

TWIG Point SP

The Service Provider Platform for TWIG Personal Alarms

TWIG Point SP is a modular suite of cloud services to manage and monitor TWIG personal alarm devices.

Deployed internationally in minutes, the TWIG Point SP combines ease of use and remote device management with powerful features such as location fusion, custom floor plans and API.

The Service Provider model puts you in the driver's seat: Your business, your customer relations, your pricing.



TWIG Point Remote Configurator

- Saves time and money in customer support
- Over-the-air management of all device settings



TWIG Point Site

- Save time and money deploying indoor location
- Load site maps and floor plans – drag and drop beacons in place
- TWIG Beacon SRD, WiFi, BLE, TWIG Door Sensor SRD, TWIG Tag SRD



TWIG Point Netloc

- Turn-key indoor location, world-wide
- Add custom on-site beacons as needed (SRD, WiFi, BLE)



TWIG Point Monitor

- Deploy alarms monitoring and tracking in minutes
- Turn-key location fusion with TWIG Point Netloc and AGNSS
- Custom site maps and floor plans with TWIG Point Site
- Communicate with On-Screen Messages



TWIG Point AGNSS feed

- Speeds up first acquisition after exiting buildings
- Free of charge – no excuse for compromising location quality



TWIG Point API

- Improve your ARC system with select TWIG Point modules
- REST JSON + run TWIG Point modules with user interface

Turn-key and modular

Pick only those system elements needed to complement your ARC and management system, or deploy TWIG Point SP as a turn-key platform.

Service provider model

TWIG Point SP account enables the safety service provider to create and manage customer accounts and customer devices and to access reports for billing. You control your customers and your business model.

Save time and money

Reduce capital expense in ARC software. Open new customer accounts free of charge. Deploy new TWIG devices in a matter of minutes and manage them remotely.

Improve ARC with minimum mods

Many TWIG Point services can work with your ARC system without system integration. Run TWIG Point modules, complete with user interface, from your system. Synch accounts and devices automatically with TWIG Point API.

Location fusion saves lives

Locate TWIG devices with assisted satellite location (AGNSS), TWIG Beacon Short Range

Devices (SRD)*, WiFi*, Bluetooth Low Energy (BLE*) and cellular networks. TWIG Point Netloc provides turn-key indoor location, world-wide*. Add on-site SRD + WiFi + BLE beacons, as and if needed.

Alarms monitoring and tracking

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

Optionally the TWIG Point Monitor software provides a turn-key solution for testing or deployment.

Lone worker safety

Duty of care requires employers to give lone workers means to alert help. Depending on risk assessment, a dedicated alarm device maybe required. Location information can be critical to direct responders to the distressed person. TWIG Point AGNSS improves satellite location availability. TWIG Point Netloc provides on-site and off-site indoor location. Alarms from panic button and automatic ManDown++ function can be monitored and located on the TWIG Point Monitor. When entering a risky situation, request enhanced monitoring with Amber alert.

Attendance monitoring

Register attendance by swiping TWIG Tag RF identifiers, or by following TWIG Door Sensor indications.

Assisted living

Telecare solutions powered by TWIG enable those with long-term care needs to enjoy more independent and active lives.

Personal protection

TWIG alarm improves safety through SOS key, two-way voice and hybrid satellite / indoor location.

Mobile monitoring

TWIG Point application can be accessed on mobile devices.



Device

Write to Device
Read From Device
Reboot Device
Factory Reset Device
Settings File
Save To File
Load From File
Manage Files

Other:

Open GPRS Connection
Reset pending settings
Reset all settings

TWIG Point Remote Configurator

DXILs

General Settings

GSM

GPS/GNSS

TWIG SOS Settings

SOS Key Activation Mode

Edit

Two Phase

Device: Long Press

Post Emergency Usage

Edit

Off

TWIG Point Remote Configurator

Remote management of TWIG personal alarm devices

TWIG Point Remote Configurator is a cloud service for turn-key over-the-air configuration of TWIG personal alarm devices.

It can also be invoked from your central station system over the TWIG Point API, saving a lot in development cost.



