

## Meridian MTS-102 Specification

<b>Angle Measurement</b>	Accuracy	2"
	Reading System	Absolute, continuous four-quadrant
	Display Resolution	1"
<b>Telescope</b>	Magnification	30x
	Field Of View	1°30'
	Minimum Focus Distance	1.7m
	Resolution	2.8"
<b>Tilt Compensation</b>	System	Dual axis
	Working Range	±4'
	Resolution	1"
<b>Distance Measurement Range</b>	Single Prism Mode	4000m
	Reflector Mode	2000m
	Non-Prism Mode	1000m
<b>Distance Measurement Accuracy</b>	Prism Precision Mode	±(2mm+2×10 <sup>-6</sup> ×D)
	Reflector Mode	±(3mm+2×10 <sup>-6</sup> ×D)
	Non-Prism Mode	±(3mm+2×10 <sup>-6</sup> ×D)
<b>Measurement time</b>	Non-Prism	Fine: 0.7s Rapid: 0.5s Tracking: 0.3s
	Standard Prism Mode (Tracking/Precise)	0.1 / 0.3 sec
<b>Laser alignment device</b>	Precision	1.5mm / instrument height 1.5m
	Wavelength	635nm
	Security classification	Class2
	Output Power	0.7-1.0mw
<b>Level Vial Sensitivity</b>	Tube Level	30" / 2 mm
	Circular Level	8' / 2 mm
<b>Physical</b>	Dimensions and Weight	217 x 198 x378 mm, 5.7kg
	Display Screen	2.8 inch color screen
	Keyboard	twenty-four
<b>Communication</b>	Interface	1* USB
	Wireless	Bluetooth 5.0, wifi, GPS GLONASS, BDS,Galileo
<b>Electrical</b>	Battery Voltage/Capacity/Type	Li-ion rechargeable battery, 7.2V, 7000mAh
<b>Working Hours</b>	Angle Measurement	38h
	Angle Measurement + Distance Measurement	27h
<b>Environmental</b>	Operating Temperature	-20°C ~ +55°C
	Storage Temperature	-30°C ~ +55°C
	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.



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# 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.

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

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

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

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

**Trigger Key**  
More efficient and accurate.

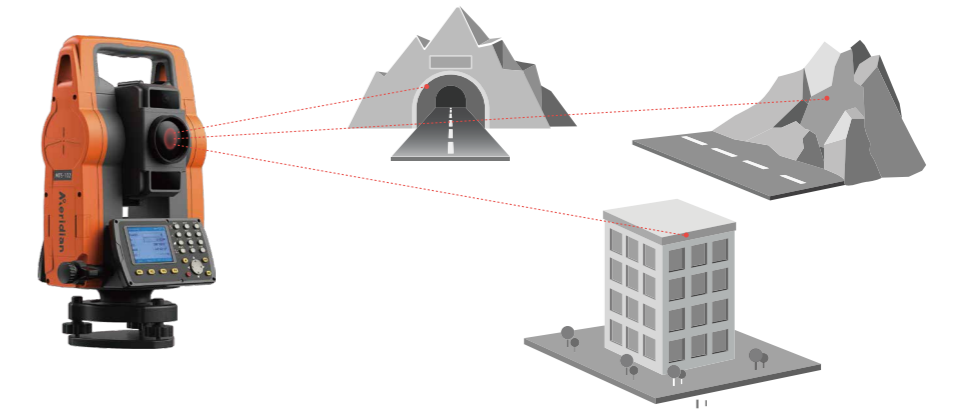
**Stable Hardware Design**  
Dual-axis tilt sensor.  
High-precision bead shafting.  
Sealed encoder disk.

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

## Precision Distance Measurement Technology

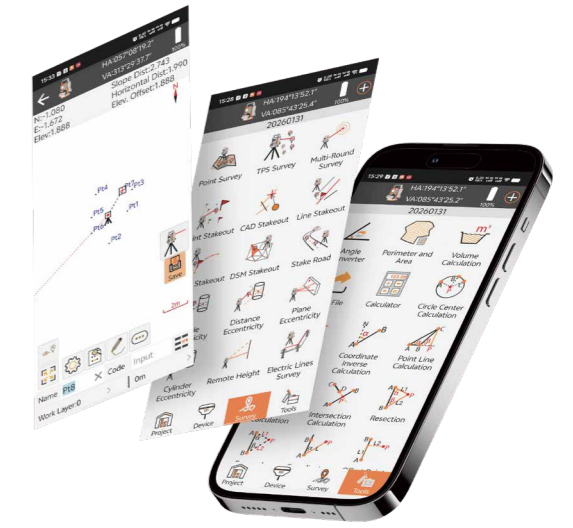
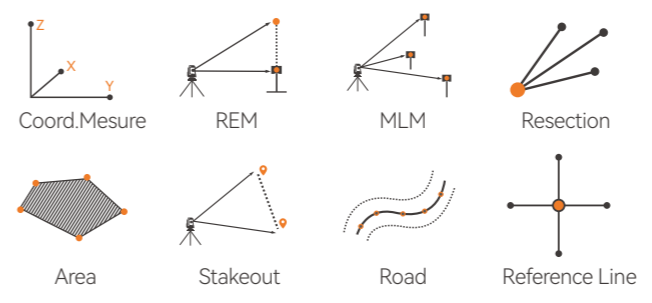
Equipped with five adaptive high-frequency measurement scales and an advanced phase-based laser distance measurement algorithm, it achieves rapid and accurate distance measurement, meeting the precision requirements of various advanced engineering applications.

**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 and Surveyor to realize the full functionality of an intelligent total station.



## Application

