



CosT-effective Topcon Total Station GM-50 Series GM52



Topcon offers Japanese quality products

Topcon performs rigorous environmental tests to ensure long-term operation even in harsh on-site environments. The Total Station GM series undergoes thorough inspections in the dust and waterproof testing room.

Furthermore, it has passed various tests for vibration, drop, temperature and humidity, achieving the best environmental specifications. Furthermore, due to measurement distance accuracy tests at baseline and instrument horizontal and angle accuracy tests and adjustments using a collimator system, we are satisfied with the quality of the GM series.

Product Description





Topcon GM52 Total Station

- Fast and accurate positioning using phase shift technology.
- High-speed ranging in 0.9 seconds regardless of the target object.
- Minimum measurement distance without reflectors - only 30cm.
- Improved collimation with ultra-high brightness pointers.
- EDM beam spot size is reduced, minimizing distance measurement errors.
- Reliable measurements even at shallow angles of incidence.
- Ensures accurate reflective sheet distance measurement.



Advanced design for faster workflows

The GM-50 Series is the perfect entry-level site layout and research tool that offers reliability and flexibility without sacrificing cost or functionality. The refined design is ruggedly built with waterproof and dustproof IP66 ratings, integrated Bluetooth® functionality and internal antennas. The GM-50 also comes equipped with top-line EDM, plenty of internal memory storage and SDRbasic onboard software, so you have everything you need. To get the job done on the ground.

- Integrated construction and surveying application software
- A high-speed, accurate, and powerful electric discharge machine.

*Up to 500m without reflectors

*Prism reaching distance up to 4,000m

- Advanced angle accuracy (2" or 5")

Product Specifications



telescope	
Magnification and resolution	30x/2.5 inch
others	Length: 171mm (6.7 inch), objective lens aperture: 45mm (1.8 inch) (48mm)
	(1.9 inch, for EDM), Image: upright, Field of view: 1°30" (26m/1,000m),
	Minimum Focus: 1.3m (4.3ft) Reticle Lighting: 5 Brightness
Angle measurement	

Minimum display	1"/5" (0.0002/0.001 Gon, 0.005/0.02 mil)
Accuracy (ISO 17123-3:2001)	2"
2-axis compensator/	2-axis liquid tilt sensor, operating range: ± 6 inches
Collimation correction	On/Off (selectable)
Distance measurement	
Laser output*1	Reflectorless mode: Class 3R / Prism / Sheet mode: Class 1
Measurement range No reflector	0.3-500m (1,640 feet)
Measurement range Reflective sheet	RS90N-K: 1.3-500m (4.3-1,640 feet),
	RS50N-K: 1.3-300m (4.3-980 feet),
	RS10N-K: 1.3 to 100m (4.3 to 320 feet)
Mini Prism	1.3-500m (4.3-1,640 feet)
One prism	1.3-4,000m (4.3-13,320 feet)
Minimum display	Fine/Coarse: 0.0001m (0.001ft. / 1/8 inch) / 0.001m (0.005ft. / 1/8 inch) (Chooseable) Coarse: 0.001m (0.005ft. / 1/8 inch) / 0.01m (0.02 feet/1 inch)
Accuracy	
No reflector	(22ppm x D)mm*
Reflective sheet	(22ppm x D)mm
prism	(1.52ppm x D)mm
Are you okay	0.9 seconds (initial 1.5 seconds)
rough	0.6 seconds (initial 1.3 seconds)
Tracking	0.4 seconds (initial 1.3 seconds)
OS, interfaces, data management	
operating system	Linux
Display/Keyboard	Graphic LCD, 192 x 80 dots, backlight: On/Off (selectable) / Alphanumeric keyboard / 28 key backlight
Control Panel Location	On both sides
Internal memory	Approximately 50,000 points
Plug-in memory devices	USB flash memory (up to 32GB)

Construction

Cross-Sectional Survey

By using the MLM (Missing Line Measurement) program, the height difference between points can be calculated for leveling. Also, you can save time on reflectorless mode to measure a number of points of variation in a large area.

Stake Out

The Guide Light function will navigate the prism operator to move to the stake out line quickly so that stake out operation can be done effectively.

Elevation Stake

Staking out with 3D coordinates, eliminates the need to set up TS on the straight line for all elevation stakes.

Coordinate Measurement

With coordinate measurement, you can manage 3D coordinate data so that various calculations such as Road, Layout and more can be determined. 3D coordinate data management can improve the productivity drastically.

Boundary and Cadastral Survey

By using the Area function, you can calculate the area easily. Also, you can determine the center point of a column such as an electric pole, which cannot be directly measured by using offset calculation.

Topographic Survey

The trigger key, or measuring distance key, helps you perform topography quickly while continuously viewing through the telescope. Also, the long distance measuring range reduces the number of the instrument changes for more efficient working time.

Survey

Super powerful advanced electric discharge machine	1000M Non-prism range 6000M Prism range
Easy Access USB2.0 Memory	Up to 32GB of storage
Advanced Angle Encoder System	"Best in class" 1" angle accuracy Equipped with unique IACS
Sturdy waterproof design	Waterproof IP66 Design Magnesium alloy housing for stable angle accuracy Graphic display and alphanumeric keyboard
On-board TopBasic Program	topcon gm sereis Use the total station to run the basic onboard layout and top program.



Packaging and shipping



What is in the box of the Topcon GM-50 series?

Battery*1
 Lens cap x 1
 Precision screwdriver*1
 1 cleaning cloth

Charger*1
 Lens hood x 1
 1 x lens brush
 Carrying case*1

Power cable*1
 1 tool pouch
 Hex wrench x 2
 Carrying strap x 2





Q&A

Question 1: Where is your company? Can I visit your office?

Answer: Yes, our company is located in Shenzhen, Guangdong Province, China. You are welcome to visit us anytime. please [click here](#) To learn more about us.

Question 2: How can I buy it? [Topcon's Total Station](#) GM52?

Answer: For more information, please contact us below. We will reply as soon as possible.

Question 3: How long does it take?

Answer: Lead time is about 1-2 weeks, but it depends on the quantity you purchase.

Question 4: What is the price of Topcon Total Station?

Answer: The more you buy, the more competitive the price. If you are interested in the prices of Topcon Total Station, please contact us.

Question 5: Can I receive training on how to use it?

Answer: Yes, we usually provide online training and make sure all our clients can use our equipment.