Over-the-air device management

- Remotely program all device settings
- See devices status at a glance



Improved customer service

- Faster response and problem resolution
- Remotely support new device deployment



Reduced field support cost

- Eliminate customer visits
- Remote diagnostics and trouble-shooting
- Reduce reverse logistics



Embed in your ARC system

- Save money in development
- Invoke as turn-key module through API

Remote device management

Control remotely all functions of TWIG devices. Two-way IP communication between device and server ensure there's no need to pay SMS fees for device management.

Deploy in minutes

When adding new device to a customer account, TWIG Point Remote Configurator knows its model and configuration and which settings are allowed. Select your mobile operator from list for ready-made communication settings. Configurations are transmitted over the air – soon device is ready to operate.

Save in system development cost

Developing and maintaining remote device configuration facility for a range of devices and functions is tedious and costly. Your ARC and management system can now invoke TWIG Point Remote Configurator as a turn-key module complete with user interface. TWIG Point API provides for straightforward integration.

Reuse and standardize device settings

Once developed and tested, known-good device configurations sets can be stored and later retrieved for fast deployment of new devices.

Devices status at a glance

Situational awareness of the devices field base is provided through a dashboard with icons and traffic light indication of pending configurations. Drill down on details of device hardware and software configuration and settings.

Compatible TWIG device types

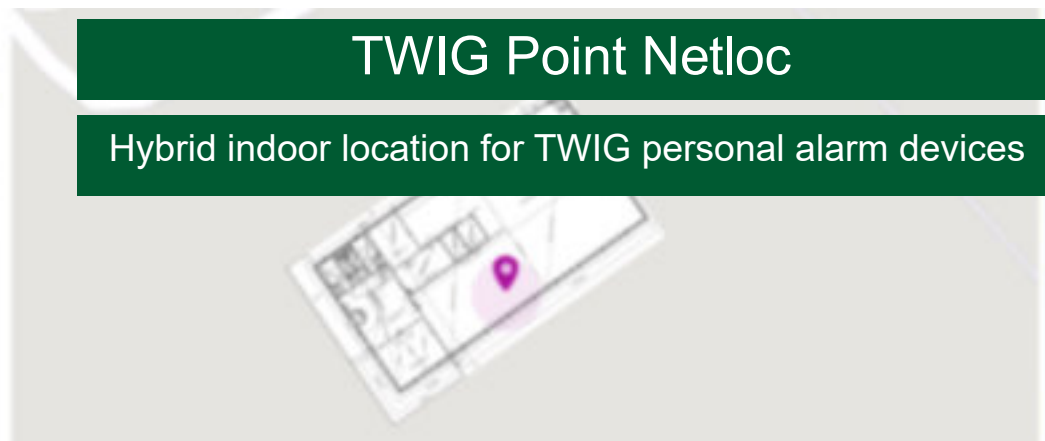
TUP93EU, TUP92EU, TUP91EU and RG310.

TWIG Point SP

TWIG Point SP is a modular suite of cloud services to help you and your system to manage and monitor TWIG personal alarm devices.

Deployed internationally in minutes, the TWIG Point SP combines ease of use and remote device management with powerful features such as location fusion, custom floor plans and API.

The no-nonsense Service Provider model puts you in the driver's seat: Your business, your customer relations, your pricing.



TWIG Point Netloc makes indoor location easy.

First, get turn-key indoor location, world-wide, on service activation. Then, just add custom on-site beacons (SRD, WiFi, BLE), as and if needed.

All these locations come from the same service, delivered either to TWIG Point Monitor for visualisation, or to your ARC system as usually over the familiar MPTP protocol.



Get help where it is needed

- Responders need accurate and timely alert location
- Urban environments limit GNSS satellite signals



Zero system integration

- Single location feed independent of signal source
- Delivery to ARC over familiar MPTP protocol



Location fusion

- Use multiple terrestrial and satellite signals to locate
- Leverage public signals + custom on-site beacons



Easy management of on-site beacons

- TWIG Point Site application
- Custom site maps and floor plans
- Drag and drop beacons in place



Turn-key and scalable

- Works world-wide on service activation (SRD3 required*)
- Refine coverage with custom on-site beacons



Low CAPEX and OPEX

- On-site hardware not necessarily needed
- Choice of optimal beacon technology

Location saves lives

Accurate and timely alert location information is critical to responders. Most field operations are set in urban environment with poor GNSS satellite signals. Depending on the user scenario, either ubiquitous or limited-site indoor location is required, or both.

