RUIDE

TOTAL STATION



R2 SERIES

MAIN FEATURES

RDM8 DIS.TECH is a unique and innovative EDM technology of RUIDE, which enables R2 Pro to deliver an accurate and long non-prism distance range up to 800m within stunningly 0.3s measuring speed. 4km distance with prism can be easily achieved with a high precision of 2mm+2ppm.

R2 Series is the first total station which is equipped with auto sensor of temperature and pressure. **ATMOsense** system can detect the surrounding temperature and air pressure then calculate the PPM value and correct the distance measuring result in real time.

R2 Pro is equipped with the Guide Light on the EDM. A red and yellow LED will flash by turns, assisting the pole man to move the prism to the right position during stake-out process.

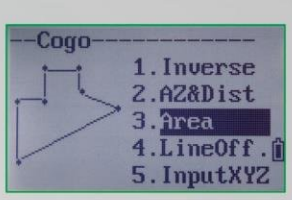
A sophisicated liquid-electronic compensator on 2 axis ensures a stable compensation within a tilt range of 4'.

Various options for data transfer are available: SD-card, mini-USB, and RS232. Internal memory is capable to store up to 20,000 points. External storage can be extended to 2GB.

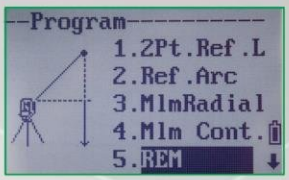
IP66 outstanding water and dust proof ensures a overall protection to the total station in any tough environments.







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.



R2 Series provides various surveying programs which are usually used in 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.









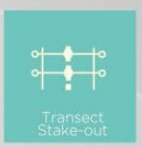












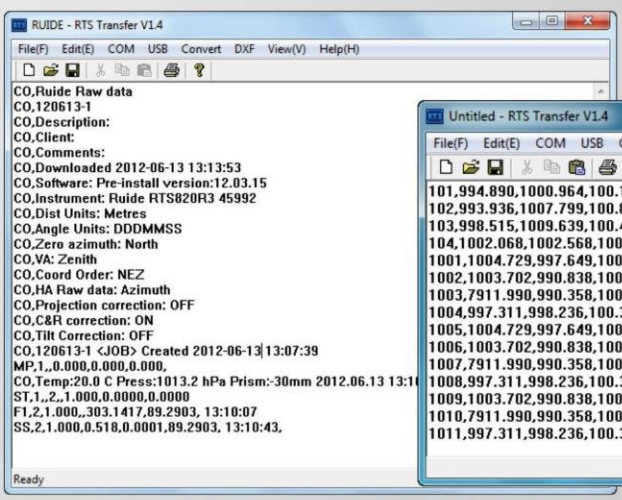


RTS TRANSFER

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 station.

After you download the 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 CAD.



SPECIFICATION

	R2	R2 PRO
TELESCOPE		
Length	154mm	
Objective Lens Diameter	Telescope: 45mm Distance Meter: 50mm	
Magnification	30X	
Image	Erect	
Field of View	1°30′	
Resolving Power	3″	
Minimum Focus	1.0m	
DISTANCE MEASUREMENT		
Single Prism	4000m[*1]	
Non-Prism	400m[*2]	800m[*2]
Accuracy -Prism Mode	±(2mm+2ppm x D)m.s.e.[*3]	
-Non-Prism Mode	±(3mm+2ppm x D)m.s.e.[*3]	
Measuring Time	Fine: 0.7s, Normal: 0.5s Fine: 0.3s, Normal: 0.2s[*4]	
Meteorologic Correction	ATMOSense (Auto Sensing)	
Prism Constant	Manual Input	
ANGLE MEASUREMENT		
Method	Absolute Encoding	
Detecting System	H: 2 sides, V: 2 sides	
Min. Reading	1″/5″	
Accuracy	2"	
Diameter of Circle	79mm	
Vertical Angle 0°	Zenith 0°/Horizontal: 0°	
Unit	360°/400gon/6400mil	
DISPLAY		
Display Unit	Graphic LCD 160 X 90 Dots with White Backlight	
No.of Unit	2 sides	
Keyboard	Alphanumeric Key	
TILT CORRECTION		
Tilt Sensor	Dual Axis	
Method	Liquid Electric	
Range	±4′	
Setting Unit	1″	
LEVEL SENSITIVITY		
Plate Level	30″/2mm	
Circular Level	8′/2mm	
OPTICAL PLUMMET (OPTIONAL: INTERNAL LASER PLUMMET)		
Image	Erect	
Magnification	3X	
Focusing Range	0.3m ~∞	
Field of View	5°	
DATA STORAGE & INTERFACE		
Internal Memory	>10,000 points or > 20,000 coordinates	
Data Interface	RS 232/SD-card/Mini-USB	
GENERAL		
Guide Light	No	Yes
Weight & Dimension	5.4kg, 340mm(H) X 160mm(W) X 150mm(L)	
Working Temperature	-20℃ ~ + 50℃	
Battery Type	Rechargeable Li-on Battery 3000mAh	
Battery Voltage	DC 7.4V	
Working Time	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 FDA21 CFR Ch.1 §.1040.

STANDARD PACKAGE

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
Mini-USB Cable X 1
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



Triple Prism System



Wooden Tripod

Aluminum Tripod

Prism Pole & Prism System

CE

CERTIFICATION ISO 9001:2008





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