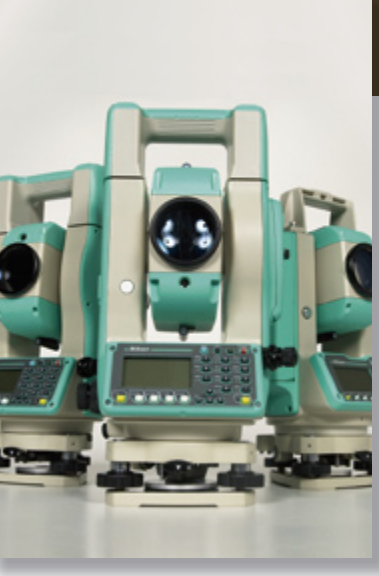
Total Stations 302, 502 & 602 Series



- Legendary optics
- Fast, accurate EDM
- Long-lasting batteries
- DTM models with reflector sheets or prisms
- NPL and NPR models for reflectorless options
- Easy-to-use keypad
- Rugged and lightweight
- Linear focusing mechanism

Nikon Series Total Stations deliver a versatile, easy-to-use platform to help you get the job done right. The Nikon 302 Series offers six different models, while the 502 and 602 Series each include two models - for a total of 10 different instruments for you to choose from. The 302 Series offers DTM and NPR model options, while the 502 and 602 Series feature DTM and NPL options.

Nikon's world-renowned optics give you brighter, clearer images. You'll see the difference when you look through a Nikon Total Station. Nikon's legendary optics effectively let in more light. The result is brighter, sharper images, 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. Battery life is superior, and lightweight, all-weather construction ensures reliable performance in tough field conditions.

Nikon Total Stations are part of the complete data collection system from Tripod Data Systems. You can depend on Nikon's on-board data collection and Connex transfer software, or for greater power and flexibility you can connect a TDS data collector to your Nikon Total Station.

302 Series

- Six models to choose from (DTM-332/352/362, NPR-332/352/362)
- Waterproof IP56 rating

The 302 Series Nikon Total Stations offer the longest battery life in the industry—up to 30 hours—so you can work through even your longest day without battery changes. And they have an IP56 waterproof rating, meaning they can withstand even powerful jets of water. The Nikon 302 Series Total Stations are among the fastest total stations in their class, so you can move quickly through your routines and spend less time in the field. 302 Series Total Stations are rugged and lightweight—less than 12 pounds including the battery.

502 Series

- Two models to choose from (DTM-522 and NPL-522)
- Lumi-Guide tracking light

The 502 Series Nikon Total Stations have multiple features to help you work more quickly and productively in the field. The 502 Series consists of the popular DTM-522 and the NPL-522. Both models feature a Lumi-Guide tracking light above the telescope objective lens. It emits one steady and one blinking beam of coherent red light, allowing the rodman to locate the correct line quickly and easily. The 502 Series is extremely precise. The DTM-522 model has an accuracy of ± (2+2 ppm x D) mm in precise mode and the NPL-522 features accuracy of ± (3+2 ppm x D) mm in precise mode.

602 Series

- Two models to choose from (DTM-652 and NPL-632)
- External and portable data storage
- Lumi-Guide tracking light

The 602 Series Nikon Total Stations feature external data storage and transfer via CompactFlash (CF) cards or USB mass storage devices. You can use Type I or II CF cards or USB 1.0, 1.1 or 2.0 devices. Download data to one of these storage devices, and carry it back to your office to easily transfer the data to your PC. The DTM-652 Total Station is one of the fastest total stations in its class, with highly accurate 1" angle and 2+2 ppm distance measurement capabilities. The NPL-632 features 2" angle accuracy and reflectorless operation with 3+2 ppm distance measurement accuracy.

