Specification

Model	RS10	
Telescope		
Magnification/Resolution	30ˣ/3″	
Field of view	1°30′	
Shortest focusing distance	1.5m	
Effective aperture	Φ50	
Imaging	Erect	
Angle Measure		
Accuracy	0.5″	1″
Method	Absolute encoder	
Unit	360° (dms/d)/400gon/6400mil	
Min. display	0.1″	
Distance Measure		
Accuracy Prism	±(1+1×10⁻⁶D) mm	
Reflective sheet	±(2+2×10⁻⁶D) mm	
Reflectorless	±(3+2×10⁻⁶D) mm	
Range Standard prism(remote prism mode)	2~5000m	
Reflective sheet	1~800m	
Mini prism	2~1200m	
Reflectorless	1~1000m	
Time Fine/Fast/Track	≤1.0s (initial 1.5s) /≤0.5s (initial 1.0s) /≤0.2s(initial 1.0s)	
Unit	m/ft/US ft	
Min. display	0.0001m/0.001m(Fine、Fast) , 0.01m(Track)	
ATR		
Woring range	5m~1000m	
Basic positioning accuracy	±1.5mm@≤200m,±1.5″@＞200m	
Positioning time(in field of view of telescope)	0.5s~2s	
Motor drive		
Max. rotational angular speed	180°/s	
Min. value for micro-rotation control in low speed	1″	
Tilt compensation		
Compensation method	Integrated dual-axis type	
Compensation range	≥±6.0′	
Level vial sensitivity		
Plate level vial	30”/2mm	
Circular level vial	8′/2mm	
Laser plummet		
Accuracy	±1.0mm/0.8m~ 1.5m	
Laser spot	≤2.0mm/0.8m~1.5m	
Power		
Battery	11.1V, 5800mAh lithium battery	
Working time	5h-8h	
Other		
Endless drive	1 for horizontal, 1 for vertical	
Display	6-inch touchscreen,resolution 1280*720,double displays, single display working supported	
Keyboard	15 keys at the bottom, backlight illumination+ automatic sensitivity to light	
Communication port	USB to RS232,USBC port,USB HOST port,close-range BT standard,long-range BT(optional),various networks(4G optional)	
Function support	Trigger key/buzz output/speaker/TF card/Temp. and air pressure sensor /cloud update	
System	ANDROID 11.0, quad-core 64-bit ARM A55 CPU 2GHz, 8GB+128GB	
Protection grade	IP55 (IEC60529)	
Working temp. range	-20°C~+50°C	

Illustrations, descriptions and technical speficifations are not binding and may change

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New auto aim technology

The RS10 Robotic Total Station has an auto aim function, with brand new intelligent algorithm to accurately and automatically correct the angle reading deviations when sighting.
This technology enables the robotic total station to quickly complete the target search and accurately determine the center position of the prism, ensuring greater work efficiency in various working environments.

Auto aim makes survey faster and more efficient

RS10

Roughly sight → Automatically precisely aim and measure → Record the data

Generally manually aim at the total station

Roughly sight → Telescope focusing → Horizontal micro adjustment → Vertical micro adjustment → Record the data

The RS10 robotic total station system launched by FOIF is a measurement system integrating automatic target recognition, automatic aim, automatic angle measurement and ranging, automatic target tracking, and automatic recording.

Time-saving,labor-saving and worriless

ATR Auto Aim! Direct-drive motor drive!!

Long reflecorless range

- Reflectorless ranging up to 1000m
- Ranging can be quickly completed in a short time

Coaxial pointing laser

- The laser is fully coaxial with the telescope
- With red pointing laser, what is pointed is what is measured

Comprehensive features

Bring the survey into the era of automation, and provide the surveyors with more efficient and convenient automation measurement solutions. The instrument provides a more cost-effective option for deformation monitoring, cross-section measurement, etc. It realizes the automation from field data collection to result calculation and output, and significantly improves the efficiency of indoor and outdoor work, greatly reduces the labor intensity of people, eliminates various errors, and can also reduce the requirements of traditional measurement methods for people and equipment. As long as you simply master the basic operations, you can proceed with the indoor and outdoor work.

