

NIKON 302 AND 502 SERIES TOTAL STATIONS



TOTAL STATION SOLUTIONS FOR SMARTER SURVEYING

HIGH QUALITY

RELIABLE

EASY TO USE

INNOVATIVE FEATURES

Nikon

ADVANCED TECHNOLOGY FOR TOTAL STATION SOLUTIONS

The Nikon 302 and 502 Series Total Stations are packed with advanced technological features, but don't let that fool you ... these total stations deliver practical surveying solutions that are exceptionally easy to use. The straightforward user interface is intuitive, meaning very little training time is required to become a proficient user. Both you and your clients will benefit from the steadfast reliability and the outstanding quality that Nikon is known for. The Nikon 302 and 502 total stations provide a consistently high level of performance in all types of field conditions in applications ranging from cadastral and topographic to construction layout, as-built and beyond.

HIGH QUALITY

Nikon total stations offer the superior optics, intelligent design and quality components your surveying jobs demand. Add the powerful Nikon onboard software, and you have a surveying solution that delivers accurate data that you and your clients can rely on.

RELIABLE

Your Nikon total station will maintain its outstanding performance day in and day out, thanks to its long battery life and robust construction. As a result, you'll enjoy minimal downtime, maximum productivity and the knowledge that your total station is working as long and as hard as you do.

EASY TO USE

With their practical onboard software, full alphanumeric keyboards, and clear, configurable displays, Nikon total stations enable you to perform surveying tasks as quickly, efficiently and productively as possible. And because their functions are intuitive and easy to learn, you'll gain productivity as you learn to maximize the total stations' capabilities.



UNIQUE FEATURES OF THE 502 SERIES

HIGH ACCURACY

One-, two- or three-second accuracy models to meet a wide variety of surveying applications.

HIGH-PERFORMANCE EDM

Four-frequency design provides speed and accuracy.

LUMI GUIDE

Self-alignment feature improves stakeout efficiency even further.

SOLUTIONS

FEATURES COMMON TO THE NIKON 502 AND 302 SERIES TOTAL STATIONS

SUPERIOR NIKON OPTICS

Clear sighting even in low lighting. Linear focusing mechanism provides faster short- and long-distance focusing.

EASY-TO-USE DISPLAY

Illuminated graphic display provides intuitive operation in any field environment; screen display is customizable to accommodate varying field requirements.

ERGONOMIC KEYBOARD

Full alphanumeric keyboard with large dedicated keys for accessing menus, software modes and measurement functions. User-definable keys provide one-touch access to your favorite functions.

POWERFUL ONBOARD SOFTWARE

Powerful data collection and feature coding, stakeout programs, COGO calculation programs and powerful measurement functions.

LONG BATTERY LIFE

A single onboard battery provides up to 16 hours of continuous service or 27 hours of intermittent service (model dependent).

TOUGH CONSTRUCTION

Capable of withstanding all types of weather conditions. The 502 meets IPX4 standards; the 302 meets IPX6 standards.

PORTABILITY

Compact and lightweight design for maximum portability.



UNIQUE FEATURES OF THE 302 SERIES

THREE- AND FIVE-SECOND ACCURACY

Suitable for most construction and routine survey applications.

REFLECTORLESS MODELS

Three models offer the safety benefits of reflectorless technology, allowing you to more easily and safely measure to difficult or dangerous locations.

EXTREME TEMPERATURE MODEL

One model designed especially for use in extreme cold weather applications.

EXCEPTIONALLY EASY TO USE



The Nikon 502 and 302 Series Total Stations have numerous built-in capabilities that allow you to handle a wide variety of field tasks without the need for a separate data collector. The combination of powerful onboard software and an intuitive user interface results in total stations that are exceptionally easy to use.

SOFTWARE AND USER INTERFACE HIGHLIGHTS



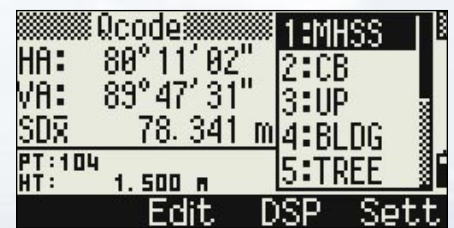
EASY DATA MANAGEMENT

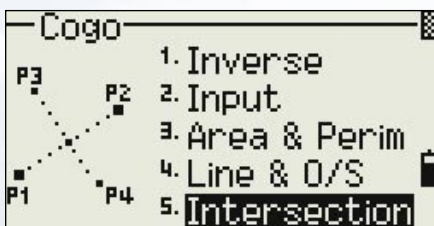
It is easy to input, store, check, edit, delete and search data directly on the total station. Data can be stored for up to 32 jobs, and 10,000 records can be stored in memory. In addition, survey control points stored in one job file can be accessed from other job files.



FEATURE CODES

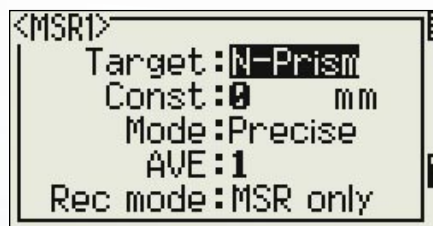
Thanks to a variety of code input methods, data collection in the field is fast and convenient with the Nikon 302 and 502 Series. In addition to direct code input and simple access to previously used codes, you can define up to 10 Quick Codes that require only one key to be touched. Then you simply aim at your target and press one of the preset keys to measure and record a point with full coding. The system also provides a complete, user-definable, multi-level code list. The code list can be created and edited either onboard or uploaded from a computer.





