



## Navigil 580 Mobile Wellbeing Wristwatch

*Stylish wellbeing tracker and SOS phone in a wristwatch!*



**NAVIGIL 580** wristwatch has been designed for persons who wish to stay active and keep track of their wellbeing. Navigil 580 display shows the level of achievement of the daily activity target and wellbeing data values to the wearer. Weekly and monthly achievement can be monitored in the Navigil Service in a web browser or in an App for iOS and Android.

### Detect changes in level of activity and routines

The wellbeing monitoring changes in the daily activity level and wellbeing data trends can be detected and preventive actions can be taken prior to the deterioration of condition. The analysis shows when the wearer is in a very active, active or non-active state in addition to the location data and wellbeing data trends.

### Activity data analytics

Navigil Service has AI (artificial intelligence) features that can be used to analyse the activity, wellbeing and location data. The analysis reports can be used to identify persons whose level of activity or daily routines are changing. Typically short term changes such as poor quality of sleep, gradually later start of the day and dramatical changes in

- LTE phone in an analog wristwatch
- Wearer activity tracking
- Wellbeing data tracking and analysis
- Sleep quality tracking
- Single button SOS call
- GNSS location reports
- Very long battery life


daily level of activity are clear indicators of change in wearer's wellbeing. Similarly gradual changes for the worse over a longer period of time indicate changes in wellbeing. Early detection of changes enable preventive care actions to be taken maintaining good quality of life while saving billions of euros in social and health care costs.

### Easy to deploy

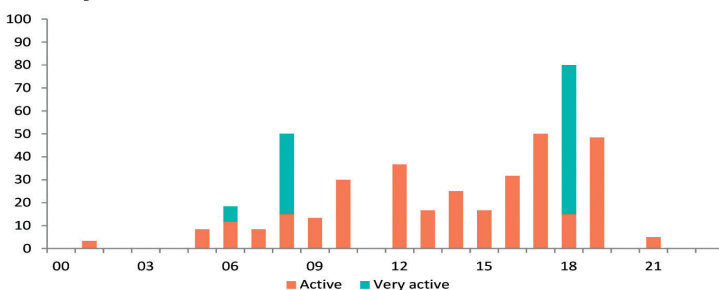
Navigil 580 comes with a SIM card pre-installed - simply select appropriate wearer profile and define phone numbers and Navigil 580 is ready to go. Navigil 580 has profiles for various types of wearers. Richness of the user interface in each profile is matched to the dexterity and capabilities of the wearer. All profiles are enabled to receive phone calls. Navigil Service includes emergency call and notification routing services in addition to SMS, e-mail and push notifications to App for alarms and warnings. Due to advanced power saving modes of the hardware and intelligent power management, Navigil 580 can operate up to four weeks on a single charge while being always registered to the mobile network and sending periodic reports.

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*Industry benchmark footprint and functionality*

<b>Mobile comms</b>	Modem type	LTE Cat-M1 modem supporting low bands B5/B8/B12/B13/B14/B17/B18/B19/B20/B26/B28 and mid bands B1/B2/B3/B4/B25/B39/B66
	Communication	FTP, UDP, TCP, VoLTE, VoIP
<b>GNSS</b>	Receiver type	GPS/GLONASS/Galileo/BeiDou receiver
	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 beacons
<b>MCU</b>	Processor	ARM Cortex-M4, 1.024 kbytes (total code memory)
	RAM & flash memory	128 kbytes (total RAM), 16 Mbytes (total data flash)
<b>Audio</b>	Microphone / speaker	Adjustable 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 controlled hands
	Buttons	Crown, Emergency call, two soft key buttons
	LEDs	2 user interface / status LEDs
	Other	Two row OLED display, speaker, microphone, haptic feedback
<b>Sensors</b>	Onboard	3D accelerometer, optical sensing for HR, HRV, respiration
<b>Battery</b>	Li-ion	500 mAh
<b>Operation time</b>	Phone always on	Up to four weeks, depending on used profile and conditions
	Phone on when required	Up to two months, depending on used profile and conditions
<b>Software features</b>	Voice communication	VoLTE and VoIP with secure interconnect to phone networks
	Data communication	Resilient with message buffering on flash
	Over-the-air updates	Configuration, parameters, safe zone, firmware and boot loader
	Safe zone functionality	Polygon or circle safe zones with validity time attributes
	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
	Alarms	Battery critical, battery low, no movement
	Activity statistics	Wearer statistics including duration of very active, active, little movement, beacon area, out of home periods
	Wellbeing data tracking	Heart rate, HRV and respiration statistics with trend analysis, circadian cycle tracking, go-to-sleep prompts and sleep/stress analysis
	Event reports	Periodic status, help request call, home beacon, activity statistics, battery status and charging reports, location reports
<b>Temperature range</b>	Operation	Use: -20°C - +60°C, charging 0°C - +45°C
<b>Certifications</b>		RoHS, CE, 2014/53/EC (RED)
<b>Available versions</b>	Navigil 580	EU, US, Asia LTE bands, several wristwatch and strap designs
<b>Enclosure</b>	Navigil 580	IP67 and shower proof, standard strap, 22 mm interface
<b>Dimensions</b>	Navigil 580	Diameter 46 mm, thickness 13.9 mm, weight 45 gr. (normal strap)
<b>Beacons</b>	Battery beacons	For indoor location and statistics on wearer's daily routines.

### Activity



### Key features are:

- Stylish shower proof analog watch
- Activity tracker with mobile call function
- AI activity and vital sign analytics
- Indoor beacon and outdoor GNSS location