

Topcon Introduces GT-503M Motorised Total Station



Topcon has introduced the GT-503M, an auto-collimating motorised total station for surveying professionals. This total station is both rugged and waterproof (IP65) and has the latest TSshield technology for advanced security and maintenance. The system can also be upgraded to Autotracking when the customer is ready to advance further to robotic applications. The GT-503M can be used for Tunnel Guidance and Periodic Monitoring applications.

Features

The GT-503M can find a prism and lock within the field of view simplifying the steps for the operator to find the prism. No need to focus the GT-503M to find the prism.

The direct drive motors of the instrument have an angular speed of up to 85 degrees per second.

When connected with an external data collector, the Longlink communication provides license-free communication up to 300m.

The advanced encoder technology provides 'Best in class' 3" angle accuracy, and in addition, allows the instrument to calibrate its own angle measurement system automatically.

The red laser pointer is coaxial through the telescope making measurements in dark environments, it can assist the remote rod operator in limited sunlight or over shorter distance shots.

Red and Green LED guide lights provide the remote pole man with direction to approximately find the horizontal line. This feature is extremely helpful during stakeout to quickly find line without communication with the instrument operator, or for trying to find the horizontal angle (line) when cutting brush for a traverse line.

The device has a Sunlight readable 4.3-inch touchscreen TFT WVGA display that can be seen in many different light conditions.

A quick and easy trigger key is located on the right-hand side of the total station and allows the instrument operator to easily and quickly take measurements whilst looking through the telescope.

TSshield Advanced Security and Maintenance

The new dual SIM module allows the customer to insert their own data SIM card in the GT-503M total station to communicate directly to MAGNET Enterprise. The telematics card installed can communicate to the TSshield servers, which can then review if the total station has any existing error codes, the version of the firmware that is installed, as well as the total station geographical location. From this information, a message can be sent to the total station and advise the operator if further action is available or necessary.

Fast and Powerful EDM

The 800m Non-prism distance measurement uses a phase shift EDM that has a smaller beam width than other non-prism instruments in its class. Distance measurements can be taken as fast as 0.9 seconds in fine mode. Measurement algorithms reduce the noise associated with non-prism measurements providing an accurate result to most surfaces over a longer distance. This is true for darker surfaces and wet surfaces where other non-prisms fail. The smaller beam width also allows the GT-503M to get measurements, for example, to a fence as well as through the fence to any objects behind it.

USB Port & Connectivity

The GT-503M total station provides water and dust protection for USB hardware thumb drives. An operator can easily import/export data from the office to the field in seconds. The instrument has both USB type A and Type B for easy connection to a computer. In addition, a RS-232 connector is provided for connecting to data collectors that do not have Bluetooth or to transfer data to a computer.

For more information and pricing, please call 0845 450 4300 or contact your Account Manager.