

iX-503M Series Robotic Total Station



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Robotic Total Station



The Ultimate Total Station

- Fast UltraSonic Direct Drive motors
- 30 percent smaller and lighter than any previous Sokkia robotic
- TSshield® global service
- Advanced UltraTrac technology
- · Three-year instrument warranty
- · Five-year UltraSonic motor warranty

The iX-503M robotic total station is designed for the tunneling and monitoring professional looking for a motorized solution for tunnel guidance and periodic monitoring applications. You get the efficiency of a single-operator robotic system, the power of long-range reflectorless measurements, and performance as a Fusion Positioning $^{\text{TM}}$ solution.

Ultra-powerful

UltraSonic technology is the driving force for the iX-503M series. The UltraSonic motors are the thinnest, lightest, and the most efficient on the market – providing you with the smoothest, fastest and most accurate prism-tracking possible. It's a difference you can see and hear immediately – with a turning speed of 85° per-second.

Ultra-accurate

Our UltraTrac technology gives you increased prism-tracking strength in all conditions. Advanced instrument algorithms deliver the confidence you need to move ahead. It's not that you lose line-of-sight, it's how fast you can reacquire and get back to work.

Ultra-slim and reliable

Featuring a remarkably slimmed down design, the compact system is a third smaller and lighter than any Sokkia robotic instrument. Without traditional gears or wearing parts, the UltraSonic motors are more rugged and durable – lasting four times longer than previous total stations, and we back it with a five-year warranty.

Workdays turned into workflows

- Direct connectivity to Sitelink3D™ global web services
- Easy collaboration from project sites to office staff and managers
- Instant file sharing with both Autodesk® AutoCAD Civil 3D and Bentley MicroStation

UltraSonic Motor

- Long-lasting gearless design backed by the industry leading warranty
- Turning speed of 85° per second
- Compact motor efficiency



Specifications

Telescope				
Resolving power	2.5"			
Magnification	30x			
Angle Measurement				
iX-503M	3"			
Tilt Angle Compensatio	n			
Compensation	Liquid 2-axis tilt sensor			
Range	±6′			
Distance Measurement				
Prism EDM Range	4,500 m			
Prism EDM Accuracy	2 mm + 2 ppm			
Non-Prism Range	800 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

 ${\sf SiteComm}^{{\sf TM}}\ {\sf interference-free}\ {\sf communication}$

USB 2.0 Slot (Host + Slave)

RS-				

General	
Display	Color touch TFT 800 x 480 display
Keyboard	24 keys with illuminator
Battery Operation	Up to 4 hours
Dust/Water Rating	IP65
Wireless Connection	Bluetooth® Class 1
Operating Temp	-20°C to 50°C
Turning Speed	85° per-second



Sharp display

- Larger and brighter color touch screen
- User-friendly interface with simple setup routines and hot keys
- Faster processor for improved response time



Versatile solution

- Fusion Positioning™ with quick addition of the GRX3
- Compatible with RC-PR5 remote (RC-PR5 remote is a factory option)
- Reflectorless out to 800 m



Guaranteed reliability

- Three-year instrument warranty
- Five-year UltraSonic motor warranty
- TSshield™ for worry-free theft deterrence and firmware maintenance

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