



AXIS SP

AXIS SP Robotic Total Station comes with a brand-new compact design - **Smaller, Lighter, and more Portable** than before.

One person can easily carry and set up the device - even in rugged terrain like mountains and fields - reducing labor costs and physical strain.

STEC

Robotic Total Station

1"/2", 1+1ppm
Next-Gen Motorization
1000m APR
300m PS
Full Keypad
5.0 Inch Touch Screen
600m Remote Control



NEXT-GEN MOTORIZATION Torque Drive 2.0: Easier One-Man Operation

Featuring a newly designed low-power, lightweight motor, **AXIS SP** delivers strong drive and stability while significantly reducing overall instrument weight.

Rotating at up to **180°/s**, **AXIS SP** ensures high-dynamic performance with its extraordinary xTrak technology.

Auto Prism Recognize. Automatically recognizes and measures the prism at distances up to **1000m**.

Prism Search. Searching the prism within the range of **300m**, **H: 360°** and **V: 20°** from the entire working site. In complex environments, such as multi-prism interference or uneven terrain, manual aiming is not required any more.

Prism Lock. Follow and lock a moving prism at **20°/s**, which eliminate the need for standing around.

1

Up to 1", 1 + 1ppm, More Accurate
Perfect for precision engineering like bridges, tunnels, and the other high-accuracy jobs.

2

Upgraded Optical System, Fewer Errors
Significantly improves measurement accuracy and speeds data capture.

3

Full Keypad + 5.0-inch Touchscreen
Work efficiently with gloves on via the physical keys, or perform precise adjustments quickly via touchscreen. Flexible input for any working habit.

4

User-defined Keys, Less Steps, Faster Fieldwork
One-touch access to frequently used functions.

5

Multi-Mode Control, More Flexible on Site
Supports 600m long-range Bluetooth, WLAN for multi-device collaboration and WAN (SIM Card) connections.

6

8-pin Serial Port, Stable, Simple, Reliable
Provides stable external power in off-grid environments and reliable data transfer - no extra adapters needed.



TERRA MASTER

Runs Anywhere You Work

TERRA MASTER gives you the same professional experience across devices.

All-in-One Capabilities

From data collect, traverse, CAD stakeout, to COGO, road, multi-angle resection and surface scanning - TERRA MASTER equips you with everything you need in one software.

Smarter Accuracy with Multiple-round Program

A standout feature designed for long-term monitoring tasks. By averaging multiple measurements, it significantly enhances angular precision, ensuring that monitoring data remains both accurate and reliable.

Flexible, User-Defined Interface

Customize toolbars, and combine intuitive graphical surveying, tailored to your workflow.

Surface Scanning

Inspect the surface with precision — shape, size, and flatness in once, enabling quicker quality checks against design requirements.

One Map, All Tasks

TERRA MASTER combines data collection, stakeout, and CAD on a single map, eliminating module switching and streamlining workflows for faster, more focused surveying.

Enhanced Flexibility with FIELD MASTER

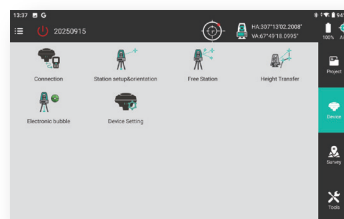
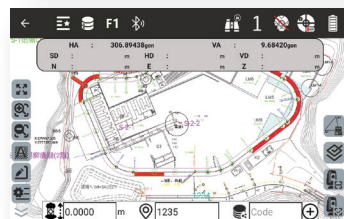
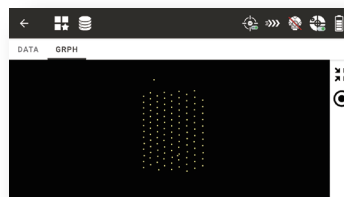
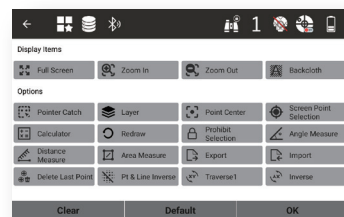
Depending on project needs, users can easily switch between a RTK or a total station.

