



Key Features

Flexible

Choose your S7 for GIS and/or high accuracy surveying jobs, with integrated STONEX software

Unique

Internal GNSS antenna for centimetric accuracy in RTK environment, a real topographic Rover ALL in one hand

Powerful

Up to 120 channels GNSS receiver for RTK centimetric surveying, ALL in one hand

Complete

Wi-Fi, Bluetooth, GPRS modem, 5 megapixel camera, voice call and MMS, Mini waterproof USB connector, all included as standard, no options for STONEX S7

Easy to use

High performance touch screen 3.7" high resolution 640x480 pixel display, sunlight-optimized

S7 handheld series GPS/GNSS for field data collection

The new STONEX® S7 series GPS/GNSS receivers combine the modern positioning technology and versatility of a powerful handheld, perfect for collecting geographic data and operate fast and accurate measurements.

The S7 handheld is compact, ergonomic and small size and weight: 234 mm x 99 mm and less than 900g.

S7 are powered by a Marvell Xscale PXA-310 806MHz processor, and Windows Mobile 6.5 Professional operating system. To increase performance and to load the job data is available an SD card slot for external memory (internal 4 GB is included).

All the S7 integrate a GSM/GPRS modem, that provides fast and efficient internet connection directly on the field, and Wi-Fi and Bluetooth technology, that allow the user to transfer data quickly and conveniently on long distances. Thanks to the internal modem there is also the possibility to improve the accuracy of data, connecting to real time differential correction network provider.

Internal GNSS antenna for centimetric accuracy in RTK environment, a real topographic Rover ALL in one hard





Wi-Fi, Bluetooth, GPR modem, 5MP camera, voice call and MMS, Mini waterproof USB connector

The three different available models can cover all the different survey applications, from GIS to high accuracy surveying.

STONEX S7-S is an handheld GPS receiver (L1, GPS, SBAS), designed to collect data in a quick and accurate way, as well as efficiently inspect and stake out assets. The S7-S can be equipped with GeoGis, a software application developed by STONEX®Europe.

STONEX S7-D adds a more powerful GNSS receiver system, thanks GNSS L1 C/A + phase capabilities, tracking GPS, GLONASS and SBAS.

STONEX S7-G, a real revolution in the world of GNSS receivers: all in one hand, a GPS, GLONASS and Galileo 120 channels receiver, with centimetric accuracy.



Technical features S7 S/D/G

System Abstract				
Sunlight-readable 3.7" Polarized TouchScreen				
Built-in GSM Mobile Station Modem				
Wi-Fi and Bluetooth Wireless Technology				
5 Megapixel Autofocus Camera, Windows Mobile 6.5 Pro				
Battery (Rechargeable Lithium)				
Battery Capacity	11.1V × 2500mAh			
Working Hours	8 hours (normal use)			
Size and Weight				
Size	234 × 99 × 56 mm (L*W*D)			
Weight	S7 G: 895g (battery included)			
	S7 S/D: 850g (battery included)			
Environment				
Humidity	5%~95% RH (non-condensing)			
Operating Temperature	-20°C to +60°C			
Storage Temperature	-30°C to +70°C			
Waterproof/Dustproof	IP65			
Camera				
Static Mode	AF 5MP			
Image Format	JPG (2048×1536)			
Video Mode and File Format	QVGA Resolution - WMV			
Display				
Model	TFT colors, LED backlight			
Resolution and Size	640 × 480 - 3.7" (diagonal)			
Cellular Mobile and Wireless System				
GPRS	850/900/1800/1900MHz			
Wi-Fi	802 11b/g			
Bluetooth	Version 2.1 + EDR			

Mechanical Shock				
Drop Test	1.2 m on concrete			
Interface and Input				
Integrated Speaker and Microphone				
Soft Keyboard Numbers and Characters Input, SIM Socket				
External Power Supply Connector, SDHC card socket				
Buttons and Control				
Navigation Button, Power Button, Confirm Button				
F1 - F4 (customized function buttons), Windows Button				
Data Communication				
Voice Call and MMS, Mini Waterproof USB Connector				
802.11b/g Wireless LAN, Built-in GPRS/GSM Comm. module				
CDGE Support, Standard Bluetooth, Voice Call and MMS				
Hardware				
Processor	Marvell PXA-310 806 MHz Xscale CPU			
RAM and	256MB			
Flash Memory	256MB			
External Storage	SDHC 4Gb included (max. 16 GB)			
Operation System	Windows Mobile 6.5			
Input/Output				
NMEA 0183 Support	Available			
RTCM/CMR Support	RTCM 2.1, 2.3, 3.0, 3.1, CMR, CMR+,RTCA			
Standard Accessories				
Soft Bag, Charger Adapter, USB Cable, Rear Hand-strap, Battery				
Stylus Pen with String, CD and Manual, Screen Protector, Car adapter				
Optional Accessories				
Telescopic pole, Backpack kit for external antenna				
External antenna (GPS, GLONASS, L1-L2)				
External antenna cable (2m or 5m), Holder for pole, Carrying case				

Serie	S7 S	S7 D	S7 G
Receiver	12 Channels ¹	14 Channels	120 Channels
System	GPS (L1 C/A, L1 carrier phase smoothing), SBAS	GPS (L1 C/A, L1); GLONASS (L1 C/A, L1)	GPS (L1 C/A, L1, L2, L2C), GLONASS (L1 C/A, L1, L2), GALILEO (E1 test), COMPASS, SBAS
Update Rate	1Hz ²	1Hz ²	1Hz ²
Initialization time	< 15s	< 15s	<10s
Time to First Fix	< 60s (Cold Start) ³	<60s (Cold Start) ³	<50s (Cold Start) ³
	< 35s (Hot Start) ⁴	<35s (Hot Start) ⁴	<35s (Hot Start) ⁴
NMEA 0183 Support	Available	Available	Available
RTCM/CMR Support	RTCM SC-104 v2.x	RTCM 2.1, 2.3, 3.0, 3.1, CMR, CMR+,RTCA	RTCM 2.1, 2.3, 3.0, 3.1, CMR, CMR+,RTCA
Accuracy ⁵	S7 S - GPS	S7 D - GNSS	S7 G - GNSS
Positioning Accuracy	Sub-meter/decimeter	Sub-meter/decimeter	Centimeter
Accuracy internal antenna	Decimeter	Decimeter	RTK hor: 2cm+1ppm; RTK vert: 3cm+2 ppm
Accuracy external antenna	Decimeter	Decimeter	RTK hor: 1cm+1ppm; RTK vert: 2cm+1.5ppm
Postprocessed	<0.5m + 1ppm	<0.5m + 1ppm	5mm + 1ppm (horizontal)
Autonomous	2.5m (RMS)	1.5m (RMS)	1.2m (RMS)
SBAS	0.6m (RMS)	0.6m (RMS) ⁶	0.6m (RMS) ⁷
DGPS	0.5m (RMS)	0.5m (RMS)	0.4m (RMS)

Specifications subject to change without notice

¹ Parallel tracking (10-channel when tracking SBAS). ² Standard configuration for handheld use. ³ No almanac or ephemerides and no approximate position or time. ⁴ Almanac and recent ephemerides saved, approximate position and time entered. ⁵ Performance specifications subject to GPS system characteristics, ionospheric and tropospheric conditions, satellite geometry, baseline length, multipath effects and the presence of intentional or unintentional interference sources. ⁶ GPS only. Clock aligned to GPS system time. ⁷ GPS only.













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