

TWIG Protector Ex

The Intrinsically Safe Lone Worker Alarm



TWIG Protector Ex is an intrinsically safe 3G/GSM/GNSS personal alarm device designed to protect lone workers in explosive hazardous areas.



Dedicated alarm device

- ManDown++, Amber alert
- SOS key for panic situations
- 2-way voice
- IP67 waterproof



Small and smart

- Plain text On-Screen Messages
- LCD display with guiding symbols
- Pre-programmable status keys



ATEX/IECEX approved

- II 2 G Ex ib IIC T4 Gb
- II 2 D Ex ib IIC T130°C Db
- VTT 16 ATEX 040X / IECEx VTT 16.0009X



Location fusion

- Using all means to find the person in distress
- TWIG Point Netloc and TWIG Point AGPS
- TWIG Beacon SRD on-site locating devices



TWIG life cycle economies

- Support services
- Engineered and manufactured in-house by TWIG



Remote device management

- TWIG Point Remote Configurator
- Saves time and money in customer support

Dedicated lone worker alarm

Duty of care requires employers to give lone workers means to alert help. Depending on risk assessment, a dedicated alarm device may be required.

- Automatic ManDown++ function can trigger alert if user is incapacitated.
- When entering a risky situation, enhanced monitoring can be requested with Amber alert. It can trigger alert in ARC also in absence of GSM connection.****



ATEX/IECEX compliance

TWIG Protector Ex complies with ATEX standards 60079-0:2012/60079-11:2012 and IECEx standards 60079-0:2011/60079-11:2011.

Efficient deployment

Remote configuration makes TWIG device fast to deploy and flexible to operate. Also USB programmable, either manually or from file.

Alarms monitoring and tracking

TWIG Integrator Kit resources enable integrating TWIG devices with alarm receiving centre (ARC).

Optionally the TWIG WebFinder SP software provides a turn-key solution for testing or deployment.

Alarms and reports can also be received on smartphone as SMS with [web map link](#).

Attendance monitoring

TWIG personal alarms register attendance by swiping TWIG Tag RF identifiers.



TWIG Protector Ex

Technical specification (TUP92EU)

Compatibility and communication

- Communicates with all systems using MPTP (Mobile Phone Telematics Protocol) both SMS and GPRS.
- Tracking and alert messages include information on GPS / TWIG Beacon locating devices, speed, heading and battery charge.

Provisioning and security

- Remote or local configuration
- Authorisation of remote and local access
- NOTE! Programming allowed only with TWIG Ex USB cable of device type FME92EU.

Mechanics

- Dimensions: 20 mm x 45 mm x 94 mm
- Weight: 114 g including battery
- Waterproof (IP67) and shock resistant

Key telematics functionality

- Manual alert through SOS key
- ManDown++ alarm with four automatic alert triggers: device orientation and non-movement, free fall and impact
- Amber alert (timer alert, local + server based)
- Two-way 3G/GSM voice with speaker
- Device and user status messages
- Interactive on-screen messages
- GPS / TWIG Beacon SRD tracking*
- Geofence

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Key technical features

- Quad-band GSM (850/900/1800/1900 MHz)
- 5-band 3G (800/850/900/1900/2100 MHz)
- Built-in GSM, SRD and GPS antennas
- Operating temperature -20° C.. +40° C
- Alert tones
- Vibrating alert

Operating time

- Rechargeable 1300 mAh Li-ion battery
- Typical operating times, GPS/GPRS reporting**

7 days (1 GPS report / hr)
 4 days (1 GPS report / 10 min)
 24 hours (1 GPS report / min)
 8 hours (1 GPS report / 5 sec)
 Up to 12 days (GSM standby only)

- Recharging time*** < 4 hrs for 95 %
- NOTE! Charging allowed only with TWIG Ex charger of device type CME92EU (or with USB cable FME92EU).

GNSS

- High performance 48-channel receiver
- Multi constellation GNSS receiver (GPS, Glonass, Galileo and BeiDou)
- Time to first fix: Hot start 1 s; cold start < 35 s
- Extended ephemeris on-board generation
- Motion based GPS control
- AGPS via TWIG Point Services

Display and keys

- Dedicated ergonomic SOS key
- Backlit LCD display with guiding symbols
- Pre-programmable quick dial / status keys
- Answer
- Power On / Off / End call

Sales package content

- TWIG Protector Ex personal alarm device with integral battery
- TWIG Ex USB cable and TWIG Ex charger with adapter of choice (EU/UK/AU)
- User and safety documents

Optional device features

- SRD (short range device) compatibility*

Accessories

- TWIG ATEX SRD devices:
 - TWIG Beacon Ex SRD locating device*
- Non-ATEX SRD devices:
 - TWIG Beacon SRD locating device*
 - TWIG Tag SRD RF identifier*
 - TWIG Button SRD wireless alarm*

Software and resources

- TWIG Configurator PC app
- TWIG FirmwareLoader PC app
- TWIG WebFinder monitoring SaaS
- TWIG Integrator Kit for ARC integration

TWIG Point Services

- Remote Configurator: turn-key service to manage all device settings over the air
- Netloc: turn-key cellular location service
- AGPS: turn-key service to speed up GPS

