



# PRODUCT CATALOG 2022



# Total Stations

## *High Technology and Quality*

STONEX Total Stations are simple and durable, designed and built to meet all Customers' needs, allowing easiness of use to everyone in full autonomy. Fast, intuitive, reliable and precise, STONEX Total Stations are optical precision tools designed to support high-quality professional for all types of topographic job ensuring high performance for Surveying and Engineering.



R80  
Motorized  
Total Station



R1 Plus



R15



R25



R35

# R1 Plus The companion of every professional surveyor

Stonex R1 Plus Total Station: precise distance and angles measurements, concentrated in 5 Kg of pure technology.

The perfect tool whenever the topographic works requires a light and fast machine, all day working thanks to 26 hours of continuous operating time.

The onboard field programs, included as standard, make R1 Plus suitable for any construction site, cadastral mapping and staking out works.

No limitation for distance measurements, up to 5,000 m with a single prism - 600 m reflectorless (K+G: 90%) - and 2" as angular accuracy, always guarantee a reliable points calculation.

R1 Plus has been designed to hold out against rain and dust: the IP66 certification allows to go ahead with the survey even during hard rain. The body design is distinguished by its robust mechanical structure, and the high performance telescope, featuring 30X magnification and illuminated reticle, provide the best sighting quality in any lighting condition.



## LONG DISTANCE MEASUREMENTS

Thanks to the high efficiency EDM, R1 Plus guarantees long distance measurements: 600 m in reflectorless mode and up to 5,000 m using a single prism, with millimeter accuracy.



## FAST, ACCURATE, RELIABLE

Measuring distances in one second, with 2 mm accuracy, makes any job extremely cost effective and reliable. The wide range of application software allows to complete the Surveyor's tasks directly in the field.



## 3 DAYS OF FIELD WORK

The low power consumption circuit design and to the two high capacity batteries allow to continuously work for 26 hours and to measure over than 1,000 distances. The 3D card up to 16 Gb can store an huge amount of data.



## HIGH PROTECTION GRADE

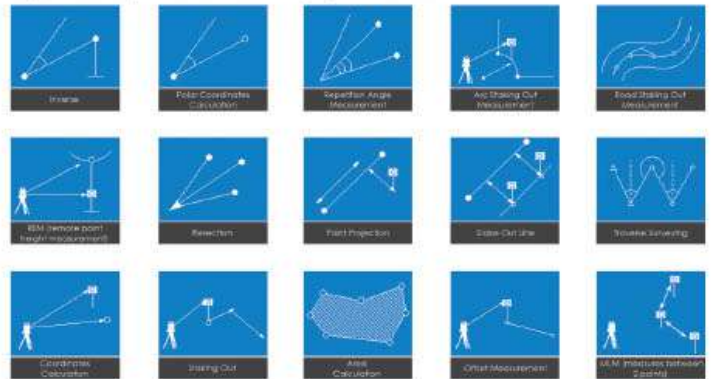
IP66 dustproof/waterproof rating ensure R1 Plus's high availability in all weather conditions and allows to continue working even under very humid conditions and where sand and dust are present.



# R1 PLUS

## The most complete field software suite at your service

When the work is not limited to points collection R1 Plus becomes your portable equipment for LOGO calculations and setting out of points, lines, roads. It's easy to calculate an area, the height of remote points, such as power lines and bridges, the accuracy of a traverse. More than 15 programs are available.



# R15

## The best companion of every surveyor

Stonex R15 Total Station, precise distance and angles measurements, concentrated in 5 Kg of pure technology. The perfect tool whenever the topographic works require a light and fast machine, all day working thanks to 24 hours of continuous operating time.

The onboard field programs, included as standard, make R15 suitable for any construction site, cadastral, mapping and staking out works. The wireless Bluetooth connection allows to connect R15 with handheld computers, giving the possibility to use a custom field software on line with the instrument.

No limitation for distance measurements, up to 5000 m with a single prism, 600 m reflectorless and 2" as angular accuracy, always guarantee a reliable points calculation.

R15 has been designed to hold out against rain and dust; the IP55 certification allows to go ahead with the survey even during hard rain. The body design is distinguished by its robust mechanical structure, and the high performance telescope, featuring 30X magnification and illuminated reticle, provide the best sighting quality in any lighting condition.



