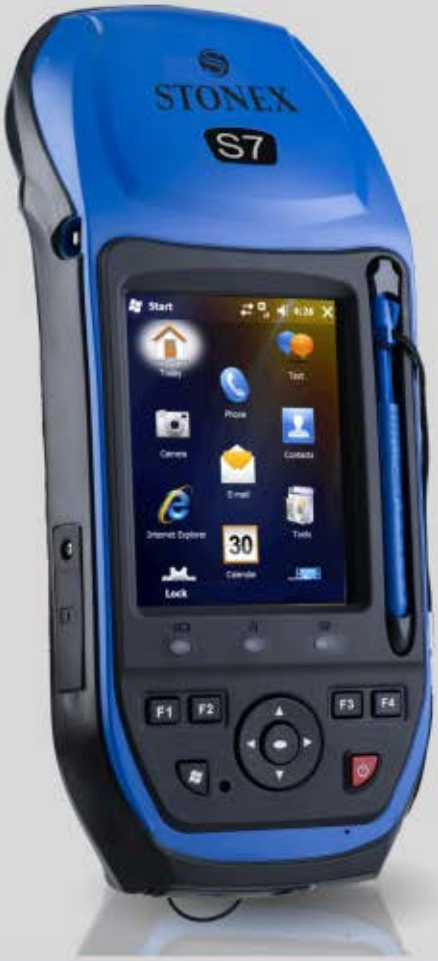
S7 Integrated GPS/GNSS System

STONEX



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.

Wi-Fi, Bluetooth, GPRS 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.

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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	
EDGE 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.

Windows Mobile™ Wi Fi Bluetooth FC CE RoHS

STONEX AUTHORIZED DEALER

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