

R2W PLUS

**POWERFUL PERFORMANCES
AT AFFORDABLE PRICES**

R2W Plus, the new Stonex Windows CE based Total Station, opens a new era in the world of traditional surveying.

R2W Plus TFT 320x240 2 sides touch screen display gives the Surveyor a clear, colourful and fully graphical environment, and the user friendly on board software supports the users with guided through functions for data collection, topographic surveys, staking; many field programs are included: free station, area and volume calculations, COGO, remote elevation, missing line, and much more. The measured points are displayed on the graphical map, providing the users with a clear image of their job. The high-precision class 3 EDM featuring millimeter accuracy even on long range distances (up to 500 m

reflectorless mode), and the absolute encoders performing angles measurements with 2" and 5", provide reliable points calculation in every condition; STONEX R2W Plus is IP55 dustproof and waterproof certified. STONEX R2W Plus clear 30X telescope, with illumination adjustable reticle, provides superior sighting quality in any light condition. The instrument is available 2" or 5" horizontal/vertical angles accuracy, and 2mm + 2ppm accuracy on distance measurements, with a range of 500 m (reflectorless mode), and up to 3000/7000 m with a single prism. The USB / mini USB ports, located on the side of the display / keyboard, guarantees an efficient system for data



Laser technology (class 3 laser) for long range reflectorless distance measurements



Alphanumeric keyboard on both sides with high resolution TFT LCD touch screen display

upload / download. STONEX R2W Plus is supplied with a built-in visible laser plummet (class 2 laser).

EASY TO USE

Windows CE 5.0 OS and user friendly on board software

LONG RANGE

500m reflectorless range, 2" or 5" accuracy are available

EASY DATA

Communication with the USB/mini USB ports to load/download data

POWERFUL

Laser technology (class 3 laser) for long range reflectorless distance measurements

EASY READER

Two side high resolution TFT LCD touch screen display

CAPACITY

Large storage capacity with 2GB internal memory

KEY FEATURES

R2W Plus Models		
R2W Plus 500	R2 -2"	R2 -5"

Angle measurement	
Reading system	Absolute encoder
Display resolution	1" / 0.0002gon/0.005mil
Angle Unit	360°(dms/d)/400gon/6400mil
Accuracy ¹	2" or 5"
Telescope	
Magnification	30 x
Field of view	1°30'
Minimum focus	1.0 m
Reticle	10 brightness levels adjustable
Objective aperture	Φ 45 mm
Compensation	
System	Electronic dual-axis-compensator
Working range	± 3.0'
Distance Measurement Range (Good condition) ²	
Reflectorless ³	1.0 ~ 500 m
With Prism	1.0 ~ 3000m Class 1 up to 7000 m Class 3
With reflective sheet (60mm x 60mm)	1.0 ~ 800 m
With Mini Prism	1.0 ~ 800 m
Distance Measurement Accuracy	
Without Prism	± (3+2x10 ⁻⁶ D)mm / 1 ~ 200m ± (5+3x10 ⁻⁶ D)mm / ≥200m
With Prism	± (2+2x10 ⁻⁶ D) mm
With reflective sheet (60mm x 60mm)	± (3+2x10 ⁻⁶ D) mm
Distance Measurement	
Laser class (prism)	Class 1
Laser class (Reflectorless / Reflective sheet)	Class 3R
Measuring time	Initial: 2.5sec
Reflectorless	typ: 1.5-5sec, max: 20sec
With Prism	typ: 1.0-1.5sec
With reflective sheet (60mm x 60mm)	typ: 1.5sec
Distance Unit	m/ft/US ft
Display Resolution(m/inch selectable)	0.1mm/1mm

Specifications subject to change without notice

¹ Standard deviation based on ISO17123-3.

² Good conditions: no haze, visibility about 40km, no heat shimmer, breeze.

³ Reflector: White side of Kodak Gray Card with 90% reflective.

⁴ Laser plummet mounted on the bottom of the vertical axis.

Laser plummet (Standard) ⁴	
Accuracy	±1.0mm at 1.5 m instrument height
Laser class	Class 2/IEC60825-1
Laser wavelength	635nm
Laser spot	2.0mm/1.5m
Level vial sensitivity	
Plate level vial	30" / 2mm
Circular level vial	8' / 2mm
Environmental conditions	
Operating Temperature	-20° C ~ +50° C
Storage Temperature	-40° C ~ +70° C
Protection to dust and water	IP55 (IEC60529)
Weight	
Weight including battery and tribrach	5.5 Kg
Power	
Battery	3400mAh Li-ion rechargeable
Output voltage	7.4V
Operating period with continuous angle measurement	12 hours
Operating period with measurement every 30 seconds	Approx. 8 hours (>1000 measurements)
Charger	110V/240V
Charging time (at +20° C)	Approx. 4 hours
Other specifications	
CPU	ARM9 core
Display	Two sides, 3.5" color TFTLCD (320 x 240 pixel), touch screen
Internal Memory	2GB
Interface	RS-232C / USB slave / USB host
Bluetooth	Optional
Bluetooth level	Class 2
Bluetooth effective distance	10 m
Guide Light System	Optional
Sensor	Temperature/Pressure



STONEX AUTHORIZED DEALER

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