Even better, the software connects directly to the RTK database, giving instant access to data without extra import or export steps.

This saves time, ensures consistency and accuracy, and delivers reliable support for multi-device collaboration and complex surveying projects.



Station Set	Pt ID	dN(mm)	dE(mm)
T2	4.2	0.3	
T3	-0.8	-0.2	
T4	-1.4	-0.9	
Learn Data	T2	-0.2	0.1
Auto Meas	T2	6.0	0.6
	T4	5.6	3.3
	T3	6.2	1.6
Job Management	T2	6.0	0.6
User-Define	Round2,Rounds1		



ANGLE

Accuracy	1"/2"
Method	Absolute Encoding
Detecting System	H: quadruple; V: quadruple
Minimum Reading	0.1"/1" optional
Diameter of Circle	79mm
Vertical Angle	Zenith 0/ Horizontal 0
Unit	360°/400gon/6400mil

DISTANCE

w/ Reflector - Range	3500m
	5000m (Enhanced Mode)
- Accuracy	1+1ppm
- Measure Interval	Fine: 0.4s, Tracking: 0.3s
w/o Reflector - Range	1000m
- Accuracy	D<500m: 3+2ppm
	D>500m: 5+2ppm
- Measure Interval	0.4s-3s

TELESCOPIC

Image	Erect
Length	178mm
Diameter	40mm (EDM: 45mm)
Magnification	30x
Resolving Power	3"
Field of View	1°30'
Minimum Focus	1.2m
Reticle Illumination	5 Levels Adjustable

xTrak MOTORIZATION

Type	DC motor
Maximum Speed	180°/s
Face Changing	3s
Auto Prism Recognize	
Working Range	1.5-1000m
Aiming Scope	1°30'
Aiming Time	3s-5s
Accuracy	1"
Searching Window	Allows user-defined
Prism Search	
Working Range	1.5-300m
Typical Searching Time	5s
Range	V: 20°, H: 360°

COMPENSATOR

Tilt Sensor	Dual-axis liquid electric sensor
Range	4'
Accuracy	1"

CAMERA

Sensor	5 Megapixel CMOS sensor
Field of View	H: ±7.5°, V: ±5.3°
Frame Rate	Up to 24 frames per second

LEVEL

Circular Level	6'/2mm
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LASER PLUMMET

Type	635nm, Class II
Accuracy	0.4mm at 1.5m height
Spot	2.0mm at 1.5m height

GENERAL

Display	5-inches TFT color touch screen, dual faces, 720*1280
Keys	27 keys with backlight
Guide Light	Red/green, 635nm/530nm
OS	Android 9.0
Internal Memory	RAM 3GB, ROM 32GB
CPU	MSM8953, 8 Core, 1.8GHz
I/O Interfaces	RS232, type-c, support flash disk
Bluetooth	BT5.1 BLE, 10m
Long-range Bluetooth	600m
WLAN	2.4G, 5G, WiFi
SIM Card	GSM, CDMA, WCDMA, TDD-LTE FDD-LTE
Battery	Li-70, 5000mAh, 68Wh, Lithium-ion battery
Working Duration	4 hours for 1 battery
Charging Time	2.5 hours
Waterproof/Dustproof	IP65, 90% non-condensing
Operating Temperature	-20°C to +50°C
Storage Temperature	-40°C to +70°C
Dimension	220*235*386mm
Weight	7.4kg with battery

TABLET

Display	8-inch multi-touch color screen
Camera	Rear: 13 MP / Front: 5 MP
OS	Android 10
Internal Memory	RAM 4GB, ROM 64GB
CPU	SDM632
I/O Interface	Type C, Bluetooth 4.2, WLAN
Battery	3.8V, 9000mAh, Li-ion battery
Working Duration	10 Hours
Waterproof/Dustproof	IP67
Operating Temperature	20°C to +60°C
Dimension	235*146*13 mm



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