Deploy in minutes

TWIG Point Netloc provides instant wide-area indoor location, world-wide in fact, as soon as the service is activated (SRD3 device option required)*.

Refine on-site coverage

Where controlled location coverage in limited sites is required, location beacons can be effectively deployed using the TWIG Point Site application for planning and management.

Mix on-site beacons freely

For best spectrum reliability, IP68 protection, and optional Ex protection, deploy TWIG Beacon SRD locating devices. Existing WiFi base stations can double as location beacons, at no extra cost. Complete coverage with BLE beacons.

No mandatory system integration

TWIG Point Netloc works and provides indoor location to your ARC system without system integration. Location is transmitted to ARC over the familiar MPTP protocol. Optionally TWIG Point API provides for automated account and device registration synch.

Compatible TWIG device types

- TUP93EU and TUP92EU (SRD3 required for WiFi and BLE)
- TUP91EU (only cellular and SRD beacons)

TWIG Point SP

TWIG Point SP is a modular suite of cloud services to help you and your system to manage and monitor TWIG personal alarm devices.

Deployed internationally in minutes, the TWIG Point SP combines ease of use and remote device management with powerful features such as location fusion, custom floor plans and API.

The no-nonsense Service Provider model puts you in the driver's seat: Your business, your customer relations, your pricing.



TWIG Point AGNSS

Satellite location assistance for TWIG personal alarm devices

TWIG Point AGNSS (Assisted GNSS, or Global Navigation Satellite System) speeds up first satellite location acquisition after exiting buildings, and is essential for urban and suburban user scenarios with back and forth movement indoors and outdoors.



Get help where it is needed

- Responders need accurate and timely alert location
- Urban environments limit GNSS satellite signals



Faster satellite location after exiting buildings

- Higher probability of getting GNSS location
- “Warm” GNSS receiver at all times



Free of charge

- No excuse to compromise location quality
- Prerequisite: mobile data subscription



Turn-key

- Just switch on in TWIG Configurator, or in TWIG Point Remote Configurator
- No system integration required



No hooks

- No TWIG Point subscription required
- No hidden service fees (mobile data charges apply)

Highly recommended

TWIG Point AGNSS can make the difference between responders finding to the distressed person or not, especially in the typical urban settings with poor satellite reception. The only drawback is a marginal increase in mobile data cost and battery power consumption.

Low data cost

TWIG Point AGNSS typically uses 0.6 MB mobile data monthly. Care should be taken to avoid excessive roaming charges if abroad.

Why it works?

The Achilles' heel of GNSS satellite systems is the requirement to download calibration data from satellites, over a slow and unreliable radio link. TWIG Point AGNSS eliminates this by loading the data over mobile network instead, greatly easing satellite signal quality requirements and increasing GNSS location availability. It is still safe to assume that typically there is no AGNSS location available indoors.

Compatible TWIG device types

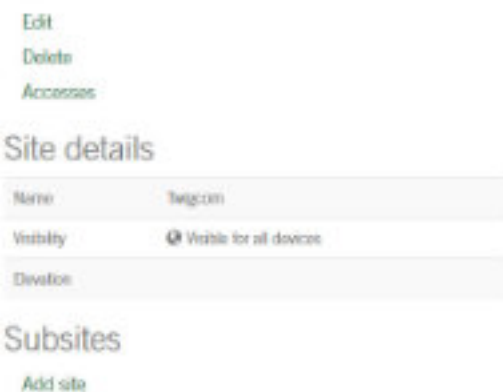
- TUP93EU, TUP92EU, TUP91EU and TUP90EU.

TWIG Point SP

TWIG Point SP is a modular suite of cloud services to help you and your system to manage and monitor TWIG personal alarm devices.

Deployed internationally in minutes, the TWIG Point SP combines ease of use and remote device management with powerful features such as location fusion, custom floor plans and API.

The no-nonsense Service Provider model puts you in the driver's seat: Your business, your customer relations, your pricing.



Twigcom

TWIG Point Site

Site management for hybrid indoor location

Beacons

Use TWIG Point Site to effectively plan and deploy on-site location beacons (SRD, WiFi, BLE) and sensors for compatible TWIG personal alarm devices.

TWIG Point Netloc provides turn-key, world-wide indoor location which can be refined by adding custom on-site beacons, as needed.

