FALCOM
WIRELESS COMMUNICATIONS GMBH

NAVI-S-U5

High sensitivity GPS receiver

- 50 channel u-blox high sensivity GPS receiver
- Integrated backup battery for SRAM and RTC
- Superior TTFF acquisition rate
- Very compact size
- Option: USB connector

The FALCOM NAVI-S-U5

is an integrated 50 parallel channel GPS receiver that features the u-blox UBX-G5010 high sensitivity chipset and consists of high-performance GPS core including acquisition accelerator, multipath mitigation hardware and satellite tracking engine.
The NAVI-S-U5 provides major advancements in GPS performance, accuracy, computing power and hardware integration. The device integrates an active GPS antenna, power regulation and interface circuitry as well as a backup battery for SRAM and RTC in a very compact form factor. The superior TTFF acquisition rate (< 29 s) allows the creation of high-efficient navigation, tracking, security and monitoring solutions.

The NAVI-S-U5 device can be connected to host devices supporting RS232 serial interface or USB 2.0 (i.e. board computers, laptops, PDAs etc.). The 1.5 m cable set can be easily customized to support big variety of standard handheld devices. The variable mounting options (magnetic base or adhesive path) provide additional flexibility during the installation procedure.
The NAVI-S-U5 concept is the perfect basis for creation of compact, high-efficient, low-cost applications that require GPS tracking signal input into a portable computing device.

Technical specification

General		**Acquisition rate TTFF**	Msg: GLL, GGA, RMC,VTG, GSV, GSA
50 channel u-blox UBX-G5010		Snap start < 1 sec average	**Physical characteristics**
L1 1575.42 MHz		Hot start < 29 sec average	52 mm (diameter) x 20 mm (height)
C/A code 1.023 MHz chip rate		Cold start < 29 sec average	weight: 67.8 g
Sensitivity		**Electrical characteristics**	temperature range: -40 to +85 °C
Tracking	-160 dBm	5 V VCC	**Interfaces**
Autonm acquisition	-144 dBm	45 mA (continuous mode), typical	1.5 m cable set RJ11 connector
		Protocols	USB connector (optional)
		NMEA, UBX binary (38400,8,n,1 @RS232)	

Note: Specifications and information given in this document are subject to change by FALCOM without notice.
For latest product information see www.falcom.de
The NAVI-S-U5 architecture is based on the UBX-G5010 single chip from u-blox, for more information about this chip and the u-blox5 protocol specifications please refer to the u-blox website: www.u-blox.com.