SPECIFICATIONS		NPR-362/352	NPR-332	DTM-362/352	DTM-332
TELESCOPE					
Magnification		33x (21x/44x with optional eyepieces)	33x (21x/44x with optional eyepieces)	33x (21x/41x with optional eyepieces)	33x (21x/41x with optional eyepieces)
Effective diameter of objective		1.57 in (45 mm)	1.57 in (45 mm)	1.77 in (45 mm)	1.77 in (45 mm)
Minimum focusing distance		4.9 ft (1.5 m)	4.9 ft (1.5 m)	4.26 ft (1.3 m)	4.26 ft (1.3 m)
Reticle illumination					
DISTANCE MEASUREMENT		**RANGE WITH NIKON SPECIFIED PRISMS**	**RANGE WITH NIKON SPECIFIED PRISMS**	**RANGE WITH NIKON SPECIFIED PRISMS**	**RANGE WITH NIKON SPECIFIED PRISMS**
Reflectorless mode (white target)[1]		4.9 ft to 885 ft (1.5 m to 270 m)	4.9 ft to 885 ft (1.5 m to 270 m)	-	-
Good conditions		(no haze, visibility of over 25 miles (40 km))	(no haze, visibility of over 25 miles (40 km))	(no haze, visibility of over 25 miles (40 km))	(no haze, visibility of over 25 miles (40 km))
With single prism		9,840 ft (3,000 m)	9,840 ft (3,000 m)	7,540 ft (2,300 m)	7,540 ft (2,300 m)
With triple prism		-	-	9,840 ft (3,000 m)	9,840 ft (3,000 m)
Normal conditions		(ordinary haze, visibility approx. 12.5 miles (20 km))	(ordinary haze, visibility approx. 12.5 miles (20 km))	(ordinary haze, visibility approx. 12.5 miles (20 km))	(ordinary haze, visibility approx. 12.5 miles (20 km))
With single prism		9,840 ft (3,000 m)	9,840 ft (3,000 m)	6,560 ft (2,000 m)	6,560 ft (2,000 m)
With triple prism		-	-	8,530 ft (2,600 m)	8,530 ft (2,600 m)
Accuracy (Prism/Precise mode)		±(2+2 ppm × D) mm	±(3+2 ppm x D) mm	±(3+2 ppm x D) mm	±(3+2 ppm x D) mm
Accuracy (Reflectorless/Precise mode)		±(3+2 ppm x D) mm	±(3+2 ppm x D) mm	-	-
MEASURING INTERVAL[2]					
Prism mode	Precise mode	1.5 sec	1.5 sec	1.6 sec (initial 1.6 sec)	1.6 sec (initial 1.6 sec)
	Normal mode	0.8 sec	0.8 sec	1.0 sec (initial 1.4 sec)	1.0 sec (initial 1.4 sec)
Reflectorless mode	Precise mode	1.8 sec	1.8 sec	-	-
	Normal mode	1.0 sec	1.0 sec	-	-
Least count	Precise mode	0.002 ft	0.002 ft	0.002 ft (1 mm)	0.002 ft (1 mm)
	Normal mode	0.02 ft	0.02 ft	0.02 ft (10 mm)	0.02 ft (10 mm)
ENVIRONMENTAL SPECIFICATIONS		IP56	IP56	IP56	IP56
AMBIENT TEMPERATURE RANGE		–4 °F to +122 °F (–20 C to 50 C)	–4 °F to +122 °F (–20 C to 50 C)	–4 °F to +122 °F (–20 C to 50 C)	–4 °F to +122 °F (–20 C to 50 C)
ATMOSPHERIC CORRECTION					
Temperature range		–40 °F to +140 °F (–40 C to 60 C)	–40 °F to +140 °F (–40 C to 60 C)	–40 °F to +140 °F (–40 C to 60 C)[3]	–40 °F to +140 °F (–40 C to 60 C)
Barometric pressure		400 mm Hg to 999 mmHg 533 hPa to 1,332 hPa/15.8 in.Hg to 39.3 in.Hg	400 mm Hg to 999 mmHg 533 hPa to 1,332 hPa/15.8 in.Hg to 39.3 in.Hg	400 mm Hg to 999 mmHg 533 hPa to 1,332 hPa/15.8 in.Hg to 39.3 in.Hg	400 mm Hg to 999 mmHg 533 hPa to 1,332 hPa/15.8 in.Hg to 39.3 in.Hg
