

R60 Android Total Station



Lock drives

Endless drives

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R60 Android Total Station

- Stonex R60 is an **Android Total Station** equipped with a **5.5-inch touch screen**, suitable for most surveying jobs
- R60 is available in two versions, with **2" accuracy - endless drives** and with **1" accuracy - lock drives**
- The instrument has an accuracy of **2mm + 2 ppm** when measuring with a prism and has a range of **1000 m**
- Its main advantage is the **Android operating system** that allows immediate interaction and ease of use by the operator



Technical Specification

R60 - Technical Specifications

ANGLE MEASUREMENT	R60 2" 1000 m	R60 1" 1000 m
Accuracy	2"	1"
Reading system	Absolute encoder	
Display Resolution	0.1 " / 0.00002g / 0.0005 mil	
Angle Units	DEG 360° / GON 400 / MIL 6.400	

TELESCOPE	R60 2" 1000 m	R60 1" 1000 m
Magnification/ Field of view	30x / 1°30'	
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	



R60 - Technical Specifications

DISTANCE MEASUREMENT RANGE	R60 2" 1000 m	R60 1" 1000 m
Standard mode prism	5000 m	
Reflective sheet (6cm x 6cm)	800 m	
Reflectorless	1000 m	

MEASUREMENT TIME	R60 2" 1000 m	R60 1" 1000 m
Prism (Track/Fast/Standard)	0.4 / 0.6 / 1.0 sec	
Reflectorless	1.5-5 sec	



R60 - Technical Specifications

DISTANCE MEASUREMENT ACCURACY	R60 2" 1000 m	R60 1" 1000 m
Standard mode prism	2 mm + 2 ppm	
Reflective sheet (6cm x 6cm)	3 mm + 2 ppm	
Reflectorless	3 mm + 2 ppm	



R60 - Technical Specifications

OTHER SPECIFICATIONS	R60 2" 1000 m	R60 1" 1000 m
CPU	CORTEX-A55 Quad-Core	
Display/Keyboard	5.5" color touch, 720 x 1280 px	
OS	Android	
Memory	4GB+32GB	
Interface	USB type-A, USB type-C, RS232, Bluetooth, Wi-Fi	
Guide Light	Yes	
Sensor	Temperature / Pressure	



R60 - Technical Specifications

POWER	R60 2" 1000 m	R60 1" 1000 m
Battery Voltage/Capacity	5200mAh	
Operating time	Up to 8 hours (one internal battery)	
Battery charger	3 hours	

PHYSICAL SPECIFICATION	R60 2" 1000 m	R60 1" 1000 m
Dimensions	358 x 211 x 220 mm	
Weight including battery and tribrach	6.5 Kg	

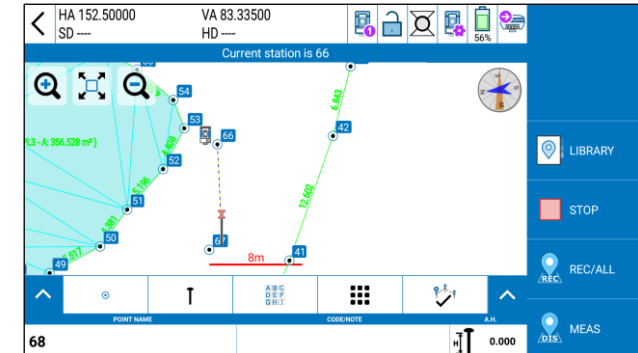
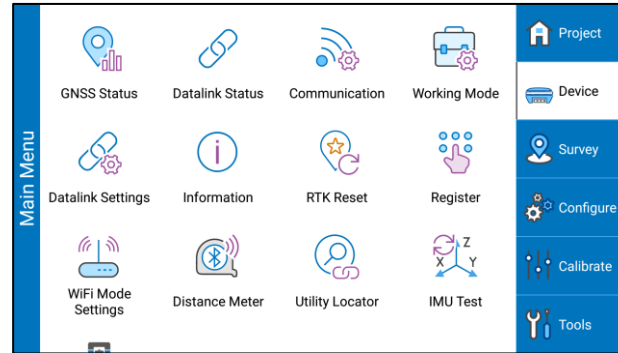
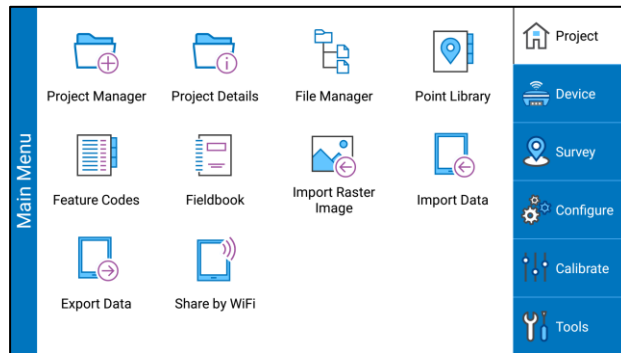


