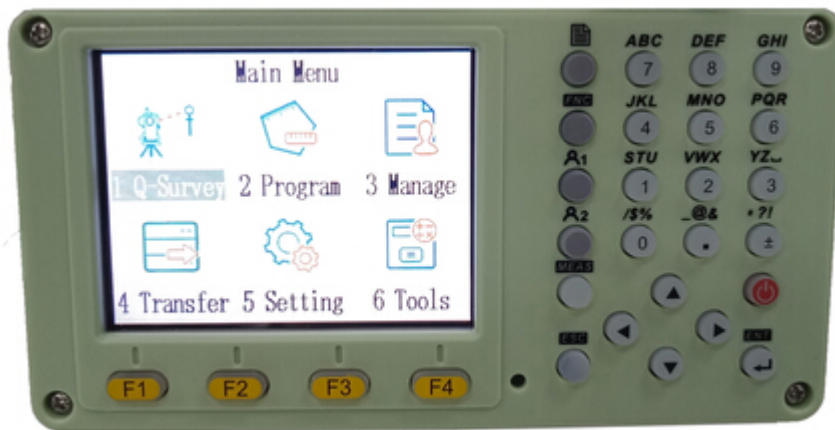


The PTS-121A Total Station is widely used in the engineering field. Equipped with a true color screen, full seal encoding disc, step motor and newly designed optical path, the PTS-121A achieves excellent angle and distance measurement performance.

The PTS-121A Series Total Station consists of a wealth of communication interfaces and smart online calibration software, allowing the PTS-121A's rich data transmission and real-time detection capabilities. [Leica Total Station Refill](#)





## Features:

### Fast and accurate EDM features

A newly designed optional path improves the accuracy and speed of distance measurements.

Anti-reflective 800m/600m.

Fine 0.8 seconds, track measurement 0.3 seconds.

### STM32 Architecture

The STM32 MCU provides high-speed processing and low power consumption for the total station.

### **Intelligent Troubleshooting Software**

Sunway has developed intelligent total station troubleshooting software that can diagnose 90% of the issues. This is a powerful tool for maintenance and repair workers.

### **Full-seal Absolute Encoding Unit**

The full seal absolute encoding unit prevents moisture and dust from entering.

After restarting or powering off, previous information remains and no initialization is required.

Angle accuracy of all series: 2"

### **Stable biaxial correction**

It is configured for automatic accuracy correction.

Correction range:  $\pm 3$

Vivid graphic electronic bubble display.

### **Rich communication and communication**

A wide range of data transfer options to meet a variety of needs. for example. USB Pen Drive, SD Card, Mini USB Interface

Wireless data transfer possible via Bluetooth

## SPECIFICATIONS

Model				
Angle Measurement	PTS-121A			
Measurement Method	Absolute Encoding			
Minimun Readout	1"			
Accuracy	2"			
Telescope				
Magnification	30X			
Field of View	1°30'			
Minimum Fousing Distance	1.5m			
Reticle	Illuminated			
Compensator				
System	Dual-axis tilt sensor			
Working Range	±3°			
Accuracy	1"			
Distance Measurement ( with Reflector )				
Single Prism (Under general/good conditions)	4000m/5000m			
Reflective Sheet	1000m			
Accuracy	2mm+2ppm			
Measuring Time(Fine/Tracking)	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	True color ,320*240 TFT Screen			
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 insturment height			
Environmental				
Operating Temperature	-20°C- +50°C(-4F to +122F)			
Storage Temperature	-40°C- +70°C(-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			