

Electronic Total Station



Reflector Less Distance Measurement
Large Memory storage
USB/Bluetooth
Long Battery Life

Laser Plummet

HTS/ATS series
Total Station

Software Features

- Powerful and Fast EDM Capabillity
- Intelligent Callibration
 Software
- Absolute Encoder Angle Measurement
- Stable Dual-axis Compensation
- Rich Communication and Transmission



























Technical Features



Powerful and Fast EDM Capabillity

No Prism Accuracy of 3mm+2ppm & accurate measurement.



STM32 Architecture

The STM32 MCU based on ARM CortexTM-M processor enables the Total Station for extra high speed and low power consumption.



Intelligent Callibration Software

Accessible for real time diagnosis to ensure trouble free operation. The software can determine 90% of problems.



Absolute Encoder

1023 pair of absolutely coded discs. All Series angle measurement accuracy is two second. Starting without initialization. The data will save automatically when power



Stable Dual-axis Compensation

Stable Dual Compensation.

Compensation range 3' for high accuracy of angle measurement.



Rich Communication

With RC232C, SD, USB & mini USB communication interface. Using Bluetooth for data transmission, makes data transmission more convenient.

ATS/HTS Series Specification

	/// // // // // // // // // // // // //		
Description Model	ATS-120R	HTS-420R	HTS-420L6
Angle Measurement			
Measurement Method	Absolute Encoding		
Minimum Readout	1"		
Accuracy ¹	2"		
Telescope			
Magnification	30X		
Field of view	1°30' (2.7m at 100m)		
Minimum Focusing Distance	1.5m		
Reticle	illuminated		
Compensator	Liquid Tilt Sensor		
System	Single Axis	Dual Axis	Dual Axis
Working	±3′		
Setting Accuracy	1"		
Distance Measurement	(Reflector less)		
Reflector less Range ²	350m	350m	600m
Single Prism	5500	7000m	7500m
Accuracy	3mm+2ppm		
Measuring	1.5s		
Distance Measurement	(with Reflector)		
Single Prism Under good	2500/3000m	3000m	4000/5000m
condition ³			
Reflective Sheet	800m		1000m
Accuracy	2mm+2ppm		
Measuring Time (Fine/Quick/Tracking)	1.5s/1.2s/0.8s	1.3s/1s/0.5s	1s/0.8s/0.5s

¹ Standard Deviation based on ISO17123-3 ² Calculated by Kodak gray card white side



Description Model	ATS-120R	HTS-420R	HTS-420L6	
Communication				
Wireless Communication	None	Bluetooth	Bluetooth	
Interface	Standard RS232,SD-Card ⁴ , Micro USB			
Internal Data Memory	Approximate 20000 Points			
Data Format	ASCII			
Operation				
Operating System	Real Time Operating System			
Display	Gray and white Display with adjustable contrast			
	280 x 160 pixel			
Keyboard	2 Sides alphanumeric backlit crystal keyboard			
Laser Plummet				
Туре	Laser point, 4 brightness level adjustment			
Centering Accuracy	1mm at 1.5m Instrument height			
Environmental Condition				
Operating Temperature	-20°c to +50°c			
Storage Temperature		-40 ⁰ c to +70 ⁰ c		
Dust & Water proof(IP55		IP65	
IEC60529 standard)				
Power Supply				
Battery Type	Rechargeable Li-Ion Battery			
Voltage/Capacity	ZBA-400 7.4V DC / 3000mAh			
Operating Time with ZBA-	Optimal 16 hr ⁵ (continuous angle measurement			
400	every 30 seconds / 10 hr Typical			
Measuring Time	Approx. 12000 times			
Weight				
Including Battery and	5.5 Kg Approx.			
Tribach				

Our Local Dealer:



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³Good Condition: No haze, visibility about 40Km

⁴ Maximum extension up to 32GB

⁵ New Battery at 25 ° c