

# Total Stations

# DTM-322



- Legendary Nikon optics
- Fast, accurate EDM
- Convenient and long-lasting rechargeable AA batteries
- Easy-to-use keypad
- Rugged and lightweight
- Linear focusing mechanism

Nikon introduces the DTM-322 Total Station that delivers an economic, versatile, and easy-to-use platform to make sure you get the job done right.

Nikon's legendary optics effectively allow in more light to give you brighter, clearer images. You'll see the difference when you look through a Nikon Total Station even in the low-visibility conditions typical in the field. You'll see much more detail and much less distortion, especially over longer distances. Better optics help you aim more precisely, and they're much easier on your eyes – something you'll really appreciate on long workdays.

The Nikon DTM-322 Total Station is among the fastest total stations in its class, so you can move quickly through your routines and spend less time in the field. The DTM-322 is rugged and lightweight – at 5kg (11 lb) including the battery.

Using rechargeable, or off-the-shelf AA batteries, the DTM-322 is designed to consume low power and provide the longest possible time in the field.

The Nikon DTM-322 is built tough for all occasions.

SPECIFICATIONS	DTM-322
<b>DISTANCE MEASUREMENT</b>	
Range with Nikon specified prisms	
Good conditions (No haze, visibility over 40 km (25 miles))	5 m to 100 m (16.4 ft to 328 ft) 2,300 m (7,540 ft)
With reflector sheet (5 × 5 cm)	
With single prism 6.25 cm (2.5 in)	
Normal conditions (Ordinary haze, visibility approx. 20 km (12.4 miles))	5 m to 100 m (16.4 ft to 328 ft) 2,000 m (6,560 ft)
With reflector sheet (5 × 5 cm)	
With single prism 6.25 cm (2.5 in)	
Accuracy (Prism/Precise mode) <sup>1</sup>	±(3+2 ppm × D) mm
Measuring interval <sup>2</sup>	Precise mode      Normal mode
Prism mode	1.6 sec.            1.0 sec.
Least count (Precise mode/Normal mode)	1 mm (0.002 ft)    10 mm (0.02 ft)
<b>ANGLE MEASUREMENT</b>	
DIN 18723 accuracy (horizontal and vertical)	5"/1.5 mgon
Circle diameter	88 mm (3.46 in)
Horizontal/Vertical angle	Single
Minimum increment	Degree: 1/5/10"; Gon: 0.2/1/2 mgon; MIL6400: 0.005/0.02/0.05 mil
<b>TELESCOPE</b>	
Magnification	33× (21×/41× with optional eyepieces)
Minimum focusing distance	1.5 m (4.92 ft)
<b>TILT SENSOR – Type</b>	
	Single-axis
<b>COMMUNICATIONS – Ports</b>	
	1 x serial (RS-232C)
<b>POWER</b>	
Clip-on rechargeable battery system	4x AA Ni-MH Battery
Operating time <sup>3</sup>	approx. 15 hours (continuous distance/angle measurement every 30 s.)
<b>GENERAL SPECIFICATIONS</b>	
Level vials – Sensitivity of Plate level vial	30"/2 mm
Sensitivity of Circular level vial	10"/2 mm
Optical plummet	
Magnification	3×
Focusing range	0.5 m (1.6 ft) to ∞
Display	Single side, graphic LCD (128 × 64 pixel)
Point memory	10,000 records
Dimensions (L x H x W)	168 mm × 173 mm × 335 mm (6.6 in × 6.8 in × 13.2 in)
Weight	
Main unit (without battery)	4.8 kg (10.6 lb)
Battery / Carry case	0.2 kg (0.4 lb) / 2.4 kg (5.3 lb)
<b>ENVIRONMENTAL</b>	
Ambient temperature range	–20 °C to +50 °C (–4 °F to +122 °F)
Atmospheric correction	
Temperature range	–40 °C to +55 °C (–40 °F to +131 °F)
Barometric pressure	400 mmHg to 999 mmHg / 533 hPa to 1,332 hPa / 15.8 inHg to 39.3 inHg
Dust and water protection	IP55
<b>CERTIFICATION</b>	Class B Part 15 FCC certification, CE Mark approval, C-Tick.

1 ±(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).

2 Measuring time may vary depending on measuring distance and conditions.

3 Battery life specification at 25 °C (77 °F).