

# Nikon NE-100 and NE-101 Theodolites



Datasheet



Nikon Quality You Can Trust

## Key Features

- 7" and 10" angle accuracies
- Large display and keyboard
- Alkaline (standard AA) batteries with battery life indicator
- Water and dust resistant
- Illuminated display and telescope
- Superior Nikon optics
- Small carrying case

## Nikon NE-100 and NE-101 Construction Theodolites

Ease of use, reliability, and durability make the Nikon NE-100 and NE-101 series theodolites a smart choice for your general construction, alignment and layout applications. These affordable instruments, featuring the familiar Nikon quality, are ideal for concrete form alignment, anchor bolt positioning, and steel column erection. The theodolites enable a number of positioning techniques: 90-degree layout, checking angles, alignment and plumb, as well as short range grade work and leveling.

The ergonomic keypad and display provide easy access to the powerful and accurate measurement capabilities of the Nikon NE-100 and NE-101 theodolites. Large, easy-to-identify buttons provide one-button operation for key functions. A large text display area makes information easy to read and use on the job. This design provides for a very short learning curve and utilization within a matter of minutes.

The Nikon NE-100 and NE-101 theodolites are built tough to withstand the harsh environments common to many construction job sites. Resistant to water and dust, these rugged units are designed to reduce downtime for repairs. The NE-100 and NE-101 are also compact and easy to transport. A small carrying case holds the theodolite, manual, and tools.

**Nikon construction theodolites are tough, reliable and compact.**

# Nikon NE-100 and NE-101 Theodolites

## NE -100

## NE -101

### Angle Measurement

Reading system	photoelectric incremental encoder	photoelectric incremental encoder
Circle diameter	79 mm (3.1 in)	79 mm (3.1 in)
Unit of reading	degree/gon/mil	degree/gon/mil
Minimum digital reading	10/20", 2/5 mgon, 0.05/0.1 mil	5/10", 1/2 mgon, 0.02/0.05 mil
Accuracy (DIN 18723)	10"/3 mgon	7"/2 mgon

### Telescope

Effective diameter of objective	45 mm (1.8 in)	45 mm (1.8 in)
Magnification	30x	30x
Image	erect	erect
Field of view (at 100m/100ft)	1°20' (2.3 m/2.3 ft)	1°20' (2.3 m/2.3 ft)
Minimum focusing distance	0.7 m (2.3 ft)	0.7 m (2.3 ft)
Stadia multiplier constant	100	100
Stadia additive constant	0	0
Reticle illuminator	Yes	Yes

### Automatic Vertical Compensator

Type	-	-
Working range	-	-

### Display / Keypad

<b>Front</b>		
Type	dot-matrix LCD (20 characters x 2 lines)	dot-matrix LCD (20 characters x 2 lines)
Backlight	1-level illumination	1-level illumination
Keypad	5 buttons	5 buttons
<b>Rear</b>		
Type	-	-
Backlight	-	-
Keypad	-	-

### Optical Plummet

Magnification	2.2x	2.2x
Field of view	5°	5°
Focus range	1.3 m (4.3 ft) fixed	1.3 m (4.3 ft) fixed

### Level Sensitivity

Plate level	60"/2 mm	40"/2 mm
Circular level	10"/2 mm	10"/2 mm

### Leveling Base

Type	detachable	detachable
------	------------	------------

### Ambient Temperature Range

-20 to 50 C (-4 TO 122 °F)	-20 to 50 C (-4 TO 122 °F)
----------------------------	----------------------------

### Environmental Rating

IP54	IP54
------	------

### Dimensions

Instrument	153.5 x 172 x 334 mm (6.0 x 6.8 x 13.1 in)	153.5 x 172 x 334 mm (6.0 x 6.8 x 13.1 in)
------------	--	--

### Weight

Instrument	4.5 kg (9.8 lb)	4.5 kg (9.8 lb)
Carrying case	2.5 kg (5.4 lb)	2.5 kg (5.4 lb)

### Power Supply

Battery type	1.5 V AA x 6	1.5 V AA x 6
Continuous operating time (at 68 °F/20 °C)	48 hours	48 hours



**TOUGH • RELIABLE • COMPACT**

### Contact Information:

#### AMERICAS

Spectra Precision Division  
10368 Westmoor Drive  
Westminster, CO 80021, USA  
+1-720-587-4700 Phone  
888-477-7516 (Toll Free in USA)

#### EUROPE, MIDDLE EAST AND AFRICA

Spectra Precision Division  
Rue Thomas Edison  
ZAC de la Fleuriaye - CS 60433  
44474 Carquefou (Nantes), France  
+33 (0)2 28 09 38 00 Phone

#### ASIA-PACIFIC

Spectra Precision Division  
80 Marine Parade Road  
#22-06, Parkway Parade  
Singapore 449269, Singapore  
+65-6348-2212 Phone



[www.spectraprecision.com](http://www.spectraprecision.com)

Specifications subject to change without notice.

©2015, Trimble Navigation Limited. All rights reserved. Nikon is a registered trademark of Nikon Corporation. All other trademarks are the property of their respective owners. (2015/08)