Nikon Pulse Laser Station NPL-352/332

SPECIFICATIONS

Telescope	
Magnification	26× (16×/32× with optional eyepieces)
Effective diameter of objective	40 mm (1.57 in) EDM: 50 mm (1.97 in)
Field of view	1°30'
Resolving power	3"
Minimum focusing distance	1.6 m (5.3 ft)
Distance measurement	
Reflectorless mode (white target)[1]	1.6 m to 200 m (5.3 m to 650 ft)
Range with Nikon specified prisms	
Normal conditions[2]	
With reflector sheet (5 × 5 cm)	1.6 m to 300 m (5.3 ft to 980 ft)
With single prism	1.6 m to 5,000 m (5.3 ft to 16,400 ft)
Good conditions[3]	
With reflector sheet (5 × 5 cm)	1.6 m to 300 m (5.3 ft to 980 ft)
With single prism	1.6 m to 5,000 m (5.3 ft to 16,400 ft)
Accuracy (Prism/Precise mode)	±(3+2 ppm × D) mm ±(3+3 ppm × D) mm (–20 °C to –10 °C, +40 °C to +50 °C) ±5 mm: 1.6 m to 5/10 m (5.3 ft to 17.4/32.8 ft) for reflector sheets/prisms
Accuracy (Reflectorless/Precise mode)	±(5+2 ppm × D) mm (5+3 ppm × D) mm (–20 °C to –10 °C, +40 °C to +50 °C)
Measuring interval[4]	
Prism mode	
Precise mode	1.6 sec. (initial 2.6 sec.)
Normal mode	0.6 sec. (initial 2.2 sec.)
Reflectorless mode	
Precise mode	1.6 sec. (initial 3.5 sec.)
Normal mode	0.8 sec. (initial 3.2 sec.)
Least count	
Precise mode	1 mm (0.002 ft)
Normal mode	10 mm (0.02 ft)
Ambient temperature range[5]	–20 °C to +50 °C (–4 °F to +122 °F)
Atmospheric correction	
Temperature range	–40 °C to +60 °C (–40 °F to +140 °F)
Barometric pressure	400 mmHg to 999 mmHg/533 hPa to 1,332 hPa/15.8 inHg to 39.3 inHg
Angle measurement	
Horizontal angle	
NPL-352	Diametrical
NPL-332	Single
Vertical angle	Single
Minimum increment (Degree, Gon, MIL6400)	Degree: 1/5/10" Gon: 0.2/1/2 mgon MIL6400: 0.005/0.02/0.05 mil
DIN 18723 accuracy (horizontal and vertical)	5"/1.5 mgon
Tilt sensor	
Type	
NPL-352	Dual-axis
NPL-332	Single-axis
Compensation range	±3'
Setting accuracy	1"
Level vial	
Plate level vial	30"/2 mm
Circular level vial	10'/2 mm
Optical plummet	
Magnification	3×
Display	Graphic LCD (128 × 64 dot)
NPL-352	Both sides
NPL-332	Single side
Point memory	10,000 records
Dimensions (W × D × H)	168 mm × 173 mm × 347 mm (6.6 in × 6.8 in × 13.7 in)
Weight (approx.)	
Main unit (with battery)	
NPL-352	5.5 kg (12.1 lb)
NPL-332	5.3 kg (11.7 lb)
On-board Ni-MH battery BC-65	
Operation time[6]	
Continuous distance/ angle measurement	Approx. 6.5 hours (Reflectorless mode: 7 hours)
Distance/angle measurement every 30 seconds	Approx. 15 hours (Reflectorless mode: 16 hours)
Angle measurement	Approx. 27 hours (Prism and Reflectorless modes)
Quick charger Q-75U/E	Approx. 2.0 hours for full recharge

1 White objects with high reflectivity. Measuring distance may vary depending on targets and measuring conditions.
2 Ordinary haze, visibility approx. 20 km/12.5 miles
3 No haze, visibility over 40 km /25 miles
4 Measuring time may vary depending on measuring distance and conditions.
5 A special version of the DTM-352 is available that allows operation at extremely low temperatures down to –30 °C.
6 Battery life specification at 25 degrees C. Operation time may be shorter if battery is not new.