### LONG DISTANCE MEASUREMENTS

Thanks to the high efficiency EDM, R15 guarantees long distance measurements: 600 m in reflectorless mode and up to 5000 m using a single prism, with millimeter accuracy.



### FAST, ACCURATE, RELIABLE

Measuring distances in one second, with 2 mm accuracy, makes any job extremely cost effective and reliable. The wide range of application software allows to complete the Surveyor's tasks directly in the field.



### 3 DAYS OF FIELD WORK

The low power consumption circuit design and to the two high capacity batteries allow to continuously work for 24 hours and to measure over than 120,000 points. The SD card up to 16 GB can store a huge amount of data.



### HIGH PROTECTION GRADE
















IP55 dustproof/waterproof rating ensures R15's high reliability in all weather conditions and allows to continue working even under very humid conditions and where sand and dust are present.



# R15

## The most complete field software suite at your service

When the work is not limited to points collection, R15 becomes your portable equipment for COGO calculations and setting out of points, lines, roads. It's easy to calculate an area, the height of remote points, such as power lines and bridges, the accuracy of a traverse. More than 15 programs are available.

 Traverse	 Polar Coordinates Calculation	 Repetition Angle Measurement	 Allowing Out Measurement	 Road Setting Out Measurement
 EDM remote point height measurement	 Resection	 Point Projection	 Stake Out Line	 Traverse Surveying
 Coordinates Calculation	 Staking Out	 Area Calculation	 Offset Measurement	 WLM (Measure between 2 points)

# R25/R25LR High precision Total Station

High accuracy and long reflectorless range are the perfect combination that makes Stonex R25/R25LR the best friend of every professional surveyor.

Cadastral, mapping, staking out, and up to high precision monitoring works: within the range of R25/R25LR Series, you will find the solution that fits your needs.

R25/R25LR comes standard with integrated onboard field software, a complete suite of applications, and an external controller can be linked to Stonex R25/R25LR through the Bluetooth™ wireless connection; no limitation will stop your working process.

Stonex R25/R25LR features endless friction drives for continuous, horizontal and vertical rotations; no more knobs and clamps with limited movements but a more comfortable use of the station. The trigger key on the side of the instrument allows you to start the measurement very easily.



STONEX SURVEYING SYSTEMS



## LIMITLESS DISTANCE MEASUREMENTS

By using digital phase laser ranging technology, R25/R25LR guarantees high accuracy long range measurements: 600/1000 m in reflectorless mode and up to 5000 m using a single prism, with millimeter accuracy.



## FAST, ACCURATE, RELIABLE

Measuring distances in one second, with 2 mm accuracy, makes any job extremely cost effective and reliable. The wide range of application software allows to complete the Surveyor's tasks directly in the field.



## ONE DAY OF CONTINUOUS FIELD WORK

Thanks to the low power consumption circuit design and to the two high capacity batteries R25/R25LR gives the opportunity to continuously work for around 13 hours. No concern for data storage: the improved 4 Gb internal memory and the SD card up to 16 Gb store a huge amount of data.



## TEMPERATURE PRESSURE SENSORS

Temperature and pressure changes have a negative impact on the accuracy of distance measurement: the smart R25/R25LR monitors the changes and automatically adjust the distance calculations.



# R25/R25LR

## The total station with endless drives

Whether the work is a basic survey or a long road staking out under full sun, R25/R25LR 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.



## ENDLESS FRICTION DRIVES & TRIGGER KEY

These features make R25/R25LR one of the most manageable Total Stations of the market: target collimations are fast and accurate using both the knobs and the measure start. Using the trigger key located on the same side of the instrument.



## AUTOMATIC 2 AXIS COMPENSATION

The electronic dual axis compensator featuring a wide range automatically levels R25/R25LR when it is not perfectly horizontal; the status of the compensator is shown on the graphic display allowing an accurate leveling of the instrument.



## WIDE RANGE OF COMMUNICATION OPTIONS

Standard RS232 interface, mini USB, SD card up to 16 Gb, guarantee a seamless in/out data flow to any external device. The wireless Bluetooth connection allows to connect R25/R25LR with handheld computers giving the possibility to use a custom field software on line with the instrument.