ANGLE MEASUREMENT					
Minimum increment (Degree, Gon, MIL6400)		Degree: 1/5/10", Gon: 0.2/1/2 mgon, MIL6400: 0.005/0.02/0.05 mil	Degree: 1/5/10", Gon: 0.2/1/2 mgon, MIL6400: 0.005/0.02/0.05 mil	Degree: 1/5/10", Gon: 0.2/1/2 mgon, MIL6400: 0.005/0.02/0.05 mil	Degree: 1/5/10", Gon: 0.2/1/2 mgon, MIL6400: 0.005/0.02/0.05 mil
DIN 18723 accuracy (horizontal and vertical)		3"/1 mgon, 5"/1.5 mgon	5"/1.5" mgon	3"/5"	5"
TILT SENSOR		Dual-axis	Single-axis	Dual-axis	Single-axis
LEVEL VIALS					
Plate level vial		30"/2 mm	30"/2 mm	30"/2 mm	30"/2 mm
Circular level vial		10'/2 mm	10'/2 mm	10'/2 mm	10'/2 mm
OPTICAL PLUMMET	Magnification	3x	3x	3x	3x
DISPLAY		Graphic LCD (128 x 64 dot); both sides	Graphic LCD (128 x 64 dot); single side	Graphic LCD (128 x 64 dot); both sides	Graphic LCD (128 x 64 dot); single side
POINT MEMORY		10,000 records	10,000 records	10,000 records	10,000 records
DIMENSIONS (W X D X H)		6.6 in x 6.8 in x 13.7 in (168 mm x 173 mm x 347 mm)	6.6 in x 6.8 in x 13.7 in (168 mm x 173 mm x 347 mm)	6.6 in x 6.8 in x 13.2 in (168 mm x 173 mm x 335 mm)	6.6 in x 6.8 in x 13.2 in (168 mm x 173 mm x 335 mm)
WEIGHT (APPROX.)					
Main unit (without battery)		11.0 lb (5.0 kg)	10.8 lb (4.9 kg)	10.8 lb (4.9 kg)	10.6 lb (4.8 kg)
Battery		0.9 lb (0.4 kg)	0.9 lb (0.4 kg)	0.9 lb (0.4 kg)	0.9 lb (0.4 kg)
Carrying case		9.7 lb (4.4 kg)	9.7 lb (4.4 kg)	5.3 lb (2.4 kg)	5.3 lb (2.4 kg)
NiMH BATTERY	Operating time[4]	Clip-on BC-65 approx. 8 hours (cont. distance/angle meas.) approx. 16 hours (cont. distance/angle meas. every 30 sec) approx. 30 hours (angle meas.)	Clip-on BC-65 approx. 8 hours (cont. distance/angle meas.) approx. 16 hours (cont. distance/angle meas. every 30 sec) approx. 30 hours (angle meas.)	Clip-on BC-65 approx. 16 hours (cont. distance/angle meas.) approx. 27 hours (cont. distance/angle meas. every 30 sec) approx. 30 hours (angle meas. only)	Clip-on BC-65 approx. 16 hours (cont. distance/angle meas.) approx. 27 hours (cont. distance/angle meas. every 30 sec) approx. 30 hours (angle meas. only)
	Output voltage	7.2V DC	7.2V DC	7.2V DC	7.2V DC
	Recharging time	approx 3 hours for full recharge	approx 3 hours for full recharge	approx 3 hours for full recharge	approx 3 hours for full recharge
COMMUNICATION PORTS		1x serial	1x serial	1x serial	1x serial

1. KGC 90% is Kodak Gray Card, 90% reflective.
2. Measuring time may vary depending on measuring distance and conditions. For the initial measurement, it may take a few more seconds.
3. A special version of the DTM-352 is available that allows operation down to –22 degrees. (NOTE: use degree symbol)(–30 C).
4. At 77 degrees F (25 C). Operation time may be shorter if battery is not new.