



Alpha Tx

Alpha Tx 1" Total Station

4CCD and Superfine Shafting For 1" Accuracy 1000m Non-Prism

Alpha Tx Total Station

Alpha Tx 1" High-precision Total Station, boasts high quality and high performance with its outstanding design, advanced encoding technology and stable alloy axis. It has achieved 1" accuracy measurement and is applied to control measurement, industrial measurement, tunnel engineering, and deformation monitoring



- Advanced Optical System**
Europe optical technology helps effectively suppress chromatic aberration and make clearer observation
- Lithium-ion Battery**
Working time up to 20 hours
- Touch Measurement**
The touch trigger key helps mitigate the impact of jitter on the measurement
- Handy Brake Wrench**
User never feels tired with the ergonomic design which fits human fingers. Lock and unlock with a gentle press on the wrench
- Processor**
Equipped with ARM architecture arm processor to lower energy and improve the stability of the total station.
- BLE 5.0**
Low energy enables more ways of measurement
- USB flash drive**
Support data upload and download and update firmware
- Coaxial Laser Plummet**
Coaxial laser plummet makes it more convenient to track the targets

High-precision Ranging Technology

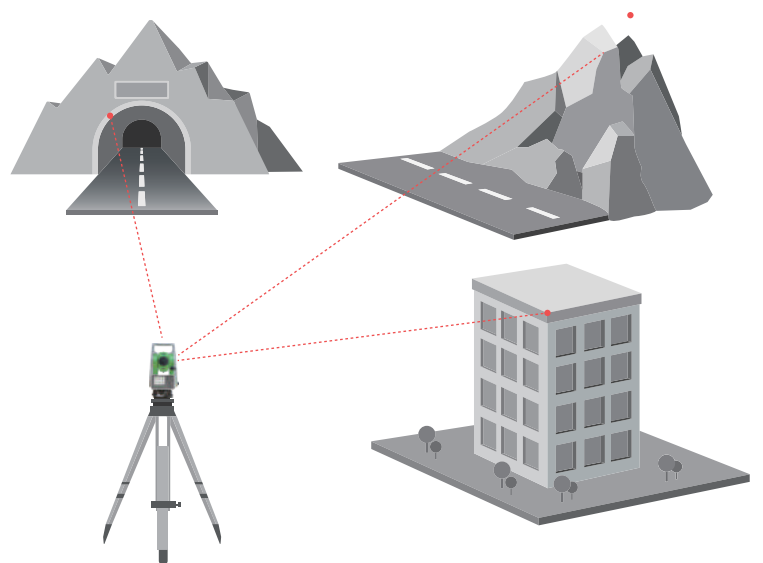
Alpha Tx can achieve fast and accurate ranging through built-in eight adaptive high-frequency measuring rulers and advanced phase laser ranging algorithm, meeting the accuracy requirements of various advanced engineering measurements

1000_m

Without Prism

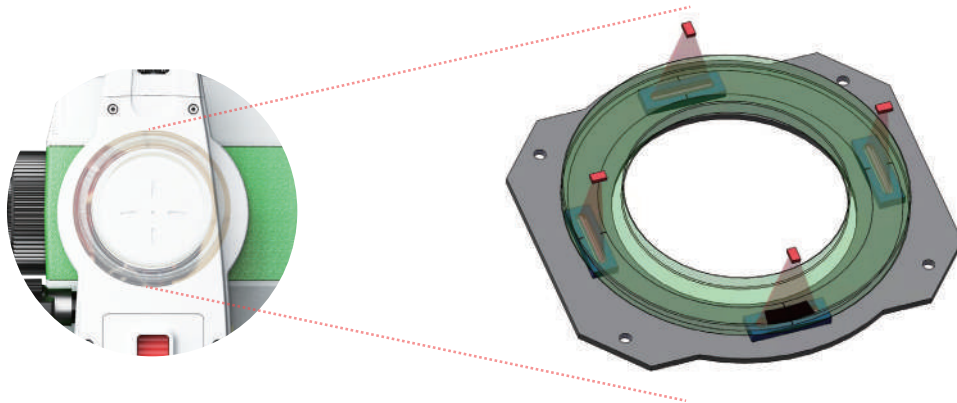
5000_m

With Prism



4CCD for higher angular accuracy

The self-developed four-quadrant precision angle sensor design, error compensation algorithm, combined with photoelectric decoding, top-notch precision photolithographic absolute coding disk, brings stable and reliable accuracy of 1"



Coaxial Comprehensive Compensation For 1" Accuracy

The compensator is located just above the vertical axis, and the accurate compensation is obtained quickly between rotations. At the same time, the CCD is used for accurate calibration, and the compensation range is as high as 4', high operation efficiency.



Superfine Shafting For 1" Accuracy

The high-quality alloy steel is heat-treated several times being processed with a specially designed ultra-high precision grinder. The G3 top-grade steel balls are selected and ground through dozens of procedures to meet the strict requirements of 1" accuracy instruments.



Strong Protection

Powerful and precise electronic compensation and high redundancy angle measurement algorithm enable the total station to work efficiently and reliably in all kinds of extreme environments.



Package includes



Tx	X1
Battery	X2
Charger	X1
Tool bag	X1
Manual	X1
Warranty Card	X1
Certificate	X1
USB flash drive	X1
RP60 reflector	X1
RP30 reflector	X1
Objective cap	X1

Technical Specification

Telescope	Image	Right-reading	
	Magnification	30x	
	Field Of View	1°30'	
	Minimum Focus	1.7m	
	Resolution	2.8"	
Angle Measurement	Accuracy	1"	
	Reading System	Absolute Encoders	
	Minimum Reading	0.2"	
Distance Measurement	Measuring	Non-Prism	1000m
		Reflector	2000m
		Single Prism	5000m
	Measuring Accuracy	Non-Prism	$\pm (3\text{mm} + 2 \times 10^{-6} \times D)$
		Reflector	$\pm (3\text{mm} + 2 \times 10^{-6} \times D)$
		Single Prism	$\pm (1\text{mm} + 1 \times 10^{-6} \times D)$
	Time	Fine :0.7s Rapid:0.5s Tracking:0.3s	
Minimum Display	Fine/Tracking:0.1mm		
Compensator	Compensator Type	Dual axis	
	Compensator Range	$\pm 4'$	
	Compensator Resolution	1"	
Laser Plummet	Accuracy	1.5mm@1.5m	
	Wavelength	635nm	
	Safety	Class2	
	Output Power	0.7-1.0nw	
Level Vial Sensitivity	Tubular Level	30"/2mm	
	Circular Level	8'/2mm	
Keyboard	Screen	3.2-inch colour screen	
	Key	x26	
	Backlight	Support	
Communication	Port	USB、Bluetooth	
	Data Memory	40000 points	
Power	Battery	2600mAh Li-ion battery	
		Low voltage alert	
	Working Time	25 hours angle 20 hours angle and distance	
Physical	Operating Temperature	-20°C ~ +50°C	
	Storage Temperature	-30°C ~ +55°C	
	Water/Dust Proof	IP65	

*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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