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Nikon Total Station DTM-352/332

SPECIFICATIONS

Telescope	
Magnification	33× (21×/41× with optional eyepieces)
Effective diameter of objective	45 mm (1.77 in) EDM: 50 mm (1.97 in) EDM: 50 mm (1.97 in)
Field of view	1°20'
Resolving power	2.5"
Minimum focusing distance	1.3 m (4.26 ft)
Distance measurement	
Range with Nikon specified prisms	
Normal conditions[1]	
With reflector sheet (5 × 5 cm)	5 m to 100 m (16.4 ft to 328 ft)
With single prism	2,000 m (6,560 ft)
With triple prism	2,600 m (8,530 ft)
Good conditions[2]	
With reflector sheet (5 × 5 cm)	5 m to 100 m (16.4 ft to 328 ft)
With single prism	2,300 m (7,540 ft)
With triple prism	3,000 m (9,840 ft)
Accuracy (Prism/Precise mode)	±(3+2 ppm × D) mm ±(3+3 ppm × D) mm (–20 °C to –10 °C, +40 °C to +50 °C)
Measuring interval[3]	
Prism mode	
Precise mode	1.6 sec. (initial 1.6 sec.)
Normal mode	1.0 sec. (initial 1.4 sec.)
Least count	
Precise mode	1 mm (0.002 ft)
Normal mode	10 mm (0.02 ft)
Ambient temperature range[4]	–20 °C to +50 °C (–4 °F to +122 °F)
Atmospheric correction	
Temperature range	–40 °C to +60 °C (–40 °F to +140 °F)
Barometric pressure	400 mmHg to 999 mmHg/533 hPa to 1,332 hPa/15.8 inHg to 39.3 inHg
Angle measurement	
Horizontal angle	
DTM-352	Diametrical
DTM-332	Single
Vertical angle	Single
Minimum increment (Degree, Gon, MIL6400)	Degree: 1/5/10" Gon: 0.2/1/2 mgon MIL6400: 0.005/0.02/0.05 mil
DIN 18723 accuracy (horizontal and vertical)	5"/1.5 mgon
Tilt sensor	
Type	
DTM-352	Dual-axis
DTM-332	Single-axis
Compensation range	±3'
Setting accuracy	1"
Level vial	
Plate level vial	30"/2 mm
Circular level vial	10'/2 mm
Optical plummet	
Magnification	3×
Display	Graphic LCD (128 × 64 dot)
DTM-352	Both sides
DTM-332	Single sides
Point memory	10,000 records
Dimensions (W × D × H)	168 mm × 173 mm × 335 mm (6.6 in × 6.8 in × 13.2 in)
Weight (approx.)	
Main unit (with battery)	
DTM-352	5.3 kg (11.7 lb)
DTM-332	5.2 kg (11.5 lb)
On-board Ni-MH battery BC-65	
Operation time[5]	
Continuous distance/ angle measurement	Approx. 16 hours
Distance/angle measurement every 30 seconds	Approx. 27 hours
Angle measurement	Approx. 30 hours
Quick charger Q-75U/E	Approx. 2.0 hours for full recharge

1 Ordinary haze, visibility approx. 20 km/12.5 miles
2 No haze, visibility over 40 km /25 miles
3 Measuring time may vary depending on measuring distance and conditions.
4 A special version of the DTM-352 is available that allows operation at extremely low temperatures down to –30 °C.
5 Battery life specification at 25 degrees C. Operation time may be shorter if battery is not new.

Specifications and equipment are subject to change without notice.

TEOREMA srl
TOPCENTER
Via Arcivescovo Romilli, 20/8
20139 MILANO
Tel: ++39(0)2 5398739 r.a.
Fax: ++39(0)2 57301988
http://www.geomatica.it
teorema@geomatica.it

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NORTH AMERICA
Tripod Data Systems
PO Box 947
Corvallis, OR 97339
+1-541-753-9322 Phone
+1-541-757-7439 Fax
www.tdsway.com

EUROPE
Trimble GmbH
Am Prime Parc 11
65479 Raunheim
GERMANY
+49-6142-2100-0 Phone
+49-6142-2100-550 Fax

ASIA-PACIFIC
Trimble Navigation
Singapore PTE Limited
80 Marine Parade Road
#22-06, Parkway Parade
Singapore 449269
SINGAPORE
+65-6348-2212 Phone
+65-6348-2232 Fax

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