

SPECIFICATIONS

	N9	N70	N7
Distance Measurement			
Max. Range	1000m	1000m	600m
	Reflectorless	3.5km	
	Reflector		
Accuracy		$\pm(3\text{mm}+2\times 10^{-6}\cdot D)$	
	Reflectorless		
	Reflector	$\pm(1+1\times \cdot D)\text{mm}$	
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	$\pm 4'$		
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	$\leq 0.4\text{mW}$		
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	$-20^{\circ}\text{C} \sim +50^{\circ}\text{C}$		
Size			
Dimension	196mm×192mm×360mm		
Weight	6.2kg		

ACCESSORIES



TK21T

TK25T

Single Prism System



Dia.: 25.4mm

Mini Pole: 30cm×4, φ10mm

Offset: 17.5mm/0-30mm

Mini Prism System ADSmini112A/B



ATS-2 (Wooden)

Prism Pole & Prism System ADS107

SOUTH
Target your success

N9/N7 SERIES TOTAL STATION



SOUTH
Target your success

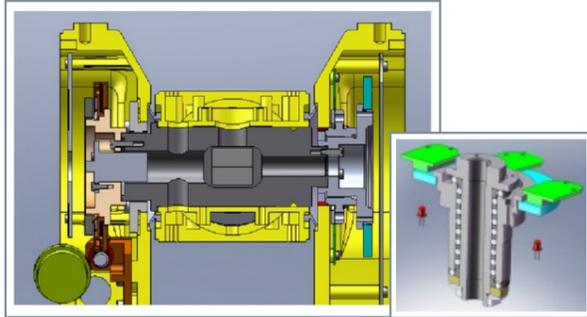
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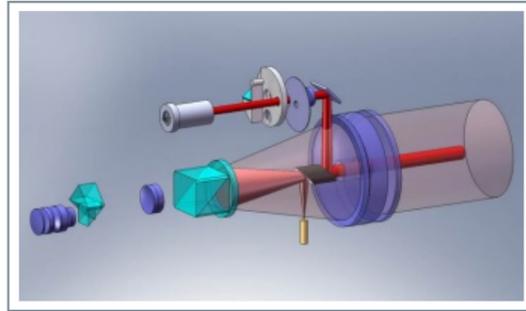
1. Angle measurement accuracy improve

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



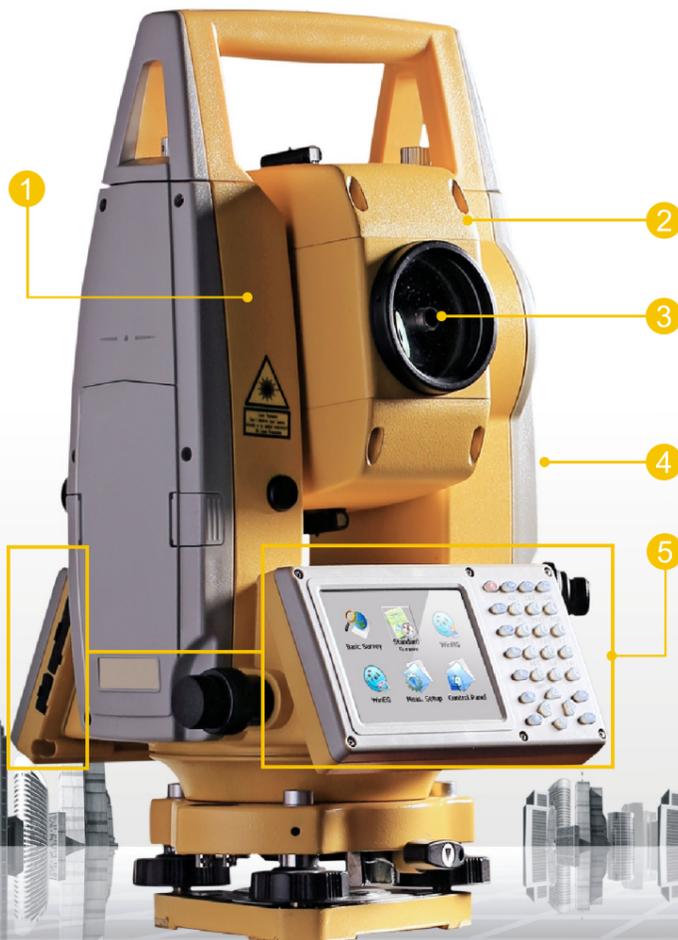
2. Distance measurement accuracy improve

- **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.

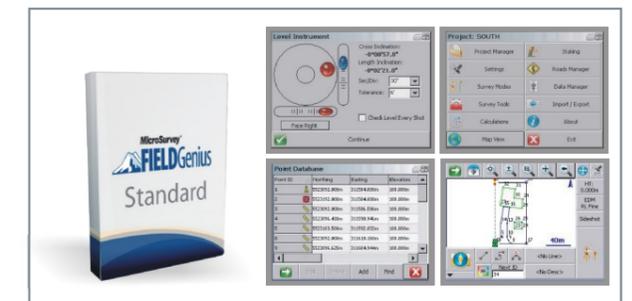
Software

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