COGO CALCULATION

Onboard COGO (coordinate geometric) calculations are yet another convenient feature of the Nikon 302 and 502 Series Total Stations. Intersections, area and perimeter calculations are among those available.



MEASUREMENT FUNCTIONS

Basic measurement is fast and flexible. MSR1/MSR2 keys can be separately configured for the measurement parameters; no time is wasted changing measurement modes between shots. For increased accuracy, F1/F2 measurement capability is also available. Both raw measurements and averages can be stored for possible future use. Other measurement functions of the Nikon 502 and 302 Series Total Stations include:

- Two-point reference line
- Two-point vertical reference plane
- Three-point sloped reference plane
- Arc reference line
- Offset measurements
- Dynamic vertical/horizontal angle offsets
- Taped offsets



NIKON 502 SERIES TOTAL STATIONS

DESIGNED FOR MAXIMUM SPEED AND ACCURACY

ONE-SECOND ACCURACY OPTION

For those whose applications demand “extreme accuracy,” the Nikon 502 Series includes a model (the DTM-552) providing accuracy to the second.

CHOICE OF ACCURACY OPTIONS

Why pay for more than you really need? The Nikon 502 Series provides the flexibility to select the level of accuracy that’s right for you and your specific applications. Three total station models provide three different levels of accuracy:

DTM-552: One-second accuracy

DTM-532: Two-second accuracy

DTM-522: Three-second accuracy

LONGER RANGE

The Nikon 502 Series Total Stations require fewer setups and provide faster, more efficient performance in the field due to their long range.

HIGH-PERFORMANCE EDM

Four-frequency design provides speed and accuracy: with initial measurements in 1.0 sec with full $\pm(2 \text{ mm} + 2 \text{ ppm})$ accuracy, the 502 series EDM is the fastest in its class.

LUMI-GUIDE FEATURE

Two visible red tracking beams—one steady, one blinking—above the telescope objective lens improve stakeout efficiency even further. This feature enables a rodman to quickly align himself in stakeout applications without the need for hand signals, radio communication or yelling from the instrument operator. The Lumi-Guide can also be used as a signal or as a prism illuminator in night surveying applications. Accurate to $\pm 6 \text{ cm}$ at 100 m.

ERGONOMIC KEYBOARD

The keyboard on the Nikon 502 Series Total Stations features an ergonomic design for maximum comfort. This, in turn, results in fewer keyboard errors.

CROSS-HAIR ILLUMINATION

This feature allows the Nikon 502 Total Stations to maintain their outstanding performance even when used at night or in dark indoor job sites.

CENTRAL AXIS DESIGN

The Nikon 502 Series features a nitride-finish, zero-tolerance ball bearing design. This unique design results in increased angle stability, regardless of field conditions.



NIKON 302 SERIES TOTAL STATIONS

THE POWER OF FLEXIBILITY

SEVEN MODELS

The Nikon 302 line of total stations includes seven models from which you can choose based on your unique requirements. The DTM-362, DTM-352, DTM-352W, DTM-332, NPL-362, NPL-352, and NPL-332 offer the flexibility you need when searching for the right combination of price and performance.

THREE- AND FIVE-SECOND ACCURACY

The Nikon 302 Series Total Stations feature three- and five-second accuracy models, suitable for most routine survey and construction applications.



REFLECTORLESS EDM OPTION

The Nikon 302 Series includes three models (the NPL-362, NPL-352, and NPL-332) that utilize reflectorless technology.

Nikon's unique focused beam pulse laser system provides an excellent combination of range, accuracy, and confidence. This Class 1 (completely eye-safe) system automatically rejects erratic return signals which are reflected from

objects that are out of focus. Simply focus the circular reticle on the target and measure. **No other system provides this kind of positive target identification.** This feature makes it possible to measure to difficult and dangerous locations with increased efficiency and safety. The configurable MSR1/MSR2 keys make it easy for you to combine prism and non-prism point measurements.

IPX6

The Nikon 302 Series are virtually waterproof (meets IPX6 water-resistance standards), making these total stations capable of maintaining performance in windy or rainy conditions.

SPECIAL EXTREME TEMPERATURE MODEL

The DTM-352W has been specially designed for extreme cold weather applications (down to -30°C).



Your business demands high productivity, precision and reliability in tough working environments. Nikon is a brand known for delivering superior optical quality, accuracy and reliability, backed by a global service and support network.

The Nikon portfolio of surveying and construction instruments for surveying, mapping and construction deliver high value, high accuracy and a high degree of reliability to meet your daily challenges—allowing you to get on with the job.



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NORTH AMERICA

Trimble Data Systems
PO Box 947
Corvallis, OR 97339
USA
+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

LATIN AMERICA

Trimble Navigation Limited
6505 Blue Lagoon Drive
Suite 120
Miami, FL 33126
USA
+1-305-263-9033 Phone
+1-305-263-8975 Fax

AFRICA & MIDDLE EAST

Trimble Export Middle-East
P.O. Box 17760
Jebel Ali Free Zone
Dubai
U.A.E.
+971-4-881-3005 Phone
+971-4-881-3007 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

CHINA

Trimble Beijing
Room 2805-07
Tengda Plaza
No. 168 Xiwai Street
Haidian District, Beijing
CHINA 100044
+86-10-8857-7575 Phone
+86-10-8857-7161 Fax
www.trimble.com.cn