STONEX

R60 Android Total Station

Total Station
with Android
on board

cube suite

R60

Total Station with Android on board

The R60 is a device with a 5.5-inch touch screen and the Android operating system, which provides users with a smartphone-like experience in terms of ease of use and familiarity. With the Android OS, operators can easily access a wide range of features and functions, making their work more efficient and productive. Additionally, the system's versatility and customization options make it an ideal choice for those looking for a flexible and adaptable operating system.
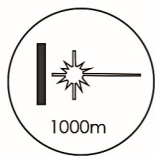
The R60 features Cube-a software, which allows for a new horizontal view and integration with GNSS surveys. The operator can use background maps and exchange functions between the TS and remote controller (GNSS) with Bluetooth, without the need for cables.

The R60 is available in two versions, one with an accuracy of 2" and endless drives, and the other with an accuracy of 1" and lock drives. With a prism, the instrument has an accuracy of 2 mm + 2 ppm, and it can measure reflectorless up to a range of 1000 m.
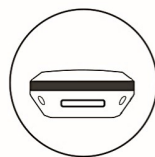
ANDROID 11 OS

The Android 11 operating system provides a multitude of possibilities for operators, allowing for easy touch management of jobs and the ability to work with convenient background maps. This operating system enhances the user experience and provides a user-friendly interface.
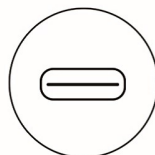
UP TO 1000 M REFLECTORLESS

1000m

The R60, available in both 1" and 2" versions, can obtain highly accurate long-range measurements. It can measure up to 1000 m without a prism and up to 5000 m with a prism, all with millimeter precision. This level of accuracy makes the R60 a reliable and efficient tool for a variety of applications, from construction and surveying to engineering and beyond.

GNSS CONNECTOR ON THE HANDLE

What sets the R60 apart is its GNSS connector; to perform a mixed survey using both a total station and GNSS, a connector has been placed on the handle to properly position the receiver on the vertical axis of the total station. This allows the operator to easily calculate the position coordinates and assign them as a reference to the total station.
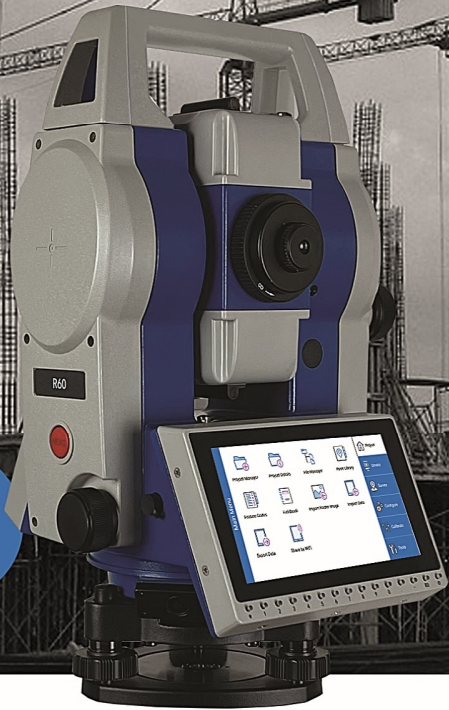
TYPE-C PORT ON BATTERY

The Type-C USB port to charge the battery is a convenient feature that makes it easier than ever to keep your R60 powered up and ready to go.

LOCK DRIVES

ENDLESS DRIVES

cube·a

ONBOARD SOFTWARE

Cube-a software, pre-installed on the R60 Android total station, offers a range of features designed to improve the efficiency and accuracy of surveying work. Among these features is direct I/O support for TS and Bluetooth support for GNSS, enabling the integration of data from various sources.

INTEGRATED CAD

During the survey and staking phase, Cube-a allows the operator to work in a simple and intuitive way, enriching the survey with overlapping Google maps or cartography imported by the user. Thanks to the powerful CAD integrated into Cube-a, the operator can directly complete the point measurement phase in the field by adding graphic elements, creating a complete restitution ready to be used immediately.

EASY DATA TRANSFER

Another feature of the Cube-a program is the data exchange capability that facilitates the seamless transfer of data between the total station and a remote controller. The transfer can be accomplished through a Bluetooth or Wi-Fi direct connection, removing the need for cables, and making the process more convenient and streamlined. With advanced features and an intuitive interface, the R60 Android total station is an ideal tool for any surveying project.

DATA TRANSFER

R60 TECHNICAL FEATURES

ANGLE MEASUREMENT

Accuracy[1]	1" / 2"
Reading System	Absolute encoder
Angle Units	DEG 360°/GON 400/MIL 6.400
Display Resolution	0.1" / 0.00002g / 0.0005 mil

TELESCOPE

Magnification / Field of view	30x / 1°30'
Tube Length	156 mm
Minimum Focus Distance	1.0 m (3.3 ft)
Reticle Illumination	10 brightness levels adjustable
Effective Aperture	Ø 45 mm
Laser Pointer	Red light, coaxial

TILT SENSOR

Type	Dual axis
Compensation Range/Accuracy	≥3.0'

DISTANCE MEASUREMENT RANGE[2]

Prism Mode[3]	5.000 m
Reflective Sheet (6 cm x 6 cm)[3]	800 m
Reflectorless[4-6]	1000 m

DISTANCE MEASUREMENT ACCURACY[5]

Prism Mode	2 mm + 2 ppm
Reflective Sheet (6 cm x 6 cm)	3 mm + 2 ppm
Reflectorless	3 mm + 2 ppm

MEASUREMENT TIME

Prism (Track/Fast/Standard)	0.4 / 0.6 / 1.0 sec
Reflectorless	1.5-5 sec

DISTANCE MEASUREMENT

Distance Units	m / US ft / INT ft
Display Resolution	0.0001 m / 0.001 m 0.001 ft / 0.01 ft

LASER PLUMMET

Laser Type	635nm semiconductor laser
Accuracy	±1.0 mm @ 1.5 m
Spot	2.5 mm @ 1.5 m

LEVEL VIAL SENSITIVITY

Plate Level	30"/ 2 mm
Circular Level	8'/ 2 mm

ENVIRONMENTAL CONDITIONS

Operating Temperature	-20°C to +50°C (-4°F to +122°F)
Storage Temperature	-40°C to +70°C (-40°F to +158°F)
Waterproof/Dustproof	IP55

PHYSICAL SPECIFICATION

Dimensions	358 x 211 x 220 mm
Weight Including Battery and Tribrach	6.5 Kg

POWER

Battery Voltage/Capacity/Type	7.2Vdc / 5200mAh /Li-ion
Batteries Number	2
Operating Time	Up to 8 hours (with one battery)[7]
Battery Charger	AC 100 - 240V, charging time 3h

OTHER SPECIFICATIONS

CPU	CORTEX-A55 Quad-Core
Display	5.5" color touch, 720 x 1280 px
OS	Android 11
Memory	4GB+32GB
Interface	USB type-A, USB type-C, RS232, Bluetooth, Wi-Fi
Guide Light	Yes
Sensors	Temperature / Pressure

ONBOARD FIELD APPLICATION PROGRAMS

Cube-a TS-GPS, R60 Manager

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1 Standard deviation based on ISO 17123-3

2 Good condition: no haze, visibility about 40km, no heat shimmer, breeze.
  Under optimal conditions on Kodak Grey Card (90% reflective)

3 Class 1

4 Class 3R

5 Standard deviation based on ISO 17123-4

6 Under optimal conditions on good surface

7 Battery duration depends also on display brightness

Illustrations, descriptions and technical specifications are not binding and may change
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