

R2W PLUS

NEW WITH ENDLESS FRICTION DRIVES AND TRIGGER KEY

R2W Plus model 2017 has been updated with endless friction drives (no more clamps and limited HOR & VERT rotations) and with a trigger key for more accurate measurements.

This advanced Total Station is fully customizable: each user can choose the software that best suits own needs. Several onboard software to be chosen, such as Microsurvey Field Genius™, Carlson SurvCE™, ANTAS™ Mobile and many Custom field applications.


In addition the TFT 320x240 touch screen display on both sides 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 out.

The high-precision class 3 EDM featuring millimeter accuracy even on long range distances (up to 500 m – 1,640 ft. reflectorless mode), and the absolute encoders performing angles measurements with 2", provide reliable points calculation in every condition; STONEX R2W Plus clear 30X telescope, with illumination adjustable reticle, provides superior sighting quality in any light condition, while the coaxial laser pointer gives a safe pointing to any point.

The instrument is available 2" 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 upload/download. STONEX R2WPlus is supplied with a built-in visible laser plummet (class 2 laser).



The Trigger key and the Endless Friction driver knob for endless. Slow motion



The Endless Friction driver knob for endless. Slow motion

ADAPTABLE

Choose the preferred onboard software and customize your Surveying mate

LONG RANGE DISTANCES, ACCURATE ANGLE MEASUREMENTS

500m reflectorless range. 2" accuracy using the trigger key

WIRELESS DATA COMMUNICATION

BT facility for a seamless data flow to an external device

EASY DATA TRANSFER

Easy and portable data transfer with a USB key

TOUCH SCREEN DISPLAY ON BOTH FACES

Use indifferently both faces of R2 Windows

ENDLESS FRICTION DRIVES

360° slow motion rotation without clamps and continuous stops

KEY FEATURES

ANGLE MEASUREMENT

Reading system	Absolute encoder
Angle Unit	360°(dms/d)/400gon/6400mil
Accuracy ¹	2"

TELESCOPE

Magnification	30 x
Field of view	1°30'
Minimum focusing distance	1.0 m
Reticle	10 brightness levels adjustable
Objective diameter	ø 45 mm
Laser pointer	Coaxial red light

TILT SENSOR

System	Electronic dual-axis-compensator
Working range/Accuracy	± 4.0' / 1"

DISTANCE MEASUREMENT RANGE (GOOD CONDITION)²

Reflectorless ³	1.0 ~ 500 m (1,640 ft.)
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

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

The distance may vary depending on the background surface and measuring conditions.

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
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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. 9 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
Operating System	Windows CE 7.0
Internal Memory	2GB
Interface	RS-232C / USB slave / USB host
Bluetooth	On board
Bluetooth level	Class 2
Bluetooth effective distance	10 m
Guide Light System	On board
Sensor	Temperature/Pressure



STONEX AUTHORIZED DEALER

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