

GM-100 SERIES MANUAL TOTAL STATION





Manual Total Stations

- Advanced security and maintenance with TSshield[™]
- Fast and powerful EDM
- Advanced angle accuracy
- Long battery life 28 hours (Eco mode)
- Rugged, waterproof design

Topcon GM-100 total stations – advanced design with superior technology

The GM-100 series was designed from the ground up to deliver the very latest technological advantages, all in a small, sleek design – you'll appreciate the advantages from the very first measurement.

Featuring a best-in-class EDM unit, the GM-100 is able to measure up to 6,000 m 1.5 mm + 2 ppm to standard prisms, and up to 1,000 m at an incredible 2 mm + 2 ppm accuracy in reflectorless mode.

Measurements are captured faster than ever, and with a beam width of 13 mm (over 30 m), the bright red laser dot pinpoints features with ease.

A world's first – TSshield

Topcon is proud to offer another world's first technology in all GM-100 total stations – TSshield. Every instrument is equipped with a telematics-based multi-function communications module providing the ultimate security and maintenance capabilities for your investment.

If the activated instrument is lost or stolen, send a coded signal to the instrument and disable it – the total station is secure anywhere in the world.

In the same module, you have daily connectivity to cloud-based Topcon servers that can inform you of available software updates and firmware enhancements.



Onboard TopBasic Program

Run onboard basic layout and topo programs with the GM series. Store up to 50,000 points. Use the convenient USB transfer method to move data on and off the instrument.





Angle Measurem	ent
Min. Resolution/Accuracy	
GM-101	0.5"/1"
GM-102	1"/2"
GM-103	1"/3"
GM-105	1"/5"
IACS	Standard on 1" and 2" models
Compensation	Dual-axis compensator
Distance Measurement	
Prism EDM Range	6,000 m
Prism EDM Accuracy	1.5 mm + 2 ppm
Non-Prism Range	1,000 m
Non-Prism Accuracy	2 mm + 2 ppm (0.3 - 200 m)
Measuring Time	Fine: 0.9 sec Rapid: 0.6 sec Tracking: 0.4 sec
Communications	
LongLink™ is not supported Bluetooth® Class 1.5/10 m	
USB 2.0 Slot (Host)	
RS-232C Serial	
General	
Display	Single Backlit LCD (Dual display optional)
Battery Operation	Up to 28 hours
Dust/Water Rating	IP66
Wireless Connection	Bluetooth [®] Class 1.5
Operating Temp	-20°C to 60°C* * Special Arctic version available (-35 to 50°C)
	* Laser plummet standard.
	* Optional optical plummet available in some global locations.



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Ultra-powerful, advanced EDM

- 1,000 m non-prism range
- 6,000 m prism range

Easy access USB 2.0 memory

- Up to 32GB storage
- Environmentally protected
- Compatible with industry standard thumb drives

Advanced angle encoder system

- "Best-in-class" 1" angle accuracy
- Incorporates exclusive IACS (Independent Angle Calibration System) on 1" and 2" models



- Waterproof/dustproof IP66 design handles the toughest environments
- Magnesium-alloy housing providing stable angle accuracy
- Graphic display and alphanumeric key board (standard)



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