Power-driven focusing

- Focusing is steady and convenient

Integrated compensation

- The high-precision integrated compensator is placed in the axis, and the compensation is faster and more stable

Diversified communication interfaces

- Bluetooth, RS232 communication, 4G all networks, which meet the needs of customers for remote command control

Direct Drive Technology

- With a new generation of direct-drive motor, the maximum speed can reach 180°/s, and it can realize high-resolution angle fine-tuning and high-precision positioning

Abundant automation measurement functions

- Auto aim
- Auto track
- Intelligent recognition
- Telemetering control

High level of protection, rugged and easy to operate

- It has a high level of waterproof and dustproof performance

The Android-style graphical operation interface makes it easy for you to get started

- Built-in Android operating system
- Large touchscreen operation, and graphical interface

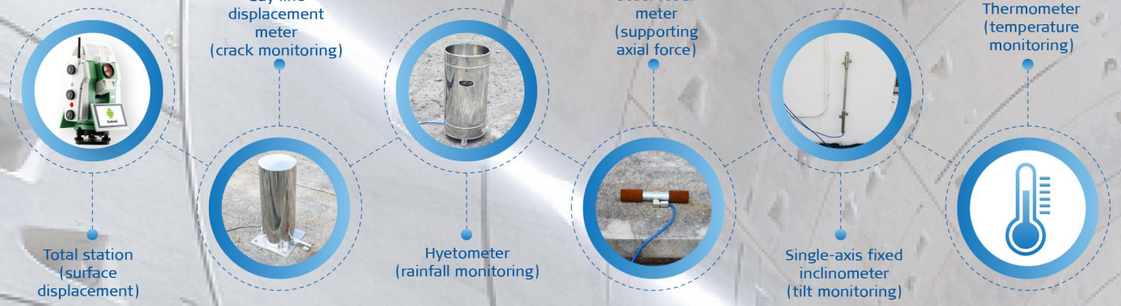
Professional measurement guides to help you finish a wide range of applications with ease

- Perfect measurement and stakeout functions, offset measurement, resection, road measurement, cross-sectional measurement, opposite side measurement, multiple observations, etc.
- Practical engineering application functions such as road measurement and design, cross-section measurement, etc
- The motor-driven automatic scanning, automatic monitoring,etc.
- Abundant COGO technical functions, coordinate inverse and traverse calculation, intersections calculation, angle calculation, offset calculation, curve calculation, area calculation, etc
- Data import and export function in a variety of commonly used formats

Integrated Deformation Monitoring System

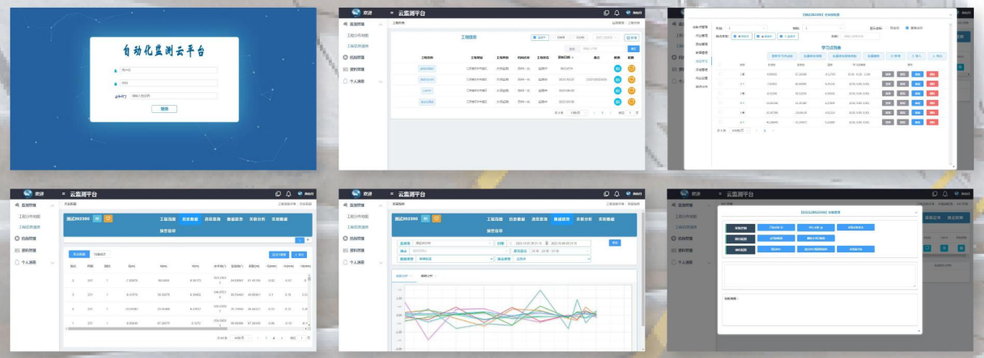
It can realize 24-hour all-weather monitoring, automatic measurement, automatic recording, automatic analysis, automatic reporting, and the data can be stored in the cloud or local computer according to user needs

Monitoring Sensor

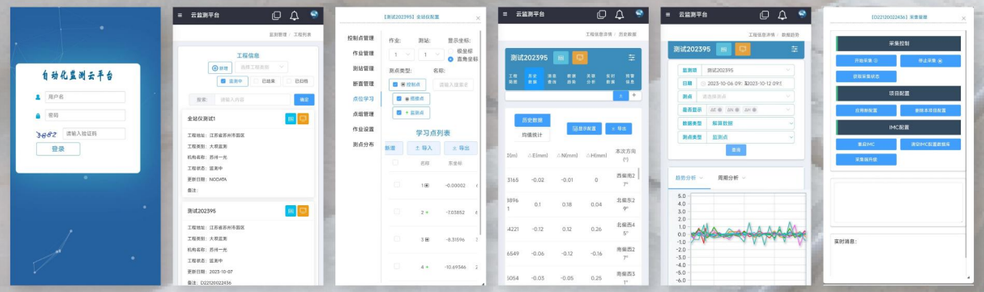


Online integrated monitoring and analysis management cloud platform

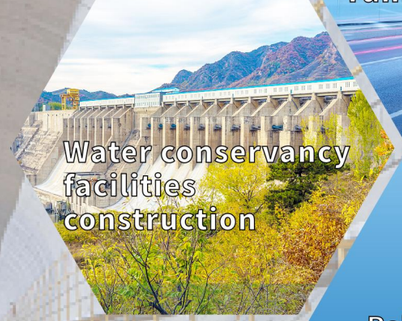
PC monitoring software



Mobile APP monitoring software



Application



RS10
Robotic Total Station
System