TWIG Neo
The wearable 4G lone worker alarm

TWIG Neo is a wearable personal alarm device designed to adapt for various lone worker and personal safety needs. Multiple wearing options, scalability and small size make it ideal e.g. for laboratory, maintenance and health care staff. Even if very small, TWIG Neo provides all essential lone worker protection functions and it can be easily integrated with various monitoring systems.

Lone worker protection functions
• Automatic ManDown detection on tilt, non-motion and fall
• Device and server based Amber alert
• Distinct and tactile SOS key for panic situations
• 2-way hands-free voice calls
• SOS cycle with preprogrammable phone numbers
• Tracking and locating indoors and outdoors

Hybrid indoor / outdoor location
• Satellite positioning with 3-constellation GNSS
• TWIG Point AGNSS service for faster location fix
• Hybrid indoor location with TWIG SRD, Wi-Fi and Bluetooth Low Energy (BLE) beacons (SRD3 device option)
• TWIG Point Netloc service for public space location (cellular network + public available Wi-Fi base stations)
• TWIG Point Netloc service for on-site location (TWIG SRD beacons + on-site Wi-Fi base stations + BLE beacons)

Effective communication in emergency
• 2G/3G/4G
• Interactive on-screen messages
• Preprogrammed one-touch status messages
• One-touch voice calls

Small and scalable
• User Interface with configurable menu and function keys
• Discreet, light and user-friendly
• Multiple wearing options
• Robust nano SIM card tray

Sustainable product life-cycle
• Backwards compatible with previous TWIG devices
• Improved device maintenance
• Engineered and manufactured fully in-house

Remote device management
• TWIG Point Remote Configurator
• Firmware over the air (FOTA)
• Access with TWIG Point SP web account
• Saves time and money in customer support

Lone worker protection
Duty of care requires employers to give lone workers means to alert help. Depending on risk assessment, a dedicated alarm device may be required. An automatic ManDown alarm is sent when device user falls or is not moving. When entering a risky situation, enhanced monitoring can be requested with Amber alert. TWIG Neo can trigger alert in ARC also in absence of mobile network connection.****

Scalable for your needs
TWIG Neo can be widely adjusted to specific needs by selecting only the needed options and functionalities and by configuring it for specific lone worker situations.

With remote configuration possibility TWIG Neo is fast to deploy and flexible to operate. It is also USB programmable, either manually or from file.

Configurable UI and keypad
The configured menu key gives fast access to main functionalities. Also the red and green function keys can be configured to replace their primary functions with any other of the functionalities available.

Multiple wearing options
TWIG Neo is compatible with multiple wearing options: belt clip, lanyard, bracelet and carbine hook.

The ripcord of the carrying strap provides the possibility for triggering alarm when detached from device. The rip alarm is a useful functionality especially for many service sector lone workers facing the risk of harassment, violence and aggression in their daily work.

Attendance monitoring with SRD Tag
TWIG Neo registers attendance by swiping TWIG Tag short range device fastened e.g. on the wall next to door.

Indoor positioning
In many buildings GNSS satellite signals are blocked and GNSS-computed location is not available at all.

The indoor location is possible with the device option SRD3 enabling the accurate indoor location by using signals from TWIG SRD beacons, Bluetooth Low Energy beacons or Wi-Fi base stations installed in the building.

Alarms monitoring and tracking
TWIG Integrator Kit resources enable integrating TWIG devices with alarm receiving centre (ARC).

Optionally the TWIG Point Monitor cloud service provides a turn-key solution for alarms monitoring and tracking.

Alarms and reports can also be received on smartphone as SMS with web map link.

Worn with lanyard and ripcord TWIG Neo suits especially for front office, health care and social workers

• TWIG Neo worn with lanyard and ripcord is easy to carry and quick to reach
• Lanyard is equipped with magnet launching rip alarm when detached from device
• Rip alarm is available only with TWIG Neo equipped with lanyard and ripcord magnet
• Optional ID badge holder extends device use for front office and social and health care staff.

