



## S3 Personal Safety Wristwatch

*Wristwatch phone and tracker for cognitively impaired persons!*



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

**NAVIGIL S3** wristwatch has been designed for persons who may face a situation where they need help in order to manage their daily life independently. Wristwatch wearer can safely go about with the knowledge that caregivers are only one phone call away. Caregivers can enjoy peace of mind knowing that the loved one is always reachable and if necessary locatable using the Navigil S3.

### Stay in touch

Navigil S3 can receive calls from white listed phone numbers using the inbuilt speaker and microphone. Incoming calls can be automatically answered by Navigil S3 if required. Wristwatch user can also make help request calls to a list of family and friends. Wristwatch users who have good dexterity can also make normal phone calls to persons in the white list.

### Detect changes in level of activity and routines

Activity reports can be used to identify persons whose level of activity or daily routines are changing. This enables implementation of preventive actions that improve wearer's quality of life while providing peace of mind to caregivers.

### Location tracking outdoors and indoors

Outdoors Navigil S3 uses a GPS receiver to determine the location of wristwatch wearer. Tracking can be either continuous or only when the watch wearer requires help. Beacons can be used to provide accurate indoor location. A-GPS support enables GPS receiver to acquire location information very fast and even in challenging conditions. Safe zones can be used to alert family members of watch wearer's exit from the area considered safe.

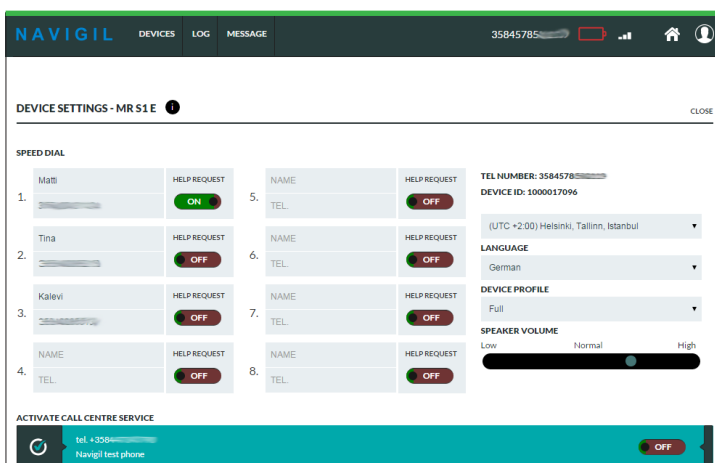
### Easy to deploy

Navigil S3 comes with a SIM card pre-installed - simply configure the phone numbers and Navigil 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.

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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 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:

- Mobile phone with speaker and microphone
- Status of wearer's location: at home or GPS location
- Alarm on of beacon range and safe zone exits
- Activity statistics can be used to identify changes in wearer's daily routines