

## 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 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 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

## 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  
 802.11 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

## SERIE

	S7 D	S7 G
Receiver	120 Channels <sup>1</sup>	120 Channels <sup>1</sup>
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 <sup>2</sup>	5Hz <sup>2</sup>
Initialization Time	< 10 s	< 10 s
Time to First Fix	< 50 s (Cold Start) <sup>3</sup> < 35 s (Hot Start) <sup>4</sup>	< 50 s (Cold Start) <sup>3</sup> < 35 s (Hot Start) <sup>4</sup>
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

## ACCURACY<sup>5</sup>

	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 <sup>6</sup>	0.6 m RMS <sup>7</sup>
DGPS	0.5 m RMS	0.4 m RMS

Specifications subject to change without notice

<sup>1</sup> Parallel tracking (10-channel when tracking SBAS). <sup>2</sup> Standard configuration for handheld use. <sup>3</sup> No almanac or ephemerides and no approximate position or time. <sup>4</sup> Almanac and recent ephemerides saved, approximate position and time entered. <sup>5</sup> 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. <sup>6</sup> GPS only. Clock aligned to GPS system time. <sup>7</sup> GPS only.



STONEX AUTHORIZED DEALER

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