SPECIFICATIONS

		N41	N40	N4
Distance Measurement				
EDM System		Laser Class 3R①		
		Wave length: 650 - 690 nm. 70-150 Mhz Frequency		
Measurement Range 1 Prism②		3500m	4000m	
	3 Prism	5000m		
	Mini Prism	800m		
	Reflective Sheet③	1200m		
	Reflectorless④	1000m	1000m	600m
Accuracy	Single Prism	$\pm(1+1ppm \times D)$ mm	$\pm(2+2ppm \times D)$ mm	
	Reflective Sheet	$\pm(3+2ppm \times D)$ mm		
	Reflectorless	$\pm(3+2ppm \times D)$ mm⑤		
Reading		Maximum: 99999999.999m; Minimum: 1mm		
Measuring Time	Single Prism	Fine Mode<1.3s; Tracking Mode<0.4s; Repeat< 0.2s		
	Reflective Sheet	<0.3s		
	Reflectorless	0.5-3s⑥		
Atmospheric Correction		Auto Correction		
Prism Constant		Auto Correction		
Angle Measurement				
Measurement Method		Absolute Encoding		
Diameter of the Absolute Encoding Disk (Horizontal/Vertical)		79mm		
Minimum Reading		0.1″ / 1″ Optional		
Accuracy ISO 17123-3		1″	2″	
Detection Method		Horizontal: 4 path	Horizontal: Dual	
		Vertical: 4 path	Vertical: Dual	
Telescope				
Image		Erect		
Length		152mm		
Effective Aperture		45mm, (DTM: 47mm)		
Magnification		30 X		
Field of View		1° 30′		
Minimum Focus		3″		
Minimum Focussing Distance		1.5m		
Reticle Illumination		Adjustable		
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		635nm		
Laser Class		Class 2		
Optical Plummet (Optional)				
Image		Erect		
Magnification		3X		
Focusing Range		0.3m - ∞		
Field of View		5°		
Camera (Optional)				
		780000 pixe, 16mm focal length, 11 frames/s refresh rate,		
		2m -∞deep of field, 3 X digital zoom, Automatic white balance		
General				
Display		Two 3.5-inch LCD graphic display, 320 x 240 dpi touch-screen backlight, contrast adjustment		
Keyboard		Alphanumeric Keyboard/ 30 keys with backlight		
EDM Trigger Key		Quick Measure Key located on side cover		
Laser pointer		Easy to find target		
Guide light (optional)		Indicates correct position fast and easy		
Bluetooth		Easier way to transfer data and connect with controller		
Communication				
SD card		Supportable		
Serial I/F Port		USB flash disk/ RS-232C/ USB Mini-B/ SD card/ Bluetooth		
On-board Battery				
Power Supply		Rechargeable Lithium Battery		
Voltage		7.4 V DC		
Operating Time		8 hrs		
Physical				
IP Standard		IP54		
Data Storage	Internal Memory	98M, ready for 833,000 points		
	External Memory	SD Card 8GB, ready for approx. 34,000,000 data blocks		
		8G USB Flash disk, ready for approx. 68,000,000 data blocks		
Working Temperature		−20℃～＋50℃		
Dimension and Weight		206×200×353 mm, 6.0Kg		

STANDARD PACKING LIST

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

①EN60825-1: 2007 ②Good conditions: No haze, visibiliity about 40km. Overcast, no scintillation ③ Good conditions. With Koada gray card white side (90%) reflective. standard sheet size. 300m under good conditions with koada gray card grey side (18%). ④With Kodak gray card white side (90%) reflective. Reflectorless range /accuracy may vary according to measuring objects, observation situations and environmental conditions ⑤Range less than 100m. When 100m to 200m, 5+2ppm and measurement time maximum less than 5s ⑥Typical, 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

You Local Authorized Dealer

SOUTH
Target your success

SOUTH SURVEYING & MAPPING INSTRUMENT CO.,LTD
E-mail: mail@southsurvey.com
export@southsurvey.com
impexp@southsurvey.com
euoffice@southsurvey.com
http://www.southinstrument.com

SOUTH
Target your success

N4 Series
TOTAL STATION

KEY FEATURES

Bluetooth 4.0

Camera Optional for N40/N41

Data transfer and storage
Flash disk and SD card,
Mini USB.
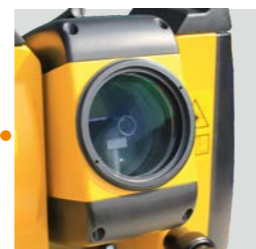
1000m/600m reflectorless EDM
Laser pointer, easy to find target

T-P sensor, automatic correction
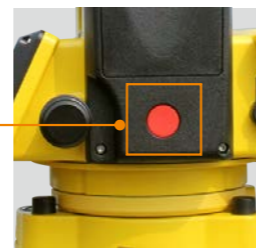
EDM Trigger Key
Special design for quick measurement

Concentrated ball bearing
Solve axis jam, more stable and reliable.

Control panel with high resolution touch screen
Back-lights keypad with 3.5 inch colorful LCD touch screen, display for easy viewing of graphics and operations.
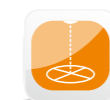Active screen back-light technology

HD Display	T/P Sensor	4-probe Encoding	Dual Compensation	Laser Plummet	Bluetooth	SD Storage	USB Interface

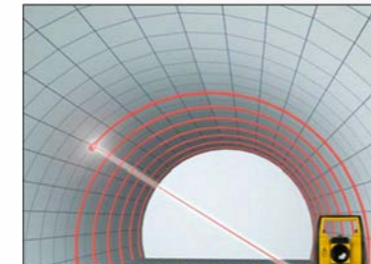## TUNNEL MEASUREMENT

Overbreak & Underbreak

Restoration Construction

Reflectorless Cross-section Measurement

Program optional for N4 Series

Powerful
• Integrated the Random detection of overbreak & underbreak, Excavation contour line lofting, Cross-section measurement, Points & lines lay-out and Data processing as a whole

Simplify
• One-key operation to finish the data seamless transform among modules

Precise
• Millimeter accuracy ensured by considering various plane curve and vertical curve, contour shape and tunnel interface in same time
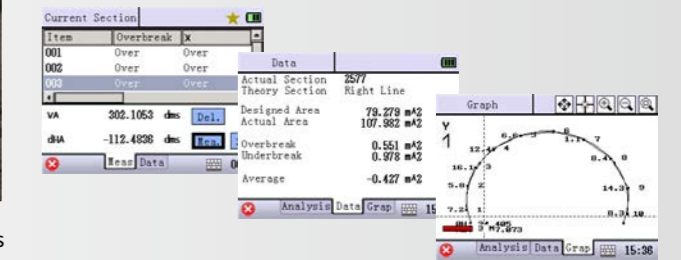
CONTROLLER

Powerful application platform
• Increase efficiency with data controller
Combine with different kinds of fieldwork software
• SURVCE, Field Genius, etc.

Bluetooth