

# 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 STONEX R2 Plus.

#### 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 7000 m, and the 2" 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

Narrow beam laser technology guarantees precise and reliable points positioning calculations

#### **USER FRIENDLY**

#### CAPACITY

**KEY FEATURES** 

## TECHNICAL FEATURES R2 PLUS



	US		

Plus 500

Reading system	Absolute encoder
	1" /5" /10" ;
Display resolution	0.0002g/0.001g/0.002g;
WAS MICH	0.005mil/0.02mil/0.05mil
Angle Units	DEG 360°/GON 400/MIL 6400
Accuracy	2"
TELESCOPE Magnification/ Field of view	30X/1°30′
Magnification/ Field of view	30X/1°30′ 156 mm
	to a consideration of the constant
Magnification/ Field of view Tube length	156 mm 1.0 m (3.26 ft)
Magnification/ Field of view Tube length Minimum focus distance	156 mm
Magnification/ Field of view Tube length Minimum focus distance Reticle	156 mm 1.0 m (3.26 ft) 10 brightness levels adjustable

R2 -2"

#### TILT SENSOR

TIET SETTOOK		
Type	Electronic, dual-axis	
Compensation range/accuracy	± 3.0'/1"	

#### DISTANCE MEASUREMENT RANGE (GOOD CONDITION)1

Standard mode/Prism	1.0 ~3000² 2000³ 1500⁴ Class1 up to 7000 m Class 3 1.0 ~800 m		
Standard Modey Frisin			
Reflective sheet (60mm x 60mm)			
Without Prism	1.0 ~350 <sup>5</sup> m - 1.0 ~500 <sup>5</sup> m		
With Mini Prism	1.0 ∼800 m		

#### DISTANCE MEASUREMENT ACCURACY

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

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

Standard mode/Prism <sup>6</sup>	0 F cos / 1 F cos / 2 0 cos
(Tracking/Fast/Fine)	0.5 sec / 1.5 sec / 2.0 sec

#### Specifications subject to change without notice

Good	condition:	no haze.	visibility	about	40km.	no	heat	shimmer.	breeze.

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



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

#### LASER PLUMMET

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 C;+30 C/-40 C;+/0 C		
Protection to dust and water	IP55		

#### WEIGHT

Weight including battery	EEVa
and tribrach	5.5 Kg

#### DOWER

7.4V / 3400mAh Li-ion
36 hours
19 hours
110/220V, charging time: approx.4h

#### **OTHER SPECIFICATIONS**

Display/Keyboard	Two sides, large LCD, 240x128 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>&</sup>lt;sup>3</sup>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>&</sup>lt;sup>6</sup>Best testing condition: indoors, target is far away about 10 m, prism or KODAK board.