STONEX

R1/R1 plus

THE MOST AFFORDABLE HIGH PRECISION TOTAL STATIONS



STONEX R1 and R1plus are the latest instruments introduced by Stonex in the Total Station product portfolio. High precision EDM with millimiter accuracy and angular measurements of 5 seconds of degree, ensure ashtoning accuracy in every survey.

STONEX R1 and R1plus encompasse laser technology (class 3 laser with a wavelength between 650 and 690nm) for distance measurement and coding technology for optical angular measurements. The instruments design is characterized by its robust mechanical chassis, certified dustproof and waterproof (IP66) standards. STONEX R1 and R1plus are built with high performance optics with a 30X magnification factor and illuminated reticle featuring superior sighting quality in any lighting condition.



Laser technology (class 3 laser with a wavelength between 650 and 690 nm) for distance measurement

STONEX R1 and R1plus offer 2mm accuracy, range measurements of 300 meters in reflectorless mode, 5" angular accuracy, 3000 meters of distance measurements with single prism.

The removable storage option of SD card allows greater flexibility to increase the storage capacity and downloading of data. The instruments are facilitated with a mini USB connector for upload and downloads of data to the computer and other external devices. The instruments are supplied with an inbuilt laser plummet.

Alphanumeric keyboard on both sides with high resolution LCD display and backlight and 6 lines of 20 characters

KEY FEATURES

ANGLE AND DISTANCE
300m/5" accuracy instrument and a measurement range up to 5000m with single prism

EASY DATA
Communication with the mini USB port/ SD Card to load/download data

POWERFUL
Laser technology (class 3 laser with a wavelength between 650 and 690nm) for distance measurement

EASY READER
Alphanumeric keyboard on both sides with high resolution LCD display and backlight and 6 lines of 20 characters

CAPACITY
Large storage capacity with 128MB internal memory - External SD Card

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TECHNICAL FEATURES R1/R1 PLUS

STONEX

Angle measurement	
Reading system	Absolute encoder
Display resolution	1" / 0.0002gon/0.005mil
Angle Unit	360°(dms/d)-400gon/6400mil
Accuracy	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
Automatic Compensator	
System	liquid detection multi axis compensator (R1 plus)
Compensation range	± 3'
Distance Measurement Range	
Without Prism	1.0 ~300[1] m
With Prism	1.0 ~3000[2] 2000[3] 1500[4]
With reflective sheet (60mm x 60mm)	1.0 ~800 m
With Mini Prism	2.0 ~800 m
Distance Measurement Accuracy	
Without Prism	± (3+2×10^{-6}D)mm/(2~150) m ± (5+3×10^{-6}D)mm/(150~300) m ± (10+5×10^{-6}D)mm/(300~500) m
With Prism	± (2+2x10^{-6}D) m
With reflective sheet (60mm x 60mm)	± (3+2x10^{-6}D) m
Distance Measurement	
Measuring time[5] (Tracking/Fast/Fine)	0.5 sec / 1.5 sec / 2.0 sec
Distance Unit	m/ft/US ft
Display Resolution	0.0001m/0.001ft/0.001ft

Laser plummet	
Laser type	635-650nm semiconductor laser
Accuracy	1mm at 1.5 m instrument height
Laser spot	2.5mm/1.5m
Level vial sensitivity	
Plate level	30 ("2mm)
Circular level	8 ('/2mm)
Environmental conditions	
Operating / Storage Temperature	-20° C ; +50° C / -30° C ; +70° C
Protection to dust and water	IP66
Weight	
Weight including battery and tribrach	5.1 Kg
Battery	
Voltage/Capacity	7.4V / 3400mAh Li-ion battery
Operating period with continuous angle measurement	36 hours
Operating period with measurement every 30 seconds	26 hours (>1.000 measurement)
Type	BT43
Other specifications	
Display	Two sides, LCD, 96x160 dots
Internal Memory	128 MB
External Memory	2 GB SD card
Interface	RS-232C / mini USB/ SD card
Charger	110/220V, Charging time: about 4h

Specifications subject to change without notice

Bluetooth CE RoHS 2002/95/EC

[1] Visibility about 20 km, back light less than 5000 lx, no haze, no direct sunlight.
No prism target: KODAK CAT NO.E1527795 (reflectivity: 90%, size: A4).

[2] Visibility about 40 km, sunny, no heat shimmer.

[3] Visibility about 20 km, moderate sunlight, slight heat shimmer.

[4] Visibility about 10 km, light haze, severe heat shimmer.

[5] Best testing condition: indoors, target is far away about 10 m, prism or KODAK board.

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STONEX AUTHORIZED DEALER

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