

# SPECIFICATION

	RTS-822A	RTS-825A	RTS-822R <sup>5</sup>	RTS-825R <sup>5</sup>
<b>TELESCOPE</b>				
Length			154mm	
Objective Lens Diameter	Telescope: 45mm		Distance Meter: 50mm	
Magnification	30X			
Image	Erect			
Field of View	1°30'			
Resolving Power	3'			
Mini. Focus	1.0m			
<b>DISTANCE MEASUREMENT</b>				
Single Prism	2000m <sup>*1</sup>		5000m <sup>*1</sup>	
Non-Prism	N/A		500m <sup>*2</sup>	
Accuracy -Prism Mode	±(2mm+2ppm x D)m.s.e. <sup>*3</sup>			
-Non-Prism Mode	N/A		±(3mm+2ppm x D)m.s.e. <sup>*3</sup>	
Measuring Time	Fine: 1.2s, Normal: 0.7s		Fine: 0.3s, Normal: 0.2s <sup>*4</sup>	
Meteorologic Correction	Manual Input		Auto Sensing	
Prism Constant	Manual Input			
<b>ANGLE MEASUREMENT</b>				
Method	Absolute Encoding			
Detecting System	H: 2 sides, V: 2 sides			
Min. Reading	1"/5"			
Accuracy	2"	5"	2"	5"
Diameter of Circle	79mm			
Vertical Angle 0°	Zenith 0°/Horizontal: 0°			
Unit	360°/40Gon/6400mil			
<b>DISPLAY</b>				
Display Unit	Graphic LCD 160 x 90 Dots with White Backlight			
No. of Unit	2 sides			
Keyboard	Alphanumeric Key			
<b>TILT CORRECTION</b>				
Tilt Sensor	Single Axis		Dual Axis	
Method	Liquid Electric			
Range	±3'		±4'	
Accuracy	1"			
<b>LEVEL SENSITIVITY</b>				
Plate Level	30"/20mm			
Circular Level	8'/2mm			
<b>OPTICAL PLUMMET (OPTIONAL: INTERNAL LASER PLUMMET)</b>				
Image	Erect			
Magnification	3X			
Focusing Range	0.3m ~ ∞			
Field of View	5°			
<b>DATA STORAGE &amp; INTERFACE</b>				
Internal Memory	>10,000 points or > 20,000 coordinates			
Data Interface	RS 232	RS 232/SD-card/Mini-USB		
<b>GENERAL</b>				
Laser Class <sup>*5</sup> -EDM	Class II		Class IIIA	
-Laser Plummet	Class II			
Working Temperature	-20°C ~ +50°C			
Battery Type	Rechargeable Ni-H Battery			
Battery Voltage	DC 6V			
Working Time	8h	16h		

\*1. Good condition: No haze, visibility about 40km, overcast, no scintillation.

\*2. With Kodak Grey Card white side (90% reflectivity).

\*3. D stands for distance.

\*4. Typically, under good condition, non-prism measuring time may differ according to measuring target, observation situations, and environmental conditions.

\*5. According to FDA 21 CFR Ch. 1 §.1040.

## STANDARD PACKAGE COMPONENTS

Carrying Case X 1  
Charger X 1  
Battery X 2  
Multi-port Cable X 1  
User Manual X 1  
Plumb X 1  
Adjusting Pin X 1  
SD-Card X 1 (for RTS-820R<sup>5</sup>)  
Mini-USB Cable X 1 (for RTS-820R<sup>5</sup>)

Screw Driver X 1  
Wiping Cloth X 1  
Lens Cover X 1  
Rain Cover X 1  
Carrying Belt X 2  
Reflecting Sheet X 1  
Warranty Card X 1  
Transfer Software CD X 1

## OPTIONAL ACCESSORIES



Single Prism System  
TPS11



Triple Prism System  
TPS30



Wooden Tripod ATS-2

Aluminum Tripod ATS-1

Prism Pole & Prism System TPS107



# RUIDE

## TOTAL STATION RTS-820 series



Dealer Info

### RUIDE

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## MAIN FEATURES

### [EDM]

An innovative EDM technology delivers up to 500m non-prism range and 5km in prism mode. Incredibly fast measuring speed enables you record a point in just 0.3 seconds.