• TWIG Neo worn on wrist is your safety watch always at hand
• Worn on wrist TWIG Neo is quick to activate in case of emergency
• It is ideal for laboratory workers or similar lone worker jobs where wearing a watch is not disturbing the daily duties

The preferred choice of maintenance workers is to wear TWIG Neo on belt or pocket fastened securely with belt clip

• The robust belt clip is easy to click on device
• The belt clip makes TWIG Neo wearable on belt or clothing
• Fast to clip on and remove

• With the combination of carbine hook and velcro loop wearing options are various: clipped on clothes or any other wearables
• Also the velcro loop alone is an option for fastening the device tightly

TWIG Neo clipped to keys, bags, clothes or lanyards with carbine hook provides flexibility e.g. for logistics, home care and social workers.

TWIG Neo
Technical Specification (TLP54EU)

Compatibility and communication
• Communicates with all systems using MPTP (Mobile Phone Telematics Protocol) both SMS and GPRS (IP).
• Tracking and alert messages include information on satellite positioning, TWIG SRD beacons, speed, heading and battery charge.

Mechanics
• Dimensions: 18 mm x 46 mm x 62 mm
• Weight: 54 g including battery
• Water and dust proof (IP67), shock resistant
• Firm grip with tactile silicone keypad

Key telematics functions
• Manual alert through SOS key
• ManDown alarm with 4 automatic alert triggers: device orientation, non-movement, free fall and impact
• Two-way 4G/3G/GSM voice with speaker
• Device and user status messages
• Interactive on-screen messages
• GNSS satellite positioning
• TWIG Beacon SRD / Wi-Fi / BLE location*
• Geofence

Key technical features
• GSM: 900/1800 MHz
• WCDMA: Bd.1 (2100MHz)/Bd.3 (1800MHz)/Bd.5 (850MHz)/Bd.8 (900MHz)
• LTE-FDD: Bd.1 (2100MHz)/Bd.3 (1800MHz)/ Bd.5 (850MHz)/Bd.7 (2600MHz)/Bd.8 (900MHz)/ Bd.20 (800MHz)/Bd.28 (700MHz)
• LTE-TDD: Bd.38 (2600MHz)/Bd.40 (2300MHz)
• Built-in GSM, SRD*, GNSS, WiFi*, BLE* antennas

Provisioning and security
• Remote or local configuration
• Authorisation of remote and local access
• SSL/TLS secured server connection
• Firmware over the air (FOTA)

Operating time and temperature
• Rechargeable 750 mAh Li-ion battery
• Typical operating times, GNSS satellite positioning/ cellular data reporting**
• 4 days (1 report / hr)
• 2 days (1 report / 10 min)
• 15 hours (1 report / min)
• 4 hours (1 report / 5 sec)
• Up to 12 days (cellular network standby)
• Recharging time*** < 3 hrs for 95 %
• Operating temperature -20°C... +50°C

Satellite positioning system
• High performance multi constellation GNSS receiver (GPS, Glonass and Galileo)
• Time to first fix: < warm start 10 s; cold start < 35 s
• Configurable opt-out and roaming block
• Extended ephemeris on-board generation
• Motion based GNSS control

TWIG Point turn-key services
• TWIG Point Remote Configurator for device settings management over the air
• TWIG Point Netloc service for public space location (cellular + Wi-Fi) and for on-site location (TWIG SRD + Wi-Fi + BLE)
• TWIG Point AGNSS for faster GNSS location (free of charge)
• TWIG Point Monitor for alarms monitoring and tracking
• TWIG Point Site for site planning and management

Display and keys
• Alterable SOS key colour
• LCD display with guiding symbols
• Preprogrammable function keys and menu key

