

# RTS-820 Total Station

**RTS-820/820L/820R/820R<sup>3</sup> SERIES**



SD/USB Data Transfer

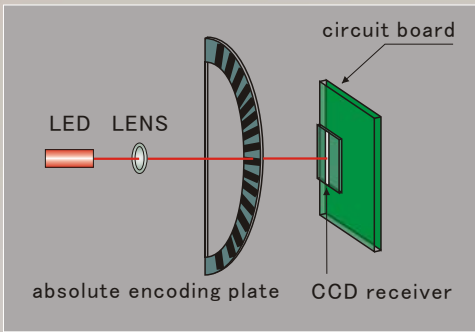


Extend your memory with a SD card.  
Download data via USB interface.

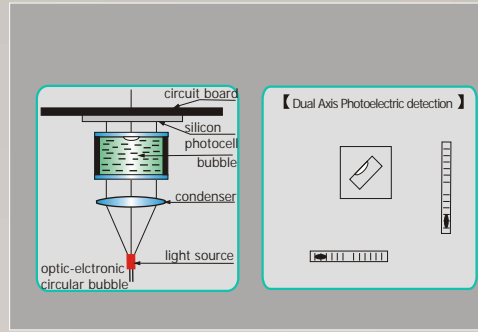
## RTS-820 Series Total Station

Reflectorless Distance Range: **300m**

# NEW FEATURES



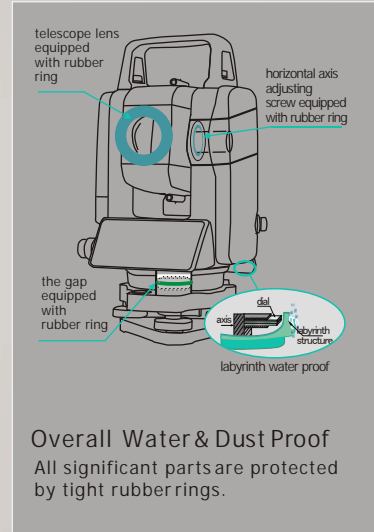
**Absolute Encoding**  
manual initialization free, angle measurement accuracy and reliability improved.



**Dual Axis Compensation**

# Specifications

	RTS-822A/825A	RTS-822R+/825R+	RTS-822L/825L	RTS-822R <sup>2</sup> /825R <sup>1</sup>
<b>MEASURING RANGE</b>				
Non-Prism	2.0 km	5.0 km	5.0 km	5.0 km
Single Prism	—	200 m	—	300 m
<b>Distance Measurement Accuracy</b> ±(2+2PPM)				
Digital Display	Max: 99999999.999 Min: 1mm			
Measuring Time	Fine:1.2s, Tracking:0.7s	Fine:1.2s, Tracking:0.7s	Fine:0.7s, Tracking:0.7s	
Measurement System	Basic frequency:60MHZ			
Meteorologic Correction	Input the parameter adjusted automatically			
Atmospheric Refraction and Earth Curvature Correction	Input the parameter adjusted automatically (k=0.14/0.2)			
Prism Constant	Input the parameter adjusted automatically			
Temperature and Air pressure Correction	Manual input		Automatic	
<b>Angle Measurement</b>				
Measuring Method	absolute encoding			
Raster Disk Diameter	79mm			
Min. Reading	1" /5" optional			
Accuracy	2" or 5"			
Detection Method	Horizontal: Dual Vertical: Dual			
Measuring Unit	360° /400 gon/6400mil Selectable			
Vertical Angle 0°	Zenith 0° / Horizontal 0° Selectable			
<b>Telescope</b>				
Image	Erect			
Length	154mm			
Effective Aperture	Telescope: 45mm Distance meter: 50mm			
Magnification	30X			
Field of View	1° 30'			
Resolving Power	3"			
Min. Focussing Distance	1m			
<b>Auto Vertical Compensator</b>				
System	Liquid-electric detection/plate vial		Dual axis photoelectric detection	
Range	±3'		±4'	
Accuracy	1"			
<b>Level Sensitivity</b>				
Plate Vial	30" /20mm			
Circular Vial	8' /2mm			
<b>Optical Plummet</b>				
Image	Erect			
Magnification	3X			
Focusing Range	0.3m ~ ∞			
Field of View	5°			
<b>Other</b>				
Mini B Port	NO	NO	YES	YES
Memory card	NO	NO	YES	YES
Display Type	Dual sides, alphanumeric keyboard, LCD, Matrix graphic			
Operation Environment	-20° ~ +50°			
Power Supply	Rechargeable Ni-H battery			
Voltage	DC 6v			
Non-stop Operating Time	8 hours		16 hours	
Size & Weight	160mmX150mmX340mm		5.4kg	



