SPECIFICATIONS

Model	ATS-120R	ATS-120L6	ATS-120L8	ATS-120L10
Angle Measurement				
Measurement Method	Absolute Encoding			
Minimun Readout	1″			
Accuracy	2″			
Telescope				
Magnification	30X			
Field of View	1°30′			
Minimum Fousing Distance	1.3m			
Reticle	Illuminated			
Compensator				
System	liquid tilt sensor/Dual-axis			
Working Range	±3′			
Accuracy	1″			
Distance Measurement (with Reflector)				
Single Prism (Under general/good conditions)	5000m			
Reflective Sheet	800m	1000m		
Accuracy	2mm+2ppm			
Measuring Time(Fine/Tracking)	1s/0.5s	0.8s/0.4s	0.8s/0.3s	
Distance Measurement (Reflectorless)				
Reflectorless Range (Calculated by Kodak Gray Card white side with 90% reflective)	400m	600m	800m	1000m
Accuracy	3mm+2ppm			
Measuring Time	1.5s			
Communication				
Internal Data Memory	Approx.20000 Points/SD Card			
Interface	Standard RS232,Mini-B,USB pen drive			
Wireless Communication	Buletooth			
Data Format	ASCII			
Operation				
System	Real-time Operating System			
Disply	High resolution backlight black and white display with contrast adjustment/Graphics 192x96 pixels			
Keyboard	2 sides Alphanumeric backlit crystal keyboard			
Laser Plummet				
Type	Laer point,4 brightness levels adjustment/Optical plummet(optional)			
Centering Accuracy	1mm at 1.5m insturument height			
Environmental				
Operating Temperature	-20℃- +50℃(-4F to +122F)			
Storage Temperature	-40℃- +70℃(-40F to +158F)			
Temperature&Pressure	Manual input			
Dust&Water Proof (IEC60529 Standard)	IP55			
Power Supply				
Battery Type	Li-ion battery			
Voltage/Capacity	ZBA-400:7.4V(DC)/3000mAh			
Operating Time With ZBA-400	Optimal 16 hours(Continuous angle measurement every 30 seconds)/10 hours(Typical)			
Measuring Times	Approx.12000 times			

Information

SUNWAY

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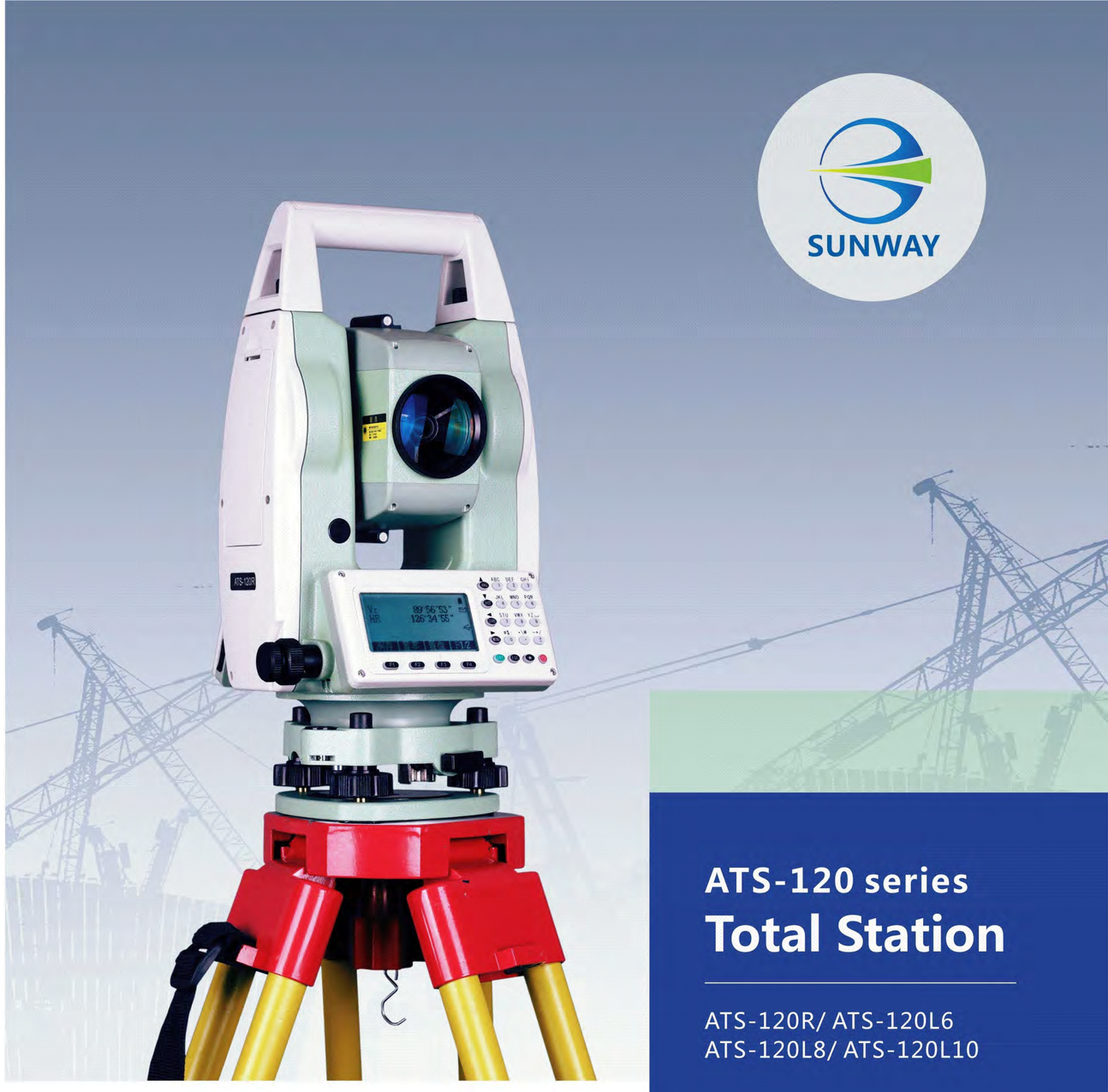