Software and resources
• TWIG Configurator PC app
• TWIG FirmwareLoader PC app, FOTA
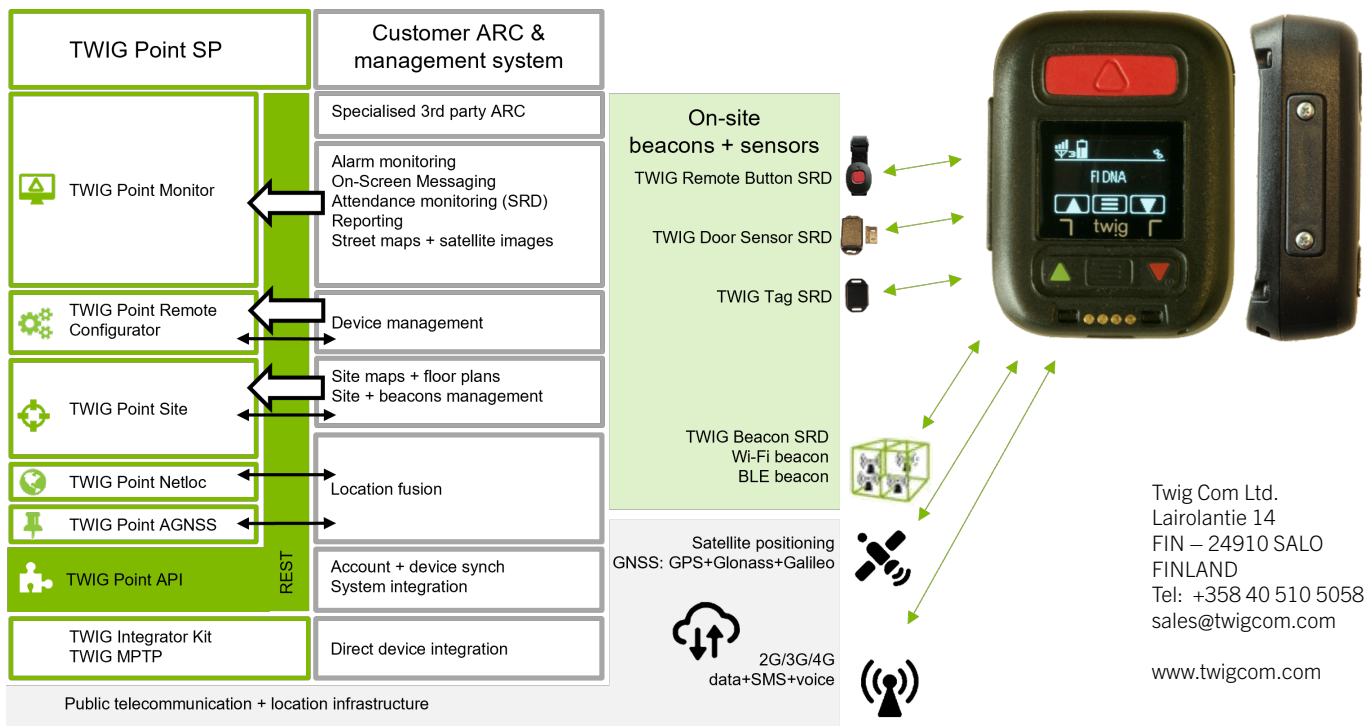• TWIG Integrator Kit for ARC integration

Standard sales package
• TWIG Neo 2G/3G/4G personal alarm device with integral battery
• Charger with adapter of choice (EU/UK/AU)
• Carrying option of choice (belt clip, lanyard, bracelet, carbine hook or ID badge holder with lanyard)

Optional device features
• 2G only* (TLP52EU)
• GNSS satellite positioning*
• ManDown alarm*
• SRD3* for device compatibility with TWIG short range devices (SRD), Wi-Fi and BLE beacons

Accessories
• Charging and programming stations
• Alterable SOS key colour
• Belt clip
• Lanyard
• Bracelet
• Carbine hook
• ID badge holder and lanyard
• Car charger
• TWIG Beacon SRD*
• TWIG Remote Button SRD*
• TWIG Door Sensor SRD*
• TWIG Tag SRD*

TWIG Point SP	Customer ARC & management system
	Specialised 3rd party ARC
TWIG Point Monitor	Alarm monitoring / On-Screen Messaging / Attendance monitoring (SRD) / Reporting / Street maps + satellite images
TWIG Point Remote Configurator	Device management
TWIG Point Site	Site maps + floor plans / Site + beacons management
TWIG Point Netloc	Location fusion
TWIG Point AGNSS	
TWIG Point API	Account + device synch / System integration
TWIG Integrator Kit / TWIG MPTP	Direct device integration

Public telecommunication + location infrastructure

On-site beacons + sensors
- TWIG Remote Button SRD
- TWIG Door Sensor SRD
- TWIG Tag SRD
- TWIG Beacon SRD / Wi-Fi beacon / BLE beacon

Satellite positioning GNSS: GPS+Glonass+Galileo

2G/3G/4G data+SMS+voice

Run TWIG Point module with UI

No API integration needed

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