SPECIFICATIONS

		N9	N70	N7
Distance Measurement				
Max. Range	Reflectorless	1000m	1000m	600m
	Reflector	3.5km		
Accuracy	Reflectorless	±(3mm+2×10−6.D)		
	Reflector	±(1+1×・D)mm	±(2mm+2×10−6.D)	
Reading				
Measuring Time		Fine Mode＜0.3s; Tracking Mode＜0.1s		
Atmospheric Correction		Auto Correction		
Prism Constant		Auto Correction		
Angle Measurement				
Measurement Method		Absolute Encoding		
Diameter of Absolute Encoding Disk		79mm		
Minimum Reading		0.1” or 1” option		
Accuracy		1”	2”	2”
Detection Method		Horizontal: Dual, Vertical: Dual		
Telescope				
Image		Erect		
Effective Aperture		48mm		
Magnification		30 X		
Field of View		1° 30’		
Minimum Focusing Distance		1.2m		
Automatic Compensator				
System		Dual-Axis Liquid-electric Sensor Compensation		
Working Range		±4’		
Accuracy		1”		
Sensitivity of Vial				
Plate Vial		30” /2mm		
Circular Vial		8’ /2mm		
Optical Plummet (Option)				
Image		Erect		
Magnification		3 X		
Focusing Range		0.5m - ∞		
Field of View		5°		
Laser Plummet (Default)				
Accuracy		1.5mm (in 1.5m InsHt)		
Diameter		2.5mm (in 1.5m InsHt)		
Wave Length		630nm—670nm		
Laser Power		≤0.4mW		
Display				
Type		3.5 Inches, 640*480dpi, High-resolution LCD Touch Screen		
Communication				
Data Support		RS-232, Min USB, USB OTG, SD CARD		
On-board Battery				
Power Supply		Rechargeable Lithium Battery		
Voltage		7.2V dc		
Operating Time		6 hours		
Working Environment				
Temperature		−20℃～+50℃		
Size				
Dimension		196mm×192mm×360mm		
Weight		6.2kg		

ACCESSORIES

TK21T

TK25T

Single Prism System

Dia.: 25.4mm
Offset: 17.5mm/0-30mm

Mini Pole: 30cm×4, Φ10mm

Mini Prism System ADSmini112A/B

ATS-2 (Wooden)

Prism Pole & Prism System ADS107

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SOUTH
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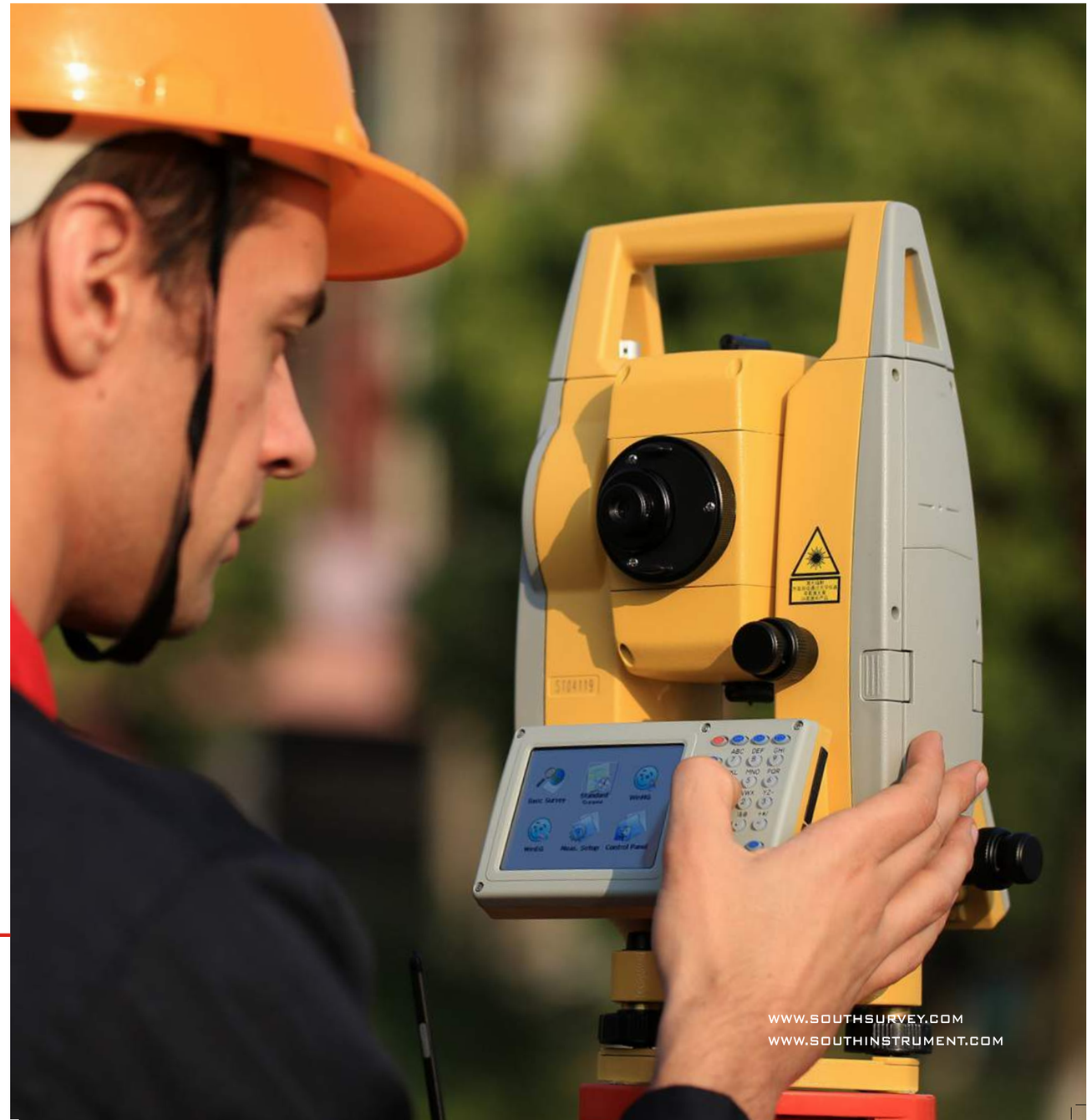
N9/N7 SERIES