### [DISPLAY & KEYBOARD]

Large screen with white backlight provides a clear and comfortable display. With alphanumeric keyboards on both sides, you can type a word or number fast and easily.

### [DATA TRANSFER]

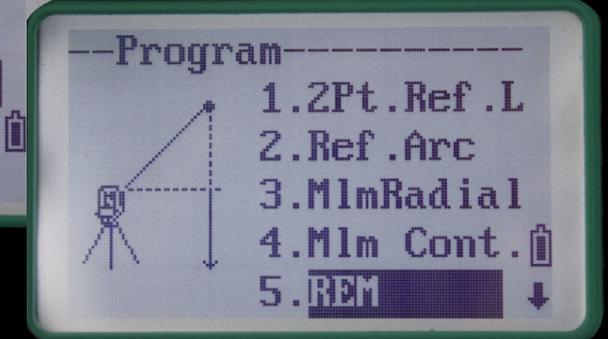
Various options for data transfer are available: SD-card, mini-USB and RS 232. Internal memory is capable to store up to 20,000 points.

### [T-P SENSOR]

Equipped with an accurate sensor of temperature and pressure. You no longer need to measure the temperature and pressure and insert the PPM values.



## POWERFUL PROGRAM



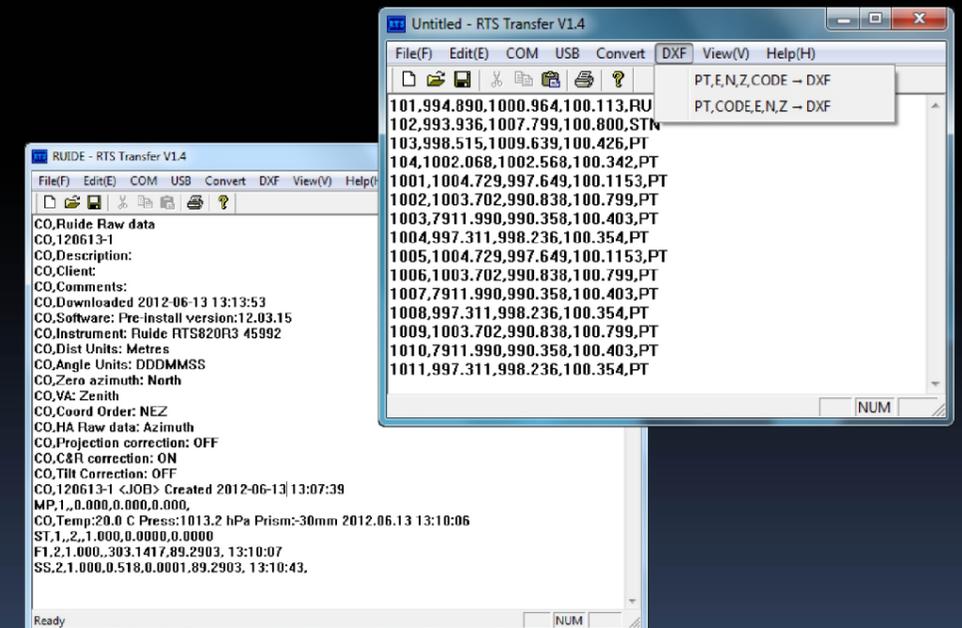
### [COGO]

COGO is a suite of programs used in civil engineering for solving coordinate geometry problems. It employs some basic types of elements such as points, spirals, lines, curve, etc. to calculate the inverse, azimuth and distance, area, line and offset.

### [PROGRAM]

RTS-820 series provides various surveying programs which are normally used in the survey job, including 2-point reference line, reference arc, measuring the HD, VD and SD between 2 points, remote elevation measurement, measuring distance and offset values on vertical plane, measuring distance and offset values on the slope plane, and road design.

## DATA TRANSFER SOFTWARE



### [RTS TRANSFER]

The transfer software RTS TRANSFER provides a complete and easy-to-use solution for data exchange between the total station and the computer, as well as transferring to DXF format.

Detailed raw data and coordinates data can be downloaded to the computer, and you can also edit and upload coordinates data and road data to the total stations.

After you download your coordinates data to the computer, you can post process the data like changing the element order, and convert it to DXF file which can be used in AutoCAD.