppm (0.032 ft + 2 ppm)

Measuring Time
Prism Mode
Standard measurement ............ 1.6 s
Tracking ............................ 1.0 s

Range (at Standard Clear)
Measurement to Prism
1 prism (50 mm dia.) .................... 2,300 m (7,500 ft)
3 prisms ................................ 3,000 m (9,800 ft)

Range with specified prisms
Good conditions (No haze, visibility over 40 km [25 miles])
With reflector sheet (5 x 5 cm) .... 5 m to 100 m (16.4 ft to 328 ft)
With mini prism 2.5 cm (1 in) ............ 1,200 m (3,930 ft)
With single prism 6.25 cm (2.5 in) .... 2,000 m (6,560 ft)
With triple prism ..................... 3,000 m (9,840 ft)

GENERAL SPECIFICATIONS

Optical plummet ................................ Optical 3x

Telescope
Magnification ........................................ 33x
Aperture .................................................. 45 mm (1.77 in)
Illuminated crosshair ......................... No
Display screen ............................... Single side - graphic LCD (128 x 64 pixel)
Operating temperature .................. –20 °C to + 50 °C (–4 °F to 122 °F)

Battery
Type ........................................ 4x AA Ni-MH Batteries, rechargeable
Charge time ................................... Approximately 3.7 hours
Operating time ........................... Approximately 12–15 hours
Class II laser product label ........ No

DATA TRANSFER AND RECORDING

Data input/output ........................... RS232
LM80 interface ............................... Optional