

# Trimble DiNi

## DIGITAL LEVEL

The Trimble® DiNi® Digital Level is a digital height measurement sensor from Trimble's Integrated Surveying™ portfolio of products. The Trimble DiNi is a field-proven tool designed for any job site where fast and accurate height determination is required. Use the Trimble DiNi for applications such as precise leveling of flat and sloping surfaces, establishing the vertical component of grade and ground profiles, subsidence monitoring, and establishing the vertical component of control networks.

### UNEQUALLED FOR PERFORMANCE IN THE FIELD

The Trimble DiNi is designed to perform optimally every day, whatever your surveying job. It is built rugged—with a dust- and waterproof rating of IP55—to take the tough conditions of the job site in its stride. A backlight in the screen and a light in the circular bubble keep you productive even when daylight gets low.

The DiNi will operate for three days without requiring a battery change, then when it does just recharge it as you would your Trimble GNSS system battery...the batteries are the same to ensure convenience and productivity.

When a job is complete, easily transfer data from the instrument to a computer by using a USB storage device; You don't have to carry your instrument in to the office.

### EASY TO LEARN, EASY TO USE

The Trimble DiNi Digital Level demands the industry's smallest measurement field—just 30 cm of code rod. So you can measure greater change in height between the level and the rod in one setup, and save time. Additionally, the small measurement area:

- ▶ reduces the number of stations needed by up to 20% because the Trimble DiNi is less impacted by a rod hidden by vegetation or hilly terrain.
- ▶ makes leveling in low light conditions, for example, in tunnels, easier because only a very small part of the staff needs to be illuminated.
- ▶ ensures greater accuracy through less influence of refraction near the ground.

The large graphical display of the Trimble DiNi is also unique, and is complemented by the latest Trimble keyboard for easy operation. Crew members used to operating other Trimble systems will easily adapt to the Trimble DiNi.

### TRIMBLE QUALITY AND ACCURACY FOR MEASURING WITH CONFIDENCE

The Trimble DiNi Digital Level is designed to support the rest of Trimble's Integrated Surveying portfolio. The Trimble DiNi interface is based on Trimble's other advanced and field-proven controllers for easy adoption of the instrument by your crews. Proven Optics by Carl Zeiss ensure the Trimble DiNi offers the highest precision and best resolution.

Measure with confidence, knowing that with the Trimble DiNi Digital Level, your crew will obtain the best quality results with the highest level of productivity.

### Key Features

- ▶ Determine accurate height information via a quick and easy key press
- ▶ Eliminate errors and reduce rework with digital readings
- ▶ Enjoy effortless data transfer between instrument and office
- ▶ Measure to a measurement field of just 30 cm
- ▶ Level 60% faster than with conventional automatic leveling



## PERFORMANCE SPECIFICATIONS

Accuracy ..... ISO 17123-2, standard deviation height measuring per 1 km (3280.84 ft) of double leveling

## Trimble DiNi 0.3 mm per km

Electronic measurement	
Invar precision bar code staff	0.3 mm (0.001 ft)
Standard bar code staff	1.0 mm (0.004 ft)
Visual measurement	1.5 mm (0.005 ft)
Distance measurement	with a 20 m (65.62 ft) sighting distance
Invar precision bar code staff	20 mm (0.066 ft)
Standard bar code staff	25 mm (0.082 ft)
Visual measurements	0.2 m (0.656 ft)

## Trimble DiNi 0.7 mm per km

Electronic measurement	
Invar precision bar code staff	0.7 mm (0.002 ft)
Standard bar code staff	1.3 mm (0.004 ft)
Visual measurement	2.0 mm (0.007 ft)
Distance measurement	with a 20 m (65.62 ft) sighting distance
Invar precision bar code staff	25 mm (0.082 ft)
Standard bar code staff	30 mm (0.098 ft)
Visual measurement	0.3 m (0.984 ft)

## Range

Electronic measurement	1.5 m–100 m (4.92 ft–328.08 ft)
Visual measurement	from 1.3 m (4.265 ft)

## Electronic measurement

Trimble DiNi 0.3 mm per km	
Resolution height measurement	0.01 mm / 0.0001 ft / 0.0001 in
Resolution distance measurement	1 mm (0.003 ft)
Measurement time	3 s

## Trimble DiNi 0.7 mm per km

Resolution height measurement	0.1 mm / 0.001 ft / 0.001 in
Resolution distance measurement	10 mm (0.033 ft)
Measurement time	2 s

## Horizontal Circle

Type of graduation	400 grads and 360 deg
Graduation interval	1 grad and 1 deg
Estimation to	0.1 grad and 0.1 deg

## Measurement Programs

Trimble DiNi 0.3 mm per km	
Standard programs	Single measurement with and without stationing, stakeout, line leveling with intermediate sight and stakeout, line adjustment
Leveling methods <sup>1</sup>	BF, BFFB, BFBF, BBFF, FBFB aBF, aBFFB, aBFBF, aBBFF, aFBFB

## Trimble DiNi 0.7 mm per km

Standard programs	Single measurement with and without stationing, stakeout, line leveling with intermediate sight and stakeout
Leveling methods	BF, BFFB, aBF, aBFFB

<sup>1</sup> F = Foresight, B = Backsight, a = alternating  
Certified quality in accordance with DIN ISO 9001/EN 29001.

Specifications subject to change without notice.

## ENVIRONMENTAL

Operating temperature	-20 °C to +50 °C (-4 °F to 122 °F)
Dust- and waterproofing	IP55

## GENERAL SPECIFICATION

Telescope	
Aperture	40 mm (0.131 ft)
Field of view at 100 m	2.2 m (7.217 ft)
Electronic measurement field	0.3 m (0.984 ft)
Magnification	
Trimble DiNi 0.3 mm per km	32 x
Trimble DiNi 0.7 mm per km	26 x
Compensator	
Inclination range	±15°
Setting accuracy	
Trimble DiNi 0.3 mm per km	±0.2"
Trimble DiNi 0.7 mm per km	±0.5"
Circular level	8/2 mm with illumination
Display	Graphical, 240 x 160 pixels, monochrome with illumination
Keyboard	19-key alpha-numeric and 4-way arrow key for navigation
Recording	
Internal memory	up to 30 000 data lines
External memory	USB Flash Drive support
Data transfer	USB Interface for data transfer between DiNi and PC (means two way communication)
Real-time clock and temperature sensor	
Trimble DiNi 0.3 mm per km	Recording of time or temperature
Trimble DiNi 0.7 mm per km	N.A.
Power supply	
Internal battery	Li-Ion, 7.4 V / 2.4 Ah
Operating time	3 days working time without illumination
Weight (including battery)	3.5 kg (7.72 lb)



Contact your local Trimble Authorized  
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