360° remote beam height measurement



Road Staking Out measurement



High Projection



Traverse Surveying



Staking Out



360° Measure between 2 points

# R35/R35LR Fully customizable Total Station

Stonex R35/R35LR series is the most customizable Total Station of the market. Depending on the user needs, R35/R35LR comes with endless friction drives for continuous horizontal and vertical rotations, 2" accuracy and 600/1000 m reflectorless range.

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 FieldGenius, Carlson SurvCE, ANTAS Mobile and many Custom field applications.

In addition the TFT 320x240px 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, and the absolute encoders performing high precision angles measurements, provide reliable points calculation in every condition.



### UP TO 600/1000 m REFLECTORLESS

By using digital phase laser ranging technology, R35/R35LR guarantees high accuracy long range measurements: up to 600/1000 m. In reflectorless mode and up to 5000 m using a single prism, with millimeter accuracy.



### TEMPERATURE PRESSURE SENSORS

Temperature and pressure changes have a negative impact on the accuracy of distance measurements; the smart R35/R35LR monitors the changes and automatically adjusts the distance calculations.



### CHOOSE YOUR FAVORITE ONBOARD SOFTWARE

By choosing R35/R35LR you are not forced to use the manufacturer software! A wide range of well known field software are compatible, and the user can even create his own application onboard.



### FAST, ACCURATE, RELIABLE

Measuring distances and angles in one second, with 2 mm accuracy, makes any job extremely cost effective and reliable. The big touch screen graphic display facilitates the daily work in the field.



## R35/R35LR

### New with endless friction drives and trigger key

R35/R35LR model has been updated with endless friction drives (no more clamps and limited horizontal & vertical rotations) and with a trigger key for more accurate measurements. R35/R35LR 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.



#### TRIGGER KEY & ENDLESS FRICTION

These features make R35/R35LR one of the most manageable Total Stations of the market: target collimators are fast and accurate using both the hands and the measure starts using the trigger key located on the same side of the instrument.



#### WIDE RANGE OF COMMUNICATION OPTIONS

Standard RS232 interface, USB, mini USB, guarantee a seamless in/out data flow to any external device. The wireless Bluetooth connection allows to connect R35/R35LR with handheld computer giving the possibility to use a custom field software on line with the instrument.



#### 2 SIDES TOUCH SCREEN DISPLAY

The clear TFT 320x240px 2 sides touch screen display gives the Surveyor a clear, colourful and fully graphical environment, and the user friendly on board software supports the Surveyor with guided through functions for data collection, topographic surveys, staking.



# TOTAL STATIONS

## Product Comparison



R1 Plus



R15



R25/R25LR



R35/R35LR



R80

	R1 Plus	R15	R25/R25LR	R35/R35LR	R80
Angle Accuracy	2"	2"	2"	2"	0.5"-1"
Prism measurement	5.000m	5.000m	5.000m	5.000m	5.000m
Prism accuracy	2mm+2ppm	2mm+2ppm	2mm+2ppm	2mm+2ppm	1mm+1ppm
Reflectorless measurement	600m	600m	600m/1.000m	600m/1.000m	1.000m
Reflectorless accuracy	3mm+2ppm	3mm+2ppm	3mm+2ppm	3mm+2ppm	3mm+2ppm
Display	2 LCD	2 LCD	2 LCD	2 Color touch	2 Color touch
OS	Proprietary	Proprietary	Proprietary	Windows CE	Windows CE
Bluetooth	NO	✓	✓	✓	Long Range
USB	✓	✓	✓	✓	✓
RS232	✓	✓	✓	✓	✓
Memory	120.000 points	120.000 points	4Gb	4Gb	4Gb
Guide light	NO	NO	NO	✓	✓
H-V movements	Lock drives	Lock drives	Endless drives	Endless drives	Motorized
Operation time	24 hours	24 hours	12 hours	9 hours	6 hours
Operating temperature	-20° +50°	-20° +50°	-20° +50°	-20° +50°	-20° +50°
Protection class	IP66	IP55	IP55	IP55	IP55