

# Nikon Pulse Laser Station NPL-352/332

## SPECIFICATIONS

### Telescope

<b>Magnification</b>	26× (16×/32× with optional eyepieces)
<b>Effective diameter of objective</b>	40 mm (1.57 in) EDM: 50 mm (1.97 in)
<b>Field of view</b>	1°30'
<b>Resolving power</b>	3"
<b>Minimum focusing distance</b>	1.6 m (5.3 ft)

### Distance measurement

<b>Reflectorless mode (white target)<sup>1</sup></b>	1.6 m to 200 m (5.3 m to 650 ft)
<b>Range with Nikon specified prisms</b>	
<b>Normal conditions<sup>2</sup></b>	
<b>With reflector sheet (5 × 5 cm)</b>	1.6 m to 300 m (5.3 ft to 980 ft)
<b>With single prism</b>	1.6 m to 5,000 m (5.3 ft to 16,400 ft)
<b>Good conditions<sup>3</sup></b>	
<b>With reflector sheet (5 × 5 cm)</b>	1.6 m to 300 m (5.3 ft to 980 ft)
<b>With single prism</b>	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<sup>4</sup>

<b>Prism mode</b>	
<b>Precise mode</b>	1.6 sec. (initial 2.6 sec.)
<b>Normal mode</b>	0.6 sec. (initial 2.2 sec.)
<b>Reflectorless mode</b>	
<b>Precise mode</b>	1.6 sec. (initial 3.5 sec.)
<b>Normal mode</b>	0.8 sec. (initial 3.2 sec.)

### Least count

<b>Precise mode</b>	1 mm (0.002 ft)
<b>Normal mode</b>	10 mm (0.02 ft)

### Ambient temperature range<sup>5</sup>

−20 °C to +50 °C (−4 °F to +122 °F)

### Atmospheric correction

<b>Temperature range</b>	−40 °C to +60 °C (−40 °F to +140 °F)
<b>Barometric pressure</b>	400 mmHg to 999 mmHg/533 hPa to 1,332 hPa/15.8 inHg to 39.3 inHg

### Angle measurement

<b>Horizontal angle</b>	
<b>NPL-352</b>	Diametrical
<b>NPL-332</b>	Single
<b>Vertical angle</b>	Single
<b>Minimum increment (Degree, Gon, MIL6400)</b>	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

<b>Type</b>	Dual-axis
<b>NPL-352</b>	Single-axis
<b>NPL-332</b>	±3'
<b>Compensation range</b>	±3'
<b>Setting accuracy</b>	1"

### Level vial

<b>Plate level vial</b>	30"/2 mm
<b>Circular level vial</b>	10'/2 mm

### Optical plummet

<b>Magnification</b>	3×
<b>Display</b>	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<sup>6</sup>

##### 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

<sup>1</sup> White objects with high reflectivity. Measuring distance may vary depending on targets and measuring conditions.

<sup>2</sup> Ordinary haze, visibility approx. 20 km/12.5 miles

<sup>3</sup> No haze, visibility over 40 km/25 miles

<sup>4</sup> Measuring time may vary depending on measuring distance and conditions.

<sup>5</sup> A special version of the DTM-352 is available that allows operation at extremely low temperatures down to −30 °C.

<sup>6</sup> Battery life specification at 25 degrees C. Operation time may be shorter if battery is not new.

# Nikon