SUNWAY

ATS-120 series
Total Station

ATS-120R/ ATS-120L6
ATS-120L8/ ATS-120L10

- STM32 Architecture
- Powerful and Fast EDM Capabillity
- Intelligent Callibration Software
- Absolute Encoder Angle Measurement
- Stable Dual-axis Compensation
- Rich Communication and Transmission

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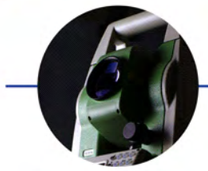
Product Introduction

ATS-120 series Total Statio

ATS-120 series Total Station is used in engineering, produce by Suzhou Sunway Photoelectric Technology Co.Ltd., a subsidiary of a Hi-Target Surveying Instrument Co.Ltd.It have no prism measurement function,absolute encoder angle measurement technology,angle measurement accuracy 2 seconds,no prism measurement accuracy 3mm+2ppm,and a breakthrough in the use of the STM32 architecture.
ATS-120 series Total Station configures a variety of communication interfaces and smart online calibration software,implements the diversity of data transmission selection and real-time detection function.

Technical Features



Powerful and Fast EDM Capabillity

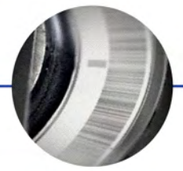
ATS-120 series Total Station's no prism measurement range can up to 800 meters. No prism measurement accuracy 3mm+2ppm.Accurate measurement 0.8S,Track measurement 0.3S.

STM32 Architecture

The STM32 MCU based on ARM CortexTM-M processor enables the total station has extra high processing speed and low-power consumption.

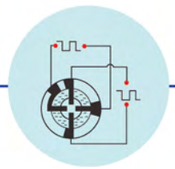
Intelligent Callibration Software

Accessible for real-time diagnosis to ensure trouble-free operation.The software can determine 90 percent of the Problem。



Absolute Encoder Angle Measurement

1023 pairs of absolutely coded disc.All Series' angle measurement accuracy is two seconds. Starting without initialization.The data will save automatically when the power failure.

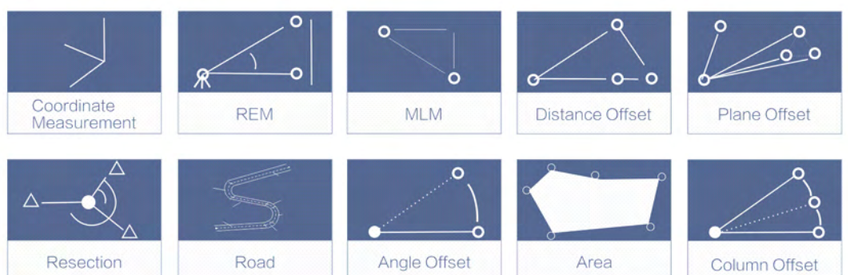


Stable Dual-axis Compensation

Stable Dual-axis Compensation.Compensation range 3'.Operation can be visualized and High accuracy of angle measurement.

Rich Communication and Transmission

With RS232C,SD,USB and MiniUSB communication interface. Using Bluetooth for data transmission, make data transmission more convenient.

Suzhou Sunway Photoelectric Technology Co.Ltd.(Hereinafter referred to as Sunway) is a subsidiary of a Hi-Target Surveying Instrument Co.Ltd.
Sunway was founded in 2005, mainly engaged in the manufacture and sale of photovoltaic measurement angle sensor, automatic balance controllers, and optical instruments assembly, maintenance, and product technology development and consulting services.
In February 2012, Hi-Target acquired Sunway.To use Hi-Target's influence, strong financial strength and sales system,Sunway optimize the industrial structure, broaden the product range, expanding the production scale and enhance core competitiveness.
In 2014, Hi-Target realized sales of over 10,000 units of Total Station, and pioneered the Mini Total Station in the industry. In Suzhou, Hi-Target is building an annual capacity of 10 million units total station manufacturing base, production capacity will be greatly enhanced.
The pattern has changed.

Software Features