

# R2 PLUS

# **POWERFUL PERFORMANCES**

#### PERFORMANCES GUARANTEED

High accuracy and long reflectorless range are the perfect combination that makes STONEX R2 Plus the best friend of every professional surveyor.

#### WIDE RANGE OF SCALABLE SOLUTIONS

Cadastral, mapping, staking out, and up to high precision monitoring works: within the range of R2 Plus Series, you will find the solution that fits your needs. R2 Plus comes standard with integrated onboard field software, a complete suite of applications, and an external controllers can be linked to STONEX R2 Plus, through the Bluetooth™ wireless connection: no limitation will stop your working process. Road software module is included as standard in each

#### **MEASURE THE RIGHT POINTS**

Measuring height of cables and buildings corners is not problems with R2 Plus: its laser is designed to measure long distances with high accuracy. The 2 mm ± 2 ppm EDM on distances up to 5000 m, and the 2" or 5" accuracy guarantee high precision in the 3D coordinates calculation.

The integrated temperature and pressure sensors are further helpful tools that make any measure reliable and accurate.

#### FRIENDLY INTERFACE FOR A SEAMLESS DATA FLOW

Whether the work is a basic survey or a long road staking out under full sun, STONEX R2 Plus will always help you with a friendly user interface and its intuitive field software. The navigation menu drives the Surveyor into simple operations, and the results are displayed in a clear way. The large LCD display, of the same dimension on both sides of the Total Station, drives you quickly to the right solution.



Alphanumeric keyboard on both sides with high resolution backlighted large LCD display

#### LONG RANGE, HIGH PRECISION

#### **RELIABLE MEASUREMENTS**

#### **USER FRIENDLY**

#### CAPACITY

**KEY FEATURES** 

## **TECHNICAL FEATURES R2 PLUS**



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Plus 500

Reading system	Absolute encoder	
	1" /5" /10" ;	
Display resolution	0.0002g/0.001g/0.002g;	
	0.005mil/0.02mil/0.05mil	
Angle Units	DEG 360°/GON 400/MIL 6400	
Accuracy	2" or 5"	
TELESCOPE		
Magnification/ Field of view	30X/1°30′	
Tube length	156 mm	
Minimum focus distance	1.0 m (3.26 ft)	
Reticle	10 brightness levels adjustable	
Objective aperture	φ 45 mm	
Laser pointer	Red light, coaxial	
TILT SENSOR		
Туре	Electronic, dual-axis	
Compensation range/accuracy	± 3.0'/1"	
DISTANCE MEASUREMENT RANG		
Standard mode/Prism	$1.0 \sim 3000^2  2000^3  1500^4  \text{Class1}$	
·	up to 5000/7000 m Class 3	
Reflective sheet (60mm x	1.0 <b>∼</b> 800 m	
60mm)		
Without Prism	1.0 ∼350 <sup>5</sup> m - 1.0 ∼500 <sup>5</sup> m	
With Mini Prism	1.0 <b>∼</b> 800 m	
DISTANCE MEASUREMENT ACCU	JRACY	
Standard mode/Prism	± (2+2x10 <sup>-6</sup> D) mm	

R2 -2"

Standard mode/Prism	± (2+2x10 <sup>-6</sup> D) mm	
Reflective sheet (60mm x	± (3+2x10 <sup>-6</sup> D) mm	
60mm)	± (3+2x10 °D) IIIIII	
	2-150m: ± (3+2×10 <sup>-6</sup> D)mm	
Without Prism	150-300m: ± (5+3×10 <sup>-6</sup> D)mm	
Without Prism	300-500m: ± (5+5×10 <sup>-6</sup> D)mm	

#### **MEASUREMENT TIME (MAX 20S)**

Standard mode/Prism <sup>6</sup>	0.5 sec / 1.5 sec / 2.0 sec
(Tracking/Fast/Fine)	0.5 sec / 1.5 sec / 2.0 sec

#### Specifications subject to change without notice

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Good condition: no haze	, visibility about	40km, no he	eat shimmer, b	reeze.

<sup>&</sup>lt;sup>2</sup>Visibility about 40 km, sunny, no heat shimmer.

#### **DISTANCE MEASUREMENT**

Distance Unit	m/ft/US ft		
Display Resolution (m/inch selectable)	0.0001m/0.001ft/0.001 US ft		

#### **LASER PLUMMET**

R2 -5"

Laser type	± 1mm/1.5 m
Laser brightness	Adjustable

#### **LEVEL VIAL SENSITIVITY**

Plate level	30 ("2mm)
Circular level	8 ('/2mm)

#### **ENVIRONMENTAL CONDITIONS**

Operating / Storage	-20° C : +50° C / -40° C : +70° C	
Temperature	-20 0,+30 0,-40 0,+70 0	
Protection to dust	IP55	
and water	IF33	

#### **WEIGHT**

Weight including battery	E E Va
مام ما خينا اميم مام	5.5 Kg

#### **POWER**

Battery Voltage/Capacity	7.4V / 3400mAh Li-ion
Operating period (angle measurement)	36 hours
Operating period (distance meas. every 30 seconds)	19 hours
Battery charger	110/220V, charging time: approx.4h

### **OTHER SPECIFICATIONS**

Display/Kaybaard	Two sides, large LCD, 240x128	
Display/Keyboard	dots/Alphanumeric	
Memory	128 MB internal + 2 GB SD card	
Interface	RS-232C / USB/ SD	
	card/Bluetooth™	
Sensors	Built in temperature/pressure	
	sensors	

#### ON BOARD FIELD APPLICATION PROGRAMS

Data recording and management, Setting out, Resection, Intersection, Point to line, Area calculation, Offset, Road









 $<sup>^3\</sup>mbox{Visibility}$  about 20 km, moderate sunlight, slight heat shimmer.

<sup>&</sup>lt;sup>4</sup>Visibility about 10 km light haze, severe heat shimmer.

No prism target: KODAK CAT NO.E1527795 (reflectivity: 90%, size: A4).

 $<sup>^6\</sup>mathrm{Best}$  testing condition: indoors, target is far away about 10 m, prism or KODAK board.