

Instrument model		TKS-R15
Distance measurement (with cooperative target)		
Range*	Prism Group	5000m
	Reflective sheet (60mm×60mm)	1000m
Precision		±(2m+2x10 ⁻⁶ •D)
Measure time		Continuous 0.25s, Track 0.1s, Single less than 1.0s
Prism-free distance measurement (without cooperative target)		
Measuring range (Kodak gray, 90% reflectance)*		1500m
Precision		0-300m: ±(3+2X10 ⁻⁶ •D) mm 300-600m: ±(5+2X10 ⁻⁶ •D) mm >600m: ±(10+2X10 ⁻⁶ •D) mm
Measure time		Continuous 0.25s, Track 0.1s, Single less than 1.0s
Angle measurement		
Angle measurement method		Absolute coding angle measurement technology
Diameter of Encoding Disk		79mm
Minimum reading		0.1"/ 1"Optional
Precision		2"
Detection method		Horizontal disc: diameter; Vertical disc: diameter
Telescope		
Image		Erect image
Barrel length		150mm
Effective aperture of objective lens		viewing distance: 45mm distance measurement: 40mm
Magnification		30X
Field of view		1° 30'
Resolution		3"
Minimum focusing distance		1.5m
System comprehensive parameters		
Compensator		Dual-axis liquid photoelectric electronic compensator (Compensation range: ±6", precision: 1")
Data communication		
U-disk		√
Bluetooth		√
Level		
Spirit level		30" / 2mm
Circular level		8' / 21m
Optical aligner/laser aligner(Optional)		
Image		Erect image
Magnification		3x
Focus range		0.3m~ ∞
Field of view		5°
Language		English,Chinese,Traditional,Spanish,Portuguese,French, German,Italian,Polish,Russian,Korean,Turkey
display part		
Screen Type		240×160 Dot matrix high-definition high-brightness display screen
Screen size		3.1 inches
Digital display		Maximum: 99999999.9999 Minimum: 0.1mm
Onboard battery		
Power supply		Rechargeable lithium battery, 3000mAH
Voltage		Direct current 7.4V
Continuous working time		8 hours
Dimension and Weight		
Size		206mm×180mm×353mm
Weight		5.4kg





TKS-R15

The series total stations adopt laser ranging, absolute encoding, and dual-axis compensation technologies, greatly reducing failure rates and improving survey efficiency. The 3.1-inch LCD screen displays more content and improves operational convenience.

Instrument Features



01 Stable Quality

Through independent innovation and meticulous manufacturing, the failure rate of Southern total stations is now equal to or lower than that of comparable imported total stations.



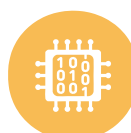
02 Full Functions

With USB port, Bluetooth communication, laser plummet, and a wide range of measurement programs, Southern total stations offer more and richer functions than comparable imported total stations.



03 Advanced Technology

Adopting world-leading technologies such as absolute encoding, reflectorless laser ranging, and photoelectric dual-axis circular electronic bubble compensation, as well as highly integrated electronic components, angle and distance measurement are integrated on a single board. The sealed structure achieves IP55 dustproof and waterproof protection.



04 High Cost-Performance Ratio

Equal or superior to comparable imported instruments in failure rate, technological advancement, and functionality, Southern total stations deliver higher cost-performance ratio – high quality at a reasonable price.

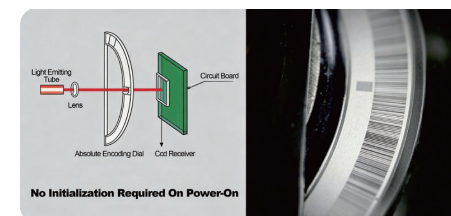


Technical Features



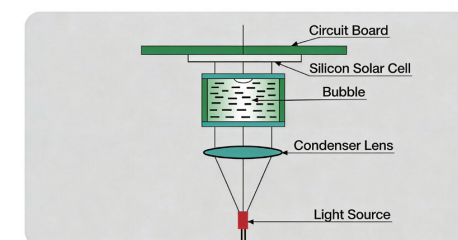
01 Absolute Encoding Angle Measurement

Advanced absolute encoding technology greatly improves angle stability. Southern total stations keep pace with international trends by adopting advanced absolute encoding technology. No initialization needed at power-on; after power loss or unexpected shutdown, restarting retains all previous information.



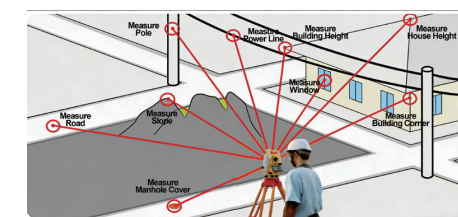
02 Dual-axis Liquid Photoelectric Electronic Compensator

Adopting internationally advanced dual-axis compensation technology, the instrument automatically eliminates errors and performs automatic compensation, greatly improving the instrument's accuracy and automation level. The graphical electronic bubble shows X and Y dual-axis compensation errors, making the operator fully aware of the instrument's status at a glance!



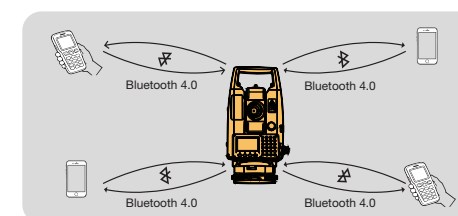
03 Long-range Reflectorless Laser Distance Measurement

In distance measurement technology, using internationally advanced point-emission, surface-reception laser ranging optics, improving both efficiency and accuracy. Class 3R safe laser, effective range up to 2000 m, effectively solving the measurement of target points where reflectors cannot be placed.



04 Bluetooth Communication

Bluetooth 4.0 enables two-way wireless data transmission, connecting wirelessly to mobile apps, handheld data collectors, etc. Strong expandability.



Rich Measurement Procedures