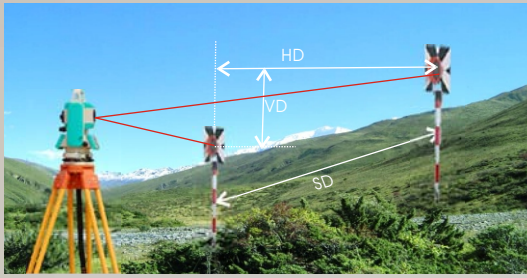
**Overall Water & Dust Proof**  
All significant parts are protected by tight rubber rings.



**Sensor of Temperature & Pressure**  
Take the surrounding temperature and pressure automatically and implement the auto compensation of PPM. Higher accuracy is what we are after.

# RTS-880R/820 Series Total Station Abundant Surveying Programs

Remote Distance Measurement



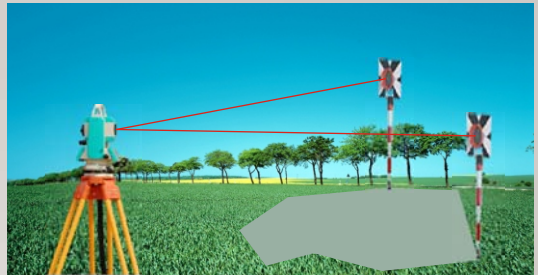
Multiple-Point Resection



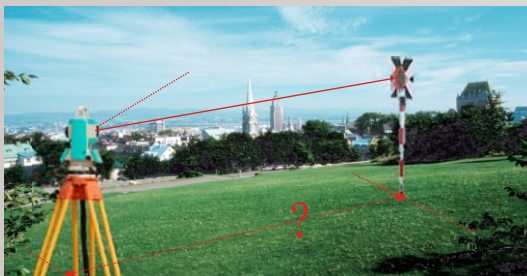
Remote Elevation Measurement



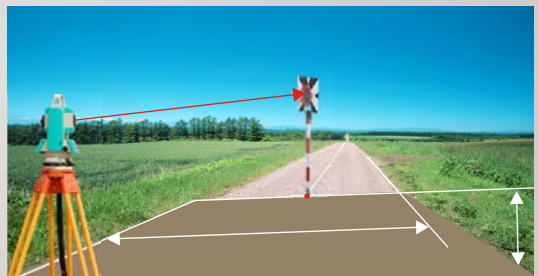
Area(Plan) and Circumference Calculation



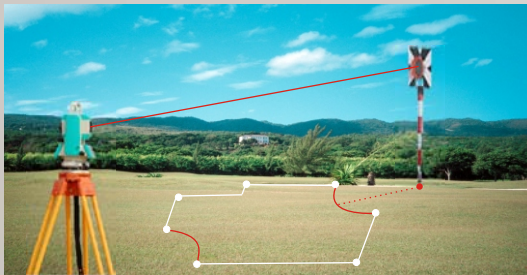
Stake-Out



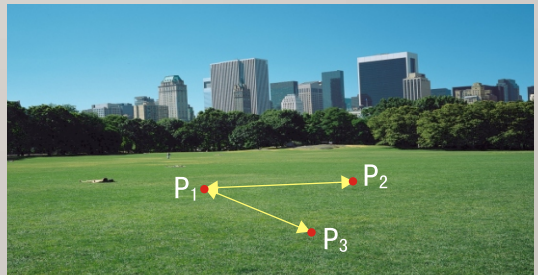
Road Design And Stake-Out



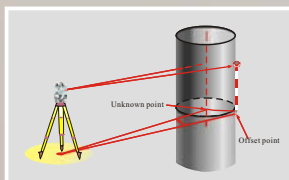
Reference Line & Arc



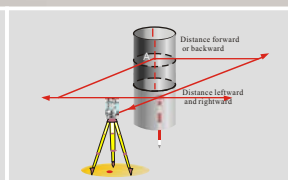
COGO Programme



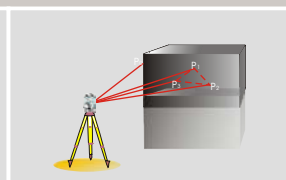
## Offset Measurement



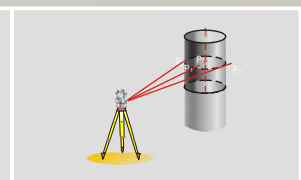
Angle Offset



Distance Offset



Plane Offset



Column Offset