

R2W 1" 1000

HIGH ACCURACY WINDOWS TOTAL STATION


STONEX R2W 1" 1000 is the most accurate Total Station ever appeared in the Stonex Total Stations family.

The clear TFT 320x240 2 sides touch screen display gives the Surveyor a clear, colourful and fully graphical environment, and the user friendly on board software – any User can choose between several software solutions -supports the Surveyor 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 1000 m in reflectorless mode), and the absolute encoders performing angles measurements with an outstanding accuracy of 1", provide reliable points calculation in every condition; STONEX R2W 1"1000 is IP55 dustproof and waterproof certified.

Thanks to its 30X/45 mm telescope, with reticle adjustable illumination, the User will always enjoy a superior sighting quality in any light condition.

The USB / mini USB ports, located on the side of the display/keyboard, guarantees an efficient system for data upload/download. STONEX R2W 1" 1000 is supplied with a built-in visible laser plummet (class 2 laser).



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



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

FLEXIBLE

Choose your preferred onboard field software

LONG RANGE, HIGH ACCURACY

1000m reflectorless range, 1" accuracy give the best possible reliability for any measurement

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

ALL UNDER CONTROL

Two side high resolution TFT LCD touch screen display

CAPACITY

Large storage capacity with 2GB internal memory

KEY FEATURES

ANGLE MEASUREMENT

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

TELESCOPE

Magnification	30 x
Field of view	1°30'
Minimum focusing distance	1.0 m
Reticle	10 brightness levels adjustable
Objective aperture	φ 45 mm

COMPENSATION

System	Electronic dual-axis-compensator
Working range/Accuracy	± 3.0' / 1"

DISTANCE MEASUREMENT RANGE (GOOD CONDITION)²

Reflectorless ³	1.0 ~ 1000 m
Prism – Standard mode& Long mode	1.0~3500m Class 1 up to 6000 m Class 3
With reflective sheet (60mm x 60mm)	1.0 ~ 1200 m

DISTANCE MEASUREMENT ACCURACY

Reflectorless	± (2+2x10 ⁻⁶ D)mm / 1~500m ± (4+2x10 ⁻⁶ D)mm / ≥500m
With Prism – standard mode Long mode	± (1+1x10 ⁻⁶ D) mm ± (2+2.5x10 ⁻⁶ D) mm
With reflective sheet (60mm x 60mm)	± (2+2x10 ⁻⁶ D) mm

DISTANCE MEASUREMENT

Laser class (prism)	Class 1
Laser class (Reflectorless / Reflective sheet)	Class 3R
Measuring time	Initial: 2 s
Reflectorless	0.7 s to -7 s
With Prism	1.0 s-1.5 s
With reflective sheet (60mm x 60mm)	1 s – 5 s
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 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	6.5 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 TFT LCD (320 x 240 pixel), touch screen
Keyboard	Alphanumeric backlit both sides
Internal Memory	2GB
Interface	RS-232C / USB slave / USB host / Bluetooth
Sensor	Built in temperatur and pressure sensors
Field software	Carlson Surv CE/Microsurvey Field Genius



STONEX AUTHORIZED DEALER

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