TOTAL STATION



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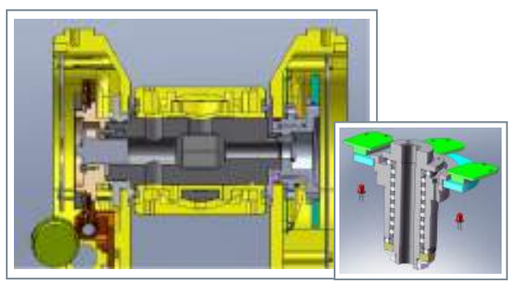
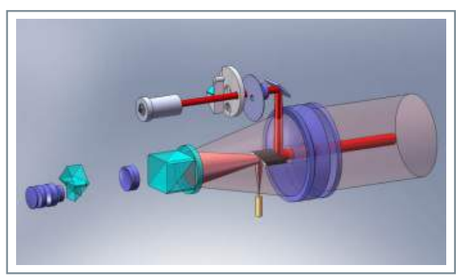
1. Angle measurement accuracy improve

- **Vertical angle:** integrated unitary axis, less components. Less offset tolerance.
- **Angle reading:** 4 detector technology, reduce disk offset angle and rit tolerance.



2. Distance measurement accuracy improve

- **Optical path change:** totally new 5 axis design, fully isolation emitting and reflect signal. Reduce optical Crosstalk.
- **Circuit design change:** 150MHZ ultra high measure frequency, improve measure tape accuracy, Development by self. Improve SNR (Signal noise rate)

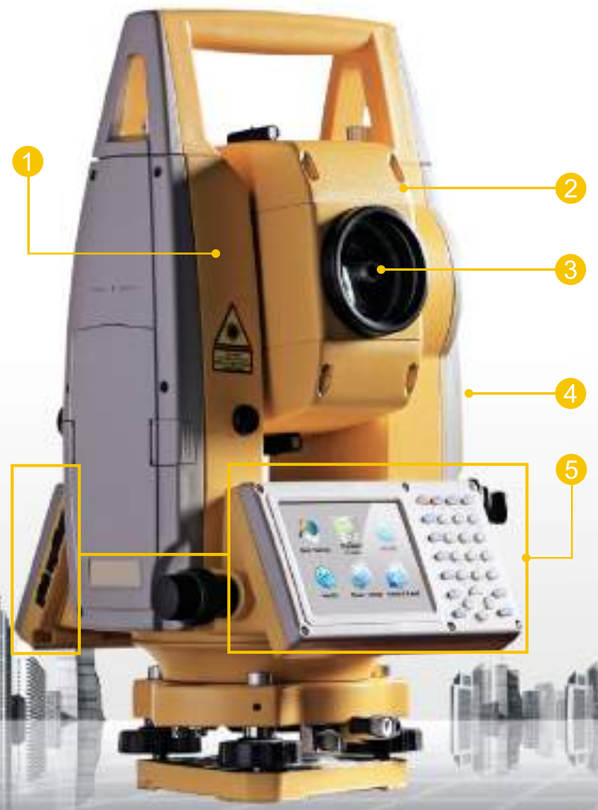


3. Geometry accuracy improve

- Clear telescope and high accuracy tribrach system, make sure pointing accuracy.

4. Compensator accuracy improve

- Micro survey tile tolerance by CCD image to compensate.



5. UE (User experience) improvement

- 640*480 high resolution.3.5 inch display unit. Easy to read under sunshine.
- WIN CE 6.0 OS, blue tooth standard, WIFI optional.
- Ultra measure speed. Fine0.3S, track 0.1s.
- A variety of data transfer options for diverse needs, eg. SD card, mini USB interface.

Software

The fieldwork software includes Carlson SurvCE and MicroSurvey FieldGenius for a complete field-to-office solution.

Carlson SurvCE (Optional)

MicroSurvey FieldGenius (Optional)

Applications

Deformation Monitoring
Applicable for buildings, underground projects and tunnel monitoring

Tunnel Construction
Used for drilling and orientation with reliable machine guidance

Mini Triangular Networking
Ideal for control survey or layouts in small-to-medium-sized triangular network

Bridge Monitoring
Designed for installation survey and continuous automatic deformation monitoring of bridges

Embankment Monitoring
Perfect for all-day monitoring of dam bodies like hydropower stations and tailing reservoirs with external power supply