

# TWIG SRD Beacons

## Indoor Positioning, Enhanced Accuracy



When GNSS signals are weak or unavailable indoors, locating a distressed worker becomes difficult and response times increase.

TWIG SRD beacons extend the capabilities of TWIG lone worker alarm devices by enabling accurate indoor positioning in environments where satellite-based methods do not deliver sufficient accuracy.

### Built to last

TWIG SRD beacons are engineered for reliable, long-term operation in demanding environments. The integrated high-capacity battery provides years of operating time, minimizing maintenance and ensuring continuous performance.

The IP67-rated enclosure protects against water and dust, enabling consistent performance in harsh and industrial conditions.

### Easy to deploy

TWIG SRD beacons are instantly operational, allowing rapid installation without complex setup. Over-the-air configuration simplifies system deployment and allows settings to be updated remotely.

### Indoor positioning

Deployed as a microcell network, TWIG SRD beacons create a reliable positioning layer that ensures location data remains available when it matters most. This allows alarm receiving centres to access precise location information and respond faster to incidents.

### Precision by range

Standard range beacons provide broad coverage for efficient site-wide deployment, while reduced range beacons enable smaller cell networks for even higher positioning accuracy. In multi-storey environments, reduced range beacons help isolate signals by floor, preventing overlap between levels and ensuring more precise location data.

### ATEX beacons

ATEX-certified beacons are available for use in potentially explosive atmospheres, making the solution suitable for industries such as oil and gas, chemical processing, and heavy industry, where both safety and compliance are critical.

### Scalable system

The modular structure of the TWIG SRD system allows flexible deployment. Devices can connect to multiple beacons, making it easy to scale the system from small installations to large sites while maintaining consistent performance.

twig

# TWIG SRD Beacons

## Technical Specification (TST90EU and TST90EX)

### Short-range location system

- Location determined using RF beacon signals
- Complement GPS location indoors

### Compact and simple

- Discreet design
- Instantly operational
- Wireless configuration
- Scalable coverage up to 20 000 m2 per beacon\*\*
- Increased positioning accuracy
- No location server system required

### Compatibility

- TWIG Beacons are compatible with TWIG personal alarm device to the ARC using MPTP (Mobile Phone Telematics Protocol) messages over SMS or GPRS.

### Communication

- Beacon data is transmitted from the TWIG personal alarm device to the ARC using MPTP (Mobile Phone Telematics Protocol) messages over SMS or GPRS.

### Setup and security

- Over-the-air configuration
- TWIG Beacon Configuration Adapter
- TWIG Beacon Configurator PC application
- Secure configuration

### Brief technical specification

- Dimensions: 80 mm x 82 mm x 56 mm
- Weight: 305 g with battery
- Operating temperature -20°C...+60°C
- Power supply alternatives:
- Lithium primary battery 19 Ah
- Operating time: 4 years\*\*\* (typical, with lithium primary battery)
- Operating frequency: 869,675 MHz (EU), 918,675 MHz (AU)
- Transmitting cycle: 4-99 s (adjustable)
- Transmitting power level: -30 dBm - +5 dBm
- Frequency deviation: +/- 5 kHz

### Typical ranges\*\*

TX level	Standard range (m)	Reduced range (m)
5	80	20
0	40	10
-10	20	5
-20	10	3
-30	5	1

### Mechanics

- Water and dust proof (IP67)

### ARC integration alternatives

- Display beacon name
- Beacons reference list at ARC

### Accessories

Wireless Configuration Adapter + USB cable

### ATEX compliant beacon

- TST90EX
- II 2 G Ex ib IIC T4 Gb
- Zone 1 Category II Gas intrinsically safe temperature class 4
- Operating temperature: -20°C...+60°C

### Sales package content

- TWIG Beacon
- Integrated lithium primary battery 19 Ah
- Printed quick installation & configuration guide

### Model options

- Standard or reduced range
- AU or EU frequency



### Twig Com Ltd.

Lairolantie 14  
FIN – 24910 SALO  
FINLAND  
sales@twigcom.com

[www.twigcom.com](http://www.twigcom.com)

Product images are indicative only, actual product details may differ. Twig Com reserves right to change all information without prior notice. \*Some product versions only. \*\*Beacon range varies substantially depending on environment and receiving device. \*\*\*Operating times may vary substantially depending on environment and the adopted configuration. TWIG is a registered trade mark of Twig Com Ltd. More information: [www.twigcom.com](http://www.twigcom.com)

twig