Onboard Cube-a Software

R60 – Cube-a TS-GPS

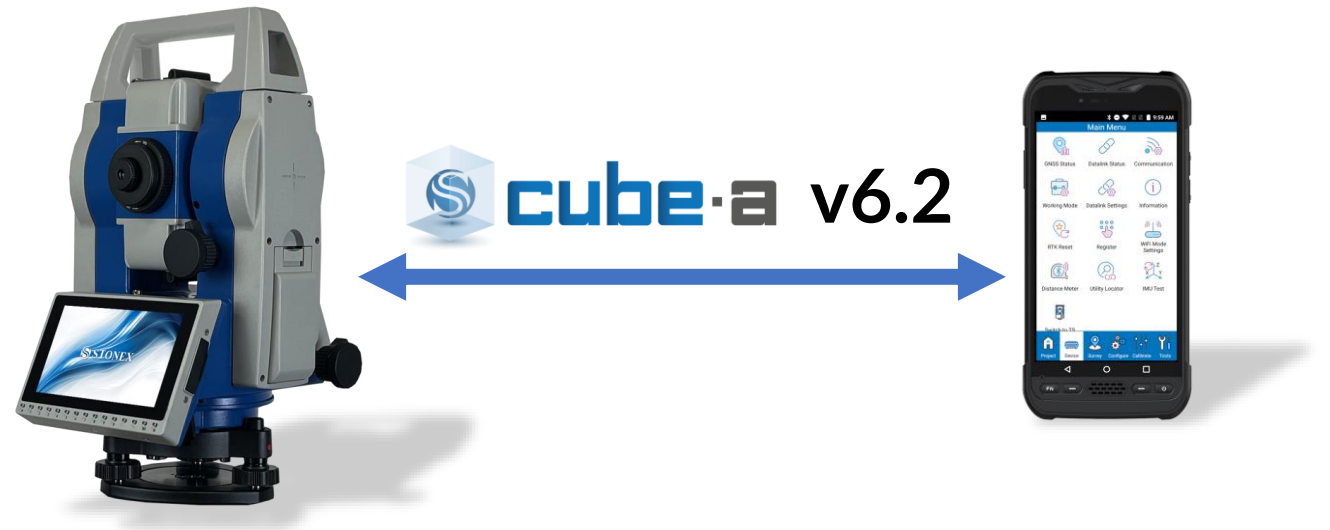
Interface changes

- New icons
- Landscape orientation



R60 – Cube-a TS-GPS

- Usual Cube-a features
- TS (direct I/O) + GPS (Bluetooth/Wi-Fi) support
- Data exchange feature
 - TS <> Remote Controller (GPS)
 - By Bluetooth or Wi-Fi direct
 - No cables



R60 – 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. The Type-C port is a superior charging technology, providing faster and more reliable charging than traditional connectors.



R60 – GNSS connector

What sets the R60 apart is its **GNSS connector on the handle**.

The adapter with a **5/8" thread** allows for a safe and secure connection between the GNSS device and the handle, ensuring that the device remains in place during operation and preventing any accidental disconnections that could compromise the accuracy of the measurements.

The connector is placed on the handle to properly position the receiver on the vertical axis of the total station.



R60 – TS and GNSS integration

Cube-a can **simultaneously handle data** acquired from the GNSS and the total station, this allows the operator to easily calculate the position coordinates and assign them as a reference to the total station.

The offset, between the bottom of the GNSS and the center of the total station, is 16 cm.



Marketing

R60 - Product pictures



STONEX

Configuration

R60 – Standard Configuration

PRODUCT CODE	DESCRIPTION	QUANTITY
B20-220201	Stonex R60, Total Station, 1000m, 1", Android, Lock Drives	1
	Tools bag	1
	Battery	2
	Adapter + Cable EU and US	1
	Strap of carrying case	2
	Carrying case	1
	Silica gel	2
	Rain cover	1
	Targets	1
40-450668	Software Stonex Cube-a TS+GPS on board v6.x	1



