

GPS/GNSS handheld receiver: GIS & SURVEY in one SOLUTION



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 3G internal modem

there is also the possibility to improve the accuracy of data, connecting to real time differential correction network provider. The two different available models can cover all the different survey applications, from GIS to high accuracy surveying. STONEX S7-D is an handheld GNSS receiver (L1, GPS, GLONASS, SBAS), designed to collect data in a quick and accurate way, as well as efficiently inspect and stake out assets.

STONEX S7-G is a real revolution in the world of GNSS receivers (L1, L2, GPS, GLONASS, SBAS): all in one hand with centimetric accuracy.

Both receivers can be equipped with GeoGis, a software application developed by Stonex.



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



Wi-Fi, Bluetooth, 3G modem, 5 MP camera, voice call (S7 D) and MMS, Mini waterproof USB connector

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, 3G modem, 5 megapixel camera, voice call (S7 D) 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

KEY FEATURES

TECHNICAL FEATURES S7 D/G SERIES



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 Professional

BATTERY (RECHARGEABLE LITHIUM)

Battery Capacity	11.1 V x 2500 mAh
Working Hours	8 hours (normal use)

SIZE AND WEIGHT

Size	234 x 99 x 56 mm
Weight	S7 G: 895 g (battery included)
	S7 D: 850 g (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 (2048x1536)
Video Mode and File Format	QVGA Resolution - WMV

DISPLAY

Model	TFT colors, LED backlight
Resolution and Size	640 x 480 - 3.7" (diagonal)

CELLULAR MOBILE AND WIRELESS SYSTEM

Band	GSM/EDGE: 900/1800 MHz WCDMA/HSDPA: 900/2100 MHz
Wi-Fi	802.11 b/g
Bluetooth	Version 2.1 + EDR

SERIE

	S7 D	S7 G
Receiver	120 Channels ¹	120 Channels ¹
System	GPS (L1 C/A, L1); GLONASS (L1 C/A, L1), GALILEO (E1 test), COMPASS (L1), SBAS	GPS (L1 C/A, L1, L2, L2C), GLONASS (L1 C/A, L1, L2), GALILEO (E1 test), COMPASS, SBAS
Maximum Update Rate	5Hz ²	5Hz ²
Initialization Time	< 10 s	< 10 s
Time to First Fix	< 50 s (Cold Start) ³ < 35 s (Hot Start) ⁴	< 50 s (Cold Start) ³ < 35 s (Hot Start) ⁴
NMEA 0183 Support	Available	Available
RTCM/CMR Support	RTCM 2.1, 2.3, 3.0, 3.1, CMR, CMR+,RTCA	RTCM 2.1, 2.3, 3.0, 3.1, CMR, CMR+,RTCA

ACCURACY⁵

	S7 D - GNSS	S7 G - GNSS
Positioning Accuracy	Sub-meter/decimeter	Centimeter
Accuracy Internal Antenna	Decimeter	RTK: horizontal 2 cm + 1 ppm; vertical 3 cm + 2 ppm
Accuracy External Antenna	Decimeter	RTK: horizontal 1 cm + 1 ppm; vertical 2 cm + 1.5 ppm
Postprocessed	< 0.5 m + 1 ppm	5 mm + 1 ppm (horizontal)
Autonomous	1.5 m RMS	1.2 m RMS
SBAS	0.6 m RMS ⁶	0.6 m RMS ⁷
DGPS	0.5 m RMS	0.4 m 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.

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 (S7 D) and MMS, Mini Waterproof USB Connector
802.11 b/g Wireless LAN, Built-in GPRS/GSM Comm. module
EDGE Support, Standard Bluetooth, Voice Call and MMS

HARDWARE

Processor	Marvell PXA-310 806 MHz Xscale CPU
RAM	256 MB
Flash Memory	256 MB + 4GB
External Storage	SDHC 4 GB included (max. 16 GB)
Operation System	Windows Mobile 6.5 Professional

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

OPTIONAL ACCESSORIES

Telescopic pole, Backpack kit for external antenna
External antenna (GPS, GLONASS, L1-L2)
External antenna cable (2 m or 5 m), Holder for pole, Carrying case

STONEX AUTHORIZED DEALER



STONEX® Srl

Via Cimabue 39 - 20851 Lissone (MB) Italy
Phone +39 039 2783008 Fax +39 039 2789576
www.stonexpositioning.com
info@stonexpositioning.com