



Rugged, waterproof and easy to use, plus superior Nikon optics

Nikon The Nikon® NE-203 and NE-202 electronic digital theodolites from Tripod Data Systems™ (TDS) deliver a rugged, easy-to-use platform to help you get the job done right. Nikon's world-renowned optics with a 30x telescope give you brighter, clearer images. And it's waterproof, with an IPX6 rating. That means the NE-203 and 202 can withstand a powerful jet of water with no harmful effects. So you can count on reliable performance in tough field conditions.

See brighter, sharper images with focus to 2.3 ft

You'll see the difference when you look through a Nikon theodolite. Nikon's legendary optics effectively let in more light. The result is brighter, sharper images, especially in low-visibility conditions. You'll see much more detail and much less distortion. Better optics help you aim more precisely, and they're much easier on your eyes—something you'll really appreciate on long workdays.

The NE-203 and 202 feature a 30x telescope with a 45 mm objective aperture diameter. Nikon's unique linear focusing mechanism improves focusing at both short and long distances. The minimum focusing distance is 2.3 ft (0.7 m).

Extra light for dark conditions

For working in tunnels, mines and other environments with little or no light, the NE-203 and 202 feature a built-in reticle illuminator. Both LCD graphic displays are backlit as well, so you can read them easily when you're working in dark or low-light conditions.

One-touch keys for common functions = simple operation and easy to use

The NE-203 and 202 feature four one-touch keys for efficient field operation. Press the %/VA key to instantly convert vertical angles to percent of grade. Besides standard clockwise angle measurements, you can select counterclockwise horizontal angle measurement by pressing the R/L key. Press the RESET key for about a second to reset the horizontal angle to zero. And you can lock the



The NE-203 and 202 theodolites feature a large, backlit LCD graphic display and keypad on both sides. Either screen can display both vertical and horizontal angles simultaneously.

horizontal angle displayed on the LCD while you reposition the instrument by pressing the HOLD key. Press it a second time to release and continue measuring. You can also select repeat measurement by pressing the HOLD key for about a second.



Data Collection



GPS/GIS



Office Software



Construction

Electronic Digital Theodolites

NE-203/202 Specifications

Built-in vertical compensation ensures angle accuracy

The NE-203 can detect instrument tilt as far as $\pm 3'$ from the vertical and automatically compensate to ensure precise vertical angle readings. Both models have an accuracy of 5".

Power management features extend battery life

The NE-203 can operate for 21 hours with six AA (R6) manganese batteries and 47 hours with L40 (LR6) alkaline batteries. The NE-202 can work for an extra hour on either battery. To extend battery life, you can set the instrument to turn itself off after 10 or 30 minutes of inactivity. The power save function also retains the last horizontal angle on the display in backup memory so you can get right back to work. A three-level bar graph on the LCD screen constantly displays remaining battery power.

Optional accessories

- High (36x) and low (18x) power eyepiece lenses
- Diagonal eyepiece prism
- Zenith prism
- Suunto compass set
- Solar prism
- Tubular compass and adapter
- Solar filter

	NE-203	NE-202
TELESCOPE		
Effective diameter of objective:	1.77 in (45 mm)	1.77 in (45 mm)
Magnification:	30x	30x
Image:	erect	erect
Field of view (@ 100 ft/100 m):	1°20' (2.3 ft/2.3 m)	1°20' (2.3 ft/2.3 m)
Shortest focusing distance:	2.3 ft (0.7 m)	2.3 ft (0.7 m)
Stadia multiplier constant:	100	100
Stadia additive constant:	0	0
Reticle illuminator:	provided	provided
ANGLE MEASUREMENT		
Reading system:	photoelectric incremental encoder	photoelectric incremental encoder
Circle diameter:	3.1 in (79 mm)	3.1 in (79 mm)
Unit of reading:	degree/gon/mil (selectable)	degree/gon/mil (selectable)
Minimum digital reading*:	5/10", 1/2 mgon, 0.02/0.05 mil (selectable)	5/10", 1/2 mgon, 0.02/0.05 mil (selectable)
Accuracy (DIN 18723):	5"/1 mgon	5"/1 mgon
AUTOMATIC VERTICAL COMPENSATOR (NE-203 only)		
Type:	liquid-electric detection	—
Working range:	$\pm 3'$ (out-of-range warning provided)	—
DISPLAY		
Type:	dot-matrix LCD 20 characters x 2 lines backlight illumination provided	dot-matrix LCD 20 characters x 2 lines backlight illumination provided
KEYPAD		
Location:	both sides	both sides
OPTICAL PLUMMET		
Magnification:	3x	3x
Field of view:	5°	5°
Focus range:	1.6 ft (0.5 m) to infinity	1.6 ft (0.5 m) to infinity
LEVEL SENSITIVITY		
Plate level:	30"/2 mm	30"/2 mm
Circular level:	10"/2 mm	10"/2 mm
LEVELING BASE		
Type:	detachable	detachable
INTERNAL POWER SOURCE		
Type of batteries:	1.5V manganese AA (R6-type) x 6 or alkaline L40 (LR6-type)	1.5V manganese AA (R6-type) x 6 or alkaline L40 (LR6-type)
Continuous operating time (at 68 °F/20 C)		
With manganese battery (AA):	21 hrs	22 hrs
With alkaline battery (L40):	47 hrs	48 hrs
AMBIENT TEMPERATURE RANGE		
	-4 to 122 °F (-20 to 50 C)	-4 to 122 °F (-20 to 50 C)
DIMENSIONS (W x D x H)		
Instrument:	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 153.5 x 172 x 334 mm
WEIGHT		
Instrument:	10.1 lbs (4.6 kg)	9.9 lbs (4.5 kg)
Plastic carrying case:	8.6 lbs (3.9 kg)	8.6 lbs (3.9 kg)

*1/5", 0.5/1 mgon, 0.005/0.02 mil available as option

Your local TDS dealer



TRIPOD DATA SYSTEMS
A TRIMBLE COMPANY

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