

Topcon GM-120 Series

Geodetic Measurement Station



Reliable measurement performance
for surveying and construction workflows.
Accurate measurements, built-in field applications,
and all-day operation in a durable platform.

Learn more at topconpositioning.com





High-performance EDM, integrated field workflows, large storage capacity, and IP66 environmental protection in a single instrument.

Surveyors, engineers, and construction professionals need a measurement solution that supports standard field workflows while maintaining reliable performance in a wide range of site conditions. Projects often require accurate measurements, efficient stakeout operations, and dependable operation throughout the working day.

The GM-120 Series combines high-accuracy distance measurement, integrated field applications, long battery life, and robust environmental protection to support these requirements. Built-in programs help streamline common surveying and civil engineering tasks without requiring additional software in the field.

Measurement performance for survey and construction workflows

The GM-120 incorporates a high-performance EDM suitable for control surveys, topographic surveys, stakeout, cross-section surveying, and as-built documentation. Prism measurements can be performed up to 6,000 m, while reflectorless measurements reach 1,000 m.

- » Prism measurements up to 6,000 m
- » Reflectorless measurements up to 1,000 m
- » Available in 1", 2", 3" and 5" angle accuracy models
- » Guide light supports stakeout alignment up to 150 m
- » Trigger key enables one-touch measurement during aiming

Designed for efficient field operation

The trigger key allows measurements to be taken while maintaining sight on the target, helping operators work more efficiently during staking and as-built surveys. The integrated red and green guide light assists rod-person alignment and helps support stakeout activities up to 150 m away.

Large memory and extended operating time

The GM-120 stores up to 99,999 points internally and supports USB memory devices up to 64 GB for data transfer and backup. A battery operating time of approximately 28 hours in EDM Eco Mode helps support full-day field operation.



Rugged for field conditions

The instrument provides IP66 dust and water protection and has been designed and tested for vibration, drops, temperature variation, and humidity. It operates in temperatures from -20°C to +60°C.

Civil Engineering

- Resection
- Radiation Survey
- Stakeout
- Missing Line Measurement
- 3D Coordinate Measurement
- Route Calculation

Surveying

- Face Left/Right Observation
- Offset Measurement
- REM
- Area Measurement
- Intersection Calculation
- Point-to-Line Measurement



The GM-120 Series combines accurate prism and reflectorless measurement, integrated field applications, long operating time, and durable environmental protection in a practical solution for surveying and

construction professionals. With support for up to 99,999 stored points, USB memory up to 64 GB, and up to 28 hours of operation, it is designed to support daily field measurement workflows.

GM-120 Key Capabilities



MEASURE

6,000 m prism range
1,000 m reflectorless range



STAKE OUT

Integrated guide light
up to 150 m
One-touch trigger key
measurement



CREATE & STORE

Built-in surveying and
civil engineering programs
Internal memory
for 99,999 points



TRANSFER

USB memory support
up to 64 GB



WORK LONGER

Up to 28 hours operation
in EDM Eco Mode



WORK ANYWHERE

IP66 environmental protection
Operating temperature
from -20 °C to +60 °C

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