

## SPECIFICATIONS

| Model  | ATS-120R  | ATS-120L6   | ATS-120L8 | ATS-120L10 |
|--|---|-------------|-----------|------------|
| <b>Angle Measurement</b>   |   |             |           |            |
| Measurement Method   | Absolute Encoding   |             |           |            |
| Minimum Readout  | 1"  |             |           |            |
| Accuracy   | 2"  |             |           |            |
| <b>Telescope</b>   |   |             |           |            |
| Magnification  | 30X   |             |           |            |
| Field of View  | 1°30'   |             |           |            |
| Minimum Focusing Distance  | 1.5m  |             |           |            |
| Reticle  | Illuminated   |             |           |            |
| <b>Compensator</b>   |   |             |           |            |
| System   | Single-axis liquid tilt sensor/Dual-axis(optional)  |             |           |            |
| Working Range  | ±3°   |             |           |            |
| Accuracy   | 1"  |             |           |            |
| <b>Distance Measurement ( with Reflector )</b>                                       |   |             |           |            |
| Single Prism (Under general/good conditions)   | 2500m/3000m   | 4000m/5000m |           |            |
| Reflective Sheet   | 800m  | 1000m       |           |            |
| Accuracy   | 2mm+2ppm  |             |           |            |
| Measuring Time(Fine/Tracking)  | 1s/0.5s   | 0.8s/0.4s   | 0.8s/0.3s |            |
| <b>Distance Measurement ( Reflectorless )</b>  |   |             |           |            |
| Reflectorless Range ( Calculated by Kodak Gray Card white side with 90% reflective ) | 350m  | 600m        | 800m      | 1000m      |
| Accuracy   | 3mm+2ppm  |             |           |            |
| Measuring Time   | 1.5s  |             |           |            |
| <b>Communication</b>   |   |             |           |            |
| Internal Data Memory   | Approx.20000 Points/SD Card   |             |           |            |
| Interface  | Standard RS232,Mini-B,USB pen drive   |             |           |            |
| Wireless Communication   | None  | Bluetooth   |           |            |
| Data Format  | ASCII   |             |           |            |
| <b>Operation</b>   |   |             |           |            |
| System   | Real-time Operating System  |             |           |            |
| Display  | High resolution backlight black and white display with contrast adjustment/Graphics 192x96 pixels |             |           |            |
| Keyboard   | 2 sides Alphanumeric backlit crystal keyboard   |             |           |            |
| <b>Laser Plummet</b>   |   |             |           |            |
| Type   | Laser point,4 brightness levels adjustment/Optical plummet(optional)                              |             |           |            |
| Centering Accuracy   | 1mm at 1.5m instrument height   |             |           |            |
| <b>Environmental</b>   |   |             |           |            |
| 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  |             |           |            |
| <b>Power Supply</b>  |   |             |           |            |
| 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



## ATS-120 series Total Station

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

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