R60 – Standard Configuration

PRODUCT CODE	DESCRIPTION	QUANTITY
B20-220200	Stonex R60, Total Station, 1000m, 2", Android, Endless Drives	1
	Tools bag	1
	Battery	2
	Adapter + Cable EU and US	1
	Strap of carrying case	2
	Carrying case	1
	Silica gel	2
	Rain cover	1
	Targets	1
40-450668	Software Stonex Cube-a TS+GPS on board v6.x	1



R60 – Optional

PRODUCT CODE	DESCRIPTION
30-350700	R60 EU adaptor + charger cable
30-350701	R60 US adaptor + charger cable
30-350702	R60 Battery
30-350703	R60 Rain cover
30-350704	R60 Carrying case (with the strap)
30-350705	R60 GNSS Connector



Competitors

R60 – Competitors

ANDROID MANUAL TOTAL STATION							
Update March 2023							
							
MODEL		R60	A1	N1	Arc10	KTS-552	RNS
ANGLE MEASUREMENT	Accuracy	1" (Lock drives) 2" (Endless drives)	1" 2"	2"	2"	2"	2"
	Display resolution	1"	1"	1"	1"	1"	1"
DISTANCE MEASUREMENT	Prism mode	5.000m	5.000m	5.000m	5.000m	5.000m	5.000m
	Reflectorless	1.000m	1.000m	1.000m / 1.500m optional	1.000m / 1.500m optional	1.000m / 1.500m optional	1.000m / 1.500m optional
DISTANCE ACCURACY	Prism mode	2mm + 2 ppm	2mm + 2 ppm	2mm + 2 ppm	2mm + 2 ppm	2mm + 2 ppm	2mm + 2 ppm
	Reflective sheet (6x6cm)	3mm + 2 ppm	3mm + 2 ppm	3mm + 2 ppm	3mm + 2 ppm	3mm + 2 ppm	3mm + 2 ppm
	Reflectorless	3mm + 2 ppm	3mm + 2 ppm	3mm + 2 ppm	3mm + 2 ppm	3mm + 2 ppm	3mm + 2 ppm
	Size	5.5"	5"	5"	5"	5"	5"
DISPLAY	Resolution	720x1280	720 x 1280	720 x 1280	720 x 1280	720 x 1280	720 x 1280
	Type	Color	Color	Color	Color	Color	Color
	Touch	√	√	√	√	√	√
	Operating system	Android 11	Android 9	Android 6	Android 6	Android 6	Android 6
SYSTEM CONFIGURATION	Processor	Cortex-A55	MT6753	MT6753	MT6753	MT6753	MT6753
	Internal memory	RAM 4GB / ROM 32GB	RAM 3GB / ROM 32GB	RAM 3GB / ROM 32GB	RAM 3GB / ROM 32GB	RAM 3GB / ROM 32GB	RAM 3GB / ROM 32GB
	Type	Alphanumeric	Alphanumeric	Alphanumeric	Alphanumeric	Alphanumeric	Alphanumeric
KEYBOARD	Backlight	√	√	√	√	√	√
	2nd	NO	√	√	√	√	√
H-V MOVEMENTS		Lock drives Endless Drives	Lock drives	Lock drives	Lock drives	Lock drives	Lock drives
GUIDE LIGHT		√	NO	NO	NO	NO	NO
AUTO-FOCUS		NO	NO	NO	NO	NO	NO
IMAGE		NO	NO	NO	NO	NO	NO
TRIGGER KEY		√	√	√	√	√	√
PLUMMET		Laser	Laser	Laser	Laser	Laser	Laser
INTERFACE	RS232	NO	NO	NO	NO	NO	NO
	USB type a	√	√	√	√	√	√
	USB type C	√	NO	NO	NO	NO	NO
	Bluetooth	√	√	√	√	√	√
	WiFi	√	√	√	√	√	√
	GSM	NO	√	√	√	√	√
POWER	Battery capacity	5200 mAh	3100 mAh	3100 mAh	3100 mAh	3100 mAh	3100 mAh
	Operating time (hours)	8	8	8	8	8	8
	Nr. battery	2	2	2	2	2	2
WEIGHT		6.5Kg	6.0Kg	5.7Kg	5.7Kg	5.7Kg	5.7Kg
IP		55	55	55	55	55	55
OPERATING TEMPERATURE		- 20° + 50°	- 20° + 50°	- 20° + 50°	- 20° + 50°	- 20° + 50°	- 20° + 50°
SOFTWARE ON BOARD		Cube-a	Survey Star	Survey Star	Survey Star	Survey Star	Survey Star
PRESENTATION		2023	2018	2018	2018	2018	2018

Legend		Competitor is worst
		Competitor is better



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