

twig

TWIG One Ex

ATEX safety. Built for demanding use.

An ATEX/IECEx-certified lone worker alarm designed for hazardous industrial environments, combining intelligent alarms and advanced positioning in a rugged, purpose-built device.



ATEX-CERTIFIED SAFETY

- Intrinsically safe for hazardous areas
- Certified for explosive gas and non-conductive dust
- Designed for demanding industrial conditions

ALWAYS ACCURATE LOCATION

- GNSS positioning outdoors
- SRD, Wi-Fi and BLE indoor location
- Hybrid location on public areas and on site

BUILT FOR INDUSTRIAL WORK

- IP67-rated, shock-resistant design
- Tactile keypad and configurable shortcuts
- Optional NFC attendance monitoring

ONE-PRESS SOS

- Dedicated tactile emergency button
- Automatic alerts in fall, free fall and non-movement
- Amber alert for enhanced monitoring

POWERFUL COMMUNICATION

- Hands-free two-way voice calls
- High-power speakerphone and dual microphones
- Strong vibration and audible alerts

FLEXIBLE SAFETY INTEGRATION

- Compatible with alarm receiving centres
- Remote configuration and firmware updates
- TWIG Point cloud service support

ATEX protection where it matters

TWIG One Ex provides certified lone worker protection in potentially explosive atmospheres. Its intrinsically safe design makes it suitable for industrial environments where explosive gases or non-conductive combustible dust may be present, within its approved ATEX/IECEx classifications.

Automatic protection in emergencies

A dedicated SOS button enables immediate manual alarms. Automatic Mandown detection can trigger alerts following a fall, abnormal device orientation or prolonged inactivity. Amber alert provides enhanced monitoring when entering higher-risk situations.

Clear communication in noisy areas

A high-power speakerphone, dual microphones and strong vibration alerts support communication in noisy environments. Programmable keys provide quick access to essential safety functions.

Best available location

TWIG One Ex uses TWIG Point hybrid location to automatically provide the most accurate available position. In public areas, it combines three-constellation GNSS, cellular networks and available Wi-Fi base stations. On industrial sites, positioning can be enhanced with TWIG SRD, Wi-Fi and BLE beacons for more precise indoor location, including floor-level identification.

Designed for daily industrial use

The IP67-rated, shock-resistant construction, tactile keypad and configurable user interface support daily use in demanding workplaces. Optional NFC attendance monitoring enables check-ins at designated locations.

Connected to your safety system

TWIG One Ex integrates with compatible alarm receiving centres and TWIG Point cloud services for alarm monitoring, location tracking and remote device management. Configurable functions allow the device to adapt to different industrial safety procedures.

COMMUNICATION

- 2G / 3G / 4G cellular*
- Communicates with all systems using MPTP via SMS and GPRS/IP
- Wi-Fi VoIP* and data
- Two-way speakerphone

CELLULAR BANDS

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

DESIGN AND DURABILITY

- 102.1 x 48.9 x 24.6 mm
- 130 g
- water and dust proof (IP67), shock-resistant
- Tactile silicone keypad

AUDIO AND ALERTS

- Speakerphone with 2 microphones
- Powerful vibration alert
- Configurable alert indications

LWS FEATURES

- Dedicated SOS key
- Mandown alarm: device orientation, non-motion, free fall and impact
- Amber alert and geofence functions
- Device and user status messages
- Interactive on-screen messages
- Tracking and alert messages include information on satellite positioning, TWIG SRD beacons, speed, heading and battery charge.

LOCATION

- GNSS: GPS, GLONASS, Galileo
- TWIG Point hybrid location service*: cellular network + public available Wi-Fi base stations and on-site: SRD, Wi-Fi, BLE
- Floor-level location with configured on-site beacons

GNSS PERFORMANCE

- Warm start: <10 s
- Cold start: < 35 s
- Configurable opt-out and roaming block
- Extended ephemeris
- Motion based GNSS control
- AGNSS assistance

BATTERY & OPERATING TIME

- Rechargeable 1200 mAh Li-ion battery
- Typical operating times**, GNSS satellite positioning/cellular data reporting
- 8 days: 1 report/hour
- 4 days: 1 report/10 min
- 30 hours: 1 report/min
- 9 hours: 1 report/5 sec
- Recharging time*** < 4 hrs for 95 %
- DO NOT CHARGE IN HAZARDOUS (Ex) AREAS!
- Charging is permitted only outside hazardous (Ex) areas using the approved TWIG Ex safety cable or safety box (FME92EU) with a 5-6V DC USB charger

DISPLAY & KEYS

- LCD display with guiding symbols
- Programmable function keys
- Four numeric shortcut keys
- Amber alert and Mandown keys
- Changeable SOS key colour

DEVICE MANAGEMENT

- Remote and local configuration
- Authorisation of remote and local access
- SSL/TLS secured server connection
- Firmware updates / FOTA
- NOTE! Programming allowed only with TWIG Ex USB cable of device type FME92EU.

TWIG POINT SERVICES

- Public and on-site hybrid location
- AGNSS assistance
- Remote configuration and management
- Alarms tracking and monitoring
- Site planning and beacon geocoding

OPTIONAL DEVICE FEATURES

- SRD3*: SRD, Wi-Fi, BLE
- Wi-Fi-only* device variant
- NFC* reader, 13.56 MHz

STANDARD PACKAGE

- TWIG One Ex with integrated battery
- TWIG Ex USB cable and charger
- AU / EU / UK adapter
- User and safety documents

ACCESSORIES & SOFTWARE

- Charging/programming/smart stations
- Belt clip, Ex case, car charger
- TWIG Beacon Ex SRD*
- Multi-device charging stations and chargers for 5 or 25 devices
- Configurator, FirmwareLoader
- ARC Integrator Kit

ATEX / IECEx APPROVED

- Gas: II 2 G Ex ib IIC T4 Gb
- Dust: II 2 D Ex ib IIBB T130°C Db
- Ta: -20°C to +60°C****
- EESF 20 ATEX 045X / IECEx EESF 19.0020X



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