



## S3 Lone Worker Safety Wristwatch

*Easy to use SOS wristwatch phone!*



- 3G/2G phone in an analog wristwatch
- Single button SOS call
- Man down alarm
- No movement alarm
- GPS and beacon indoor location
- Battery low and critical alarms
- Long battery life

**NAVIGIL S3** wristwatch has been designed for lone workers who may face a situation where they need help during their work day.

### Get help in an emergency

Mobile phone function in Navigil S3 can be used to make amber alert calls in order to make a preannouncement to record forthcoming entry to a dangerous location and to make a red alert call to get help in an emergency. Possibility to call for help easily significantly increases worker safety and reduces accident related leave of absence days.

### Location tracking outdoors and indoors

GPS/GLONASS receiver in Navigil S3 is used outdoors to determine the location of the lone worker. Tracking can be either continuous or only when worker makes a red alert call. Beacons can be used to provide accurate indoor location without use of amber alert calls. A-GPS support enables GPS receiver to acquire location information very fast and even in challenging conditions. Beacons can be used to define zones or used individually to pinpoint wristwatch's location with 10 - 30 metre accuracy in good GPS satellite availability conditions. Beacons can be also used

to mark no entry danger zones causing immediate alarm upon entry.

### Easy to deploy

Navigil S3 comes with a SIM card pre-installed - simply select appropriate wearer profile and configure the phone numbers and the S3 is ready to go. Navigil S3 has profiles and configurations for various type of use cases. Richness of the user interface and default settings for each use case can be defined in a configuration. All configurations are enabled to receive phone calls from white listed phone numbers.

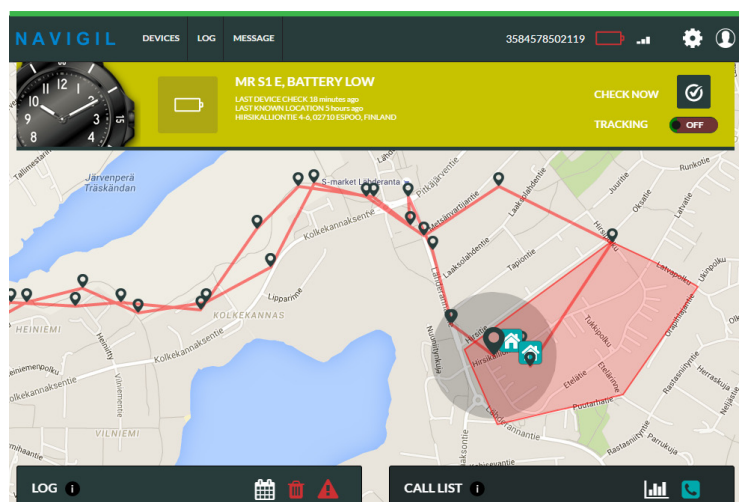
### System integration

Navigil Rafael service APIs be used to enable communication with workforce management and alarm receiving centre software solutions. Alarms and warnings can be sent via voice call, e-mail, SMS, IP and SCAIP channels.

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Industry benchmark footprint and functionality

<b>Mobile comms</b>	Modem type	Tri band 3G/GSM/GPRS/EDGE/UMTS/HSPA+ (EU and US versions)
	Communication	SMS, FTP, HTTP, TCP, UDP, USSD
<b>GNSS</b>	Receiver type	GPS/GLONASS receiver, SBAS WAAS/EGNOS/MSAS support
	Sensitivity	Acquisition -148 dBm, navigation -162 dBm
	A-GPS	A-GPS assistance (up to 28 days)
<b>Short range comms</b>	BLE	Bluetooth Low Energy communication with home and mini beacons
<b>MCU</b>	Processor	ARM Cortex-M3, 512 kbytes (total code memory)
	RAM & flash	64 kbytes (total RAM), 8 Mbytes (total data flash)
<b>Audio</b>	Microphone / speaker	Adjustable gain and volume control
<b>User interface</b>	Wearer profiles	Auto, easy, full and tracking (dementia) profiles
	Adjustable UI	Selected profile enables/disables UI features
	Watch	Analog watch, two software controllable hands
	Buttons	Crown, emergency call, speed dial and yes/no/up buttons
	LEDs	3 user interface / status LEDs
	Other	Two row OLED display, speaker, vibrator
<b>Sensors</b>	Onboard	3D accelerometer, temperature
<b>Battery</b>	Li-ion	500 mAh
<b>Operation time</b>	Phone always on	Typical 1 - 4 days, depending on use profile and conditions
<b>Software features</b>	Data communication	SMS, USSD, GPRS, HSPA+ with message buffering on data flash
	Over-the-air updates	Configuration, parameters, safe zone, firmware and boot loader
	Red Alert	Watch wearer initiated Red Alert call to Alarm Receiving Centre
	Amber Alert	Watch wearer initiated Amber Alert call to recording service
	User initiated phone calls	To alarm receiving centre and up to 8 speed dial numbers
	Receiving phone calls	Automatically or by user accepted calls, white list access control
	Automatic alarms	No movement, man down, danger zone entry (beacon)
	Other alarms	Battery critical, battery low
	Activity statistics	Wearer statistics including duration of very active, active, little movement, at beacon range by zone, out of beacon range periods
	Event reports	Periodic status, amber and red alert reports
<b>Temperature range</b>	Operation	Use: -20°C – +60°C, S1 charging 0°C – +45°C
<b>Certifications</b>		RoHS, CE, 99/5/EC
<b>Available versions</b>	S3	EU 3G/2G, US 3G/2G several wristwatch and strap designs Silicone strap for rough environment
<b>Enclosure</b>	S3	Splash water protected, standard strap, 22 mm interface
<b>Dimensions</b>	S3	Diameter 48 mm, thickness 17 mm, weight 65 gr. (normal strap)
<b>Beacons</b>	Charging dock	Easy to use charging dock with beacon functionality
	Battery beacons	Indoor location information



### Key features are:

- Red alert call with single push of a button
- Amber alert call
- Emergency location report