Meridian



MTS-102

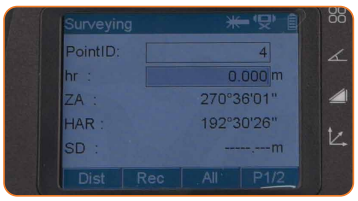
Manual Total Station

MTS-102 Manual Total Station

The MTS-102 redefines field operation with an intuitive high-definition color screen. Engineered around absolute encoding, it delivers unwavering 2″ accuracy. Paired with advanced EDM, it extends your reach to a remarkable 1000m without a prism. Experience a complete solution built for reliability and performance.



Coaxial Laser Plummet
This built-in feature facilitates fast and easy target acquisition.



Colorful Screen
2.8-inch High-brightness color screen clearly visible in sunlight.



USB Port
Support data upload and download.
Format: TXT, OMD, CASS, CSV, SDR



Stable Hardware Design
Dual-axis tilt sensor.
High-precision bead shafting.
Sealed encoder disk.



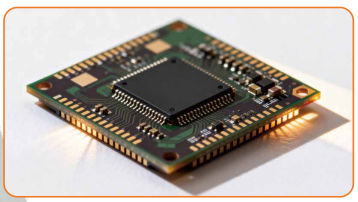
Software Connection
Support connection with M-Survey.
Support secondary development.



Power
7000 mAh high-capacity Li-ion battery, LED display, Type-C charging.
Battery life exceeds 27 h.



Trigger Key
More efficient and accurate.



New Edm
Reflectorless range 1000 m.
Speed down to 0.3 s.



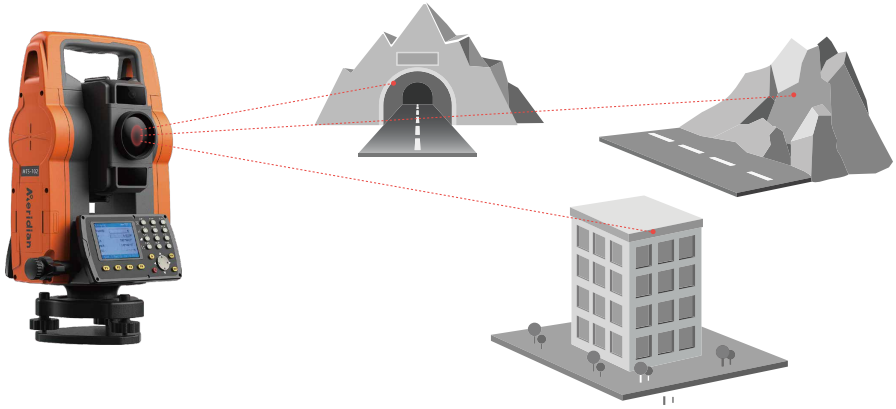
Precision Distance Measurement Technology

Equipped with five adaptive high-frequency measurement scales and an advanced phase-based laser distance measurement algorithm, it achieves rapid and accurate distance measurement, meeting the precision requirements of various advanced engineering applications.

4000m
Single Prism Mode

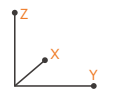
2000m
Reflector Mode

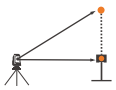
1000m
Non-Prism Mode

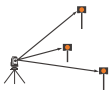


Third-party App Support

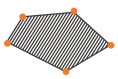
It supports Bluetooth connection with mobile phones, allowing for seamless integration with third-party software such as M-Survey to realize the full functionality of an intelligent total station.


Coord.Mesure


REM


MLM

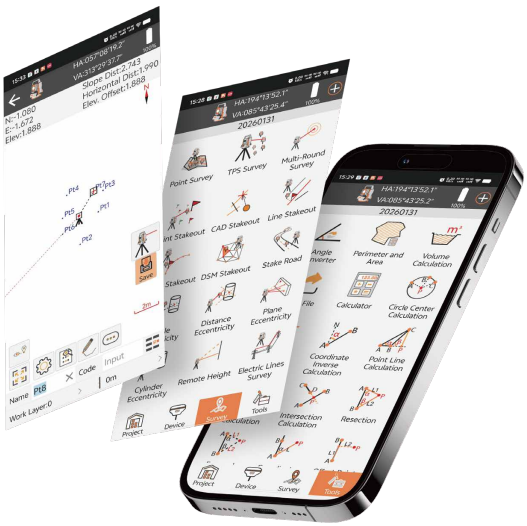

Resection


Area


Stakeout


Road


Reference Line



Application


Bridge


Construction


Mining


Tunnel


Railway


Road



Meridian MTS-102 Specification

Angle Measurement	Accuracy	2"
	Reading System	Absolute, ontinuous four-quadrant
	Display Resolution	1″
Telescope	Magnification	30x
	Field Of View	1°30′
	Minimum Focus Distance	1.7m
	Resolution	2.8"
Tilt Compensation	System	Dual axis
	Working Range	±4′
	Resolution	1"
Distance Measurement Range	Single Prism Mode	4000m
	Reflector Mode	2000m
	Non-Prism Mode	1000m
Distance Measurement Accuracy	Prism Precision Mode	$\pm(2mm+2\times10^{-6}\times D)$
	Reflector Mode	$\pm(3mm+2\times10^{-6}\times D)$
	Non-Prism Mode	$\pm(3mm+2\times10^{-6}\times D)$
Measurement time	Non-Prism	Fine: 0.7s Rapid: 0.5s Tracking: 0.3s
	Standard Prism Mode (Tracking/Precise)	0.1 / 0.3 sec
Laser alignment device	Precision	1.5mm / instrument height 1.5m
	Wavelength	635nm
	Security classification	Class2
	Output Power	0.7-1.0nw
Level Vial Sensitivity	Tube Level	30″ / 2 mm
	Circular Level	8′ / 2 mm
Physical	Dimensions and Weight	217 x 198 x378 mm, 5.7kg
	Display Screen	2.8 inch color screen
	Keyboard	twenty-four
Communication	Interface	1* USB
	Wireless	Bluetooth 5.0
Electrical	Battery Voltage/Capacity/Type	Li-ion rechargeable battery, 7.2V, 7000mAh
Working Hours	Angle Measurement	38h
	Angle Measurement + Distance Measurement	27h
Environmental	Operating Temperature	-20℃ ~ +55℃
	Storage Temperature	-30℃ ~ +55℃
	Waterproof/Dustproof	IP54

*The above technical parameters are for your reference. The company reserves the right to change the design and planning of the product based on the actual product.

Website: www.meridiangnss.com

Manufacture: **Guangzhou Meridian GNSS CO., LTD.**

Address: Building 3, No. 6, Hanqi Avenue, Dalong Street, Panyu District, Guangzhou, PRC.

Email: info@meridiangnss.com Tel: +8615241043026