SPECIFICATIONS

		N9	N70	N7
Distance Measurement				
EDM System		Laser Class 3R①		
		Wave legnth: 650 - 690 nm. 150MHz Frequency		
Measurement Range	Single Prism②	3500m	5000m	5000m
	Reflective Sheet③	1000m	1000m	600m
	Reflectorless④	1000m	1000m	600m
Accuracy	Single Prism	±(1+1ppm×D)mm	±(2+2ppm×D)mm	
	Reflective Sheet	±(3+2ppm×D)mm		
	Reflectorless	±(3+2ppm×D)mm⑤		
Measuring Time	Prism	Tracking<0.1s, Fine<0.3s		
	Sheet	<0.3s		
	Reflectorless	0.3-3s⑥		
Atmospheric Correction		Manual Input, Auto Correction		
Prism Constant		Manual Input		
Dist. Unit		Freecale Sensor		
Reading				
Measuring Time		Fine Mode＜0.3s; Tracking Mode＜0.1s		
Atmospheric Correction		Auto Correction		
Prism Constant		Manual Input		
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: 4 path, Vertical: 4 path		
Telescope				
Image		Erect		
Effective Aperture		48mm		
Magnification		30 X		
Field of View		1° 30’		
Minimum Focusing Distance		1.4m		
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		
Laser Plummet (Default)				
Accuracy		±1.5mm (in 1.5m InsHt)		
Wave Length		630nm—670nm		
Laser Power		≤0.4mW		
Optical Plummet (Option)				
Image		Erect		
Magnification		3 X		
Focusing Range		0.5m - ∞		
Field of View		5°		
General				
Operate System		Windows CE 6.0		
Processor		Intel PXA310 624Mhz		
Memory		128M DDR, 512M NAND Flash		
Display		3.5inches LCD Touch Screen 640*480dpi		
Communication		RS-232, Mini USB, USB OTG, SD card		
		Bluetooth V2.0+EDR, 10m range		
		WIFI 802.11		
Battery		Rechargeable Lithium Battery		
Voltage		7.4V DC		
Operation Time		6 hours		
Environment		－20℃～＋50℃		
IP Standard		IP55		
Dimension and Weight		196×192×360mm, 6.2kg		

* COLOR AND DESIGN MAY VARY.

STANDARD PACKING LIST

Main unit	1x
Lens cover	1x
Battery holder	1x
Battery LB-01	2x
Tools pouch	1x
Plummet	1x
SD card	1x
Y type cable	1x
Manual	1x
Warranty card	1x
Charger LC-01	1x
Reflective sheet	1x
Carry case	1x
Belt	2x
Mini USB cable	1x

① EN60825-1: 2007 ② Good conditions: No haze, visibility about 40km. Overcast, no scintillation ③ Good conditions. With Koada gray card white side (90%) reflective. sheet size 60*60mm. 400m under good conditions with koada gray card grey side (18%). ④ With Kodak gray card white side (90%) reflective. Reflectorless range /accuracy may vary according to measuring objects, observation situations and environmental conditions ⑤ Range less than 200m. When 200m to 500m, 5+2ppm and measurement time maximum less than 10 second ⑥ Typical, under good conditions. Range less than 500m. It also depend on object surface. Maximum less than 10s

OPTIONAL ACCESSORIES

ATS-2 Wooden Tripod
NLS-15 Prism Pole
TK21T Prism Set

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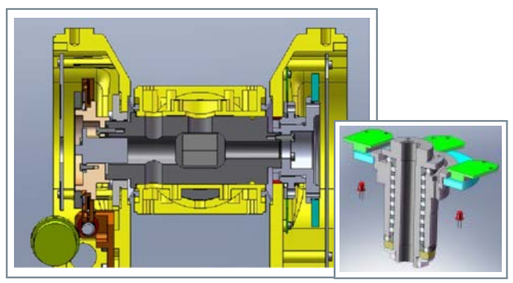
N9/N7 SERIES

TOTAL STATION

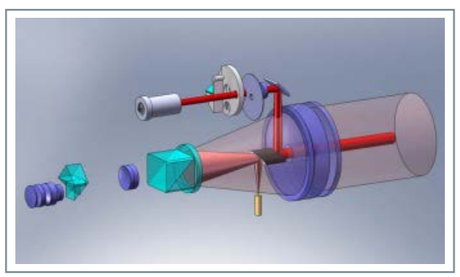
1. Angle measurement accuracy improve

- **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)

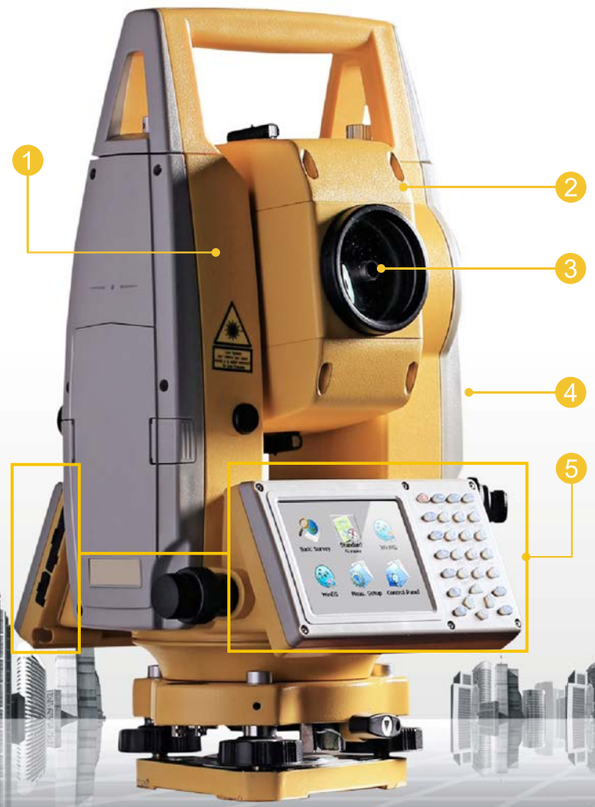


3. Geometry accuracy improve

- 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

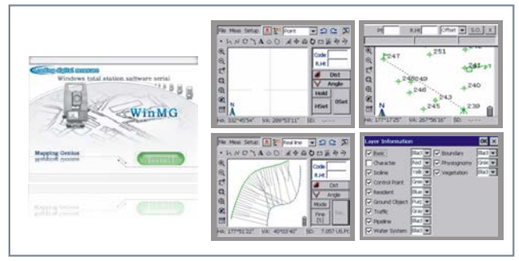
- 640*480 high resolution.3.5 inch display unit. Easy to read under sunshine.
- WIN CE 6.0 OS, blue tooth standard, WIFI, Blue tooth standard.
- Ultra measure speed. Fine0.3S, track 0.1s.
- A variety of data transfer options for diverse needs, eg. SD card, mini USB interface.

Software

The on-board software including WinEG and WinMG, can afford a complete field-to-office solution. Also Carison SurvCE and MicroSurvey Field Genius are available for N7/N9 series.

WinEG

WinMG



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