All these locations are delivered either to TWIG Point Monitor for visualisation, or to your ARC system over the familiar MPTP protocol.



Get help where it is needed

- Responders need accurate and timely alert location
- Urban environments limit GNSS satellite signals



Easy site planning and management

- Import custom site maps and floor plans
- Drag and drop beacons and sensors in place



Location fusion

- Use multiple terrestrial and satellite signals to locate
- Leverage public signals + custom on-site beacons



Choice of beacons and sensors

- TWIG Beacon SRD, WiFi, BLE
- TWIG Door Sensor SRD, TWIG Tag SRD

Location saves lives

Accurate and timely alert location information is critical to responders. Most field operations are set in urban environment with limited or no GNSS satellite signals. Depending on the user scenario, either ubiquitous or limited-site indoor location is required, or both.

Refine on-site coverage

Where controlled location coverage in limited sites is required, location beacons can be effectively deployed using the TWIG Point Site application for planning and management.

Mix on-site beacons freely

For best spectrum reliability, IP68 protection, and optional Ex protection, deploy TWIG Beacon SRD locating devices. Existing WiFi base stations can double as locating beacons, at no extra cost. Complete coverage with BLE beacons.

Sensors for attendance monitoring

Sensors such as TWIG Tag and TWIG Door can be conveniently managed by TWIG Point Site.

Low CAPEX and OPEX

Freely choose optimal beacon technology and reuse existing beacons. Minimise system integration and software development.

No mandatory system integration

TWIG Point Netloc works and provides indoor location to your ARC system without system integration. Location is transmitted to ARC over the familiar MPTP protocol.

TWIG Point Site can be operated as a stand-alone tool, or run from your ARC system as a turn-key module complete with user interface.

Optionally TWIG Point API provides for automated account and device registration synchronization.

Compatible TWIG device types

- TUP93EU and TUP92EU: SRD3 required for WiFi and BLE
- TUP91EU: Only cellular and SRD beacons

Compatible beacons and sensors

- TWIG Beacon SRD
- TWIG Door Sensor SRD
- TWIG Tag SRD
- Most WiFi base stations and BLE beacons

TWIG Point SP

TWIG Point SP is a modular suite of cloud services to help you and your system to manage and monitor TWIG personal alarm devices.

Deployed internationally in minutes, the TWIG Point SP combines ease of use and remote device management with powerful features such as location fusion, custom floor plans and API.

The no-nonsense Service Provider model puts you in the driver's seat: Your business, your customer relations, your pricing.

TWIG Point Monitor

Alarm monitoring with location fusion

TWIG Point Monitor is a turn-key alarm monitoring and tracking application for TWIG personal alarm devices.

Deployed internationally in minutes, the TWIG Point Monitor combines ease of use and remote device management with powerful features such as location fusion, custom floor plans and API.



Get help where it is needed

- Responders need accurate and timely alert location
- Urban environments limit GNSS satellite signals



Comprehensive alarms

- Panic button, ManDown++, Amber alert
- Attendance sensors alerts
- Geofences, anchor alert



Turn-key location fusion

- AGNSS satellite + TWIG Point Netloc hybrid indoor location
- Add on-site beacons with TWIG Point Site
- Street maps, satellite images, custom site maps + floor plans



On-screen messages

- Group communications
- Peer alarms



Deploy devices in minutes

- TWIG Point Remote Configurator device management
- Devices status at a glance



Reporting

- Event log
- Filter and export

Alarms monitoring

Alarms from panic button, ManDown++, Amber alert, geofence or sensors open an alert case displaying predefined operator instructions. Alert case annotation and closure.

Manage Amber alerts. In server-based timer mode, escalates also when no cellular signal. Define alarm forwarding to email and SMS.

Attendance monitoring

Monitor TWIG Door Sensor and TWIG Tag attendance sensor indications.

On-Screen Messages

Send text messages to the screen of TWIG devices. Individual or group communications. In interactive mode, prompt for user acknowledgement or selection.

Locate and track

Remotely control location reporting from TWIG devices by GNSS satellites or TWIG Point Netloc. Tracking interval is selectable down to 5 seconds.

Location saves lives

Accurate and timely alert location information is critical to responders. Most field operations are set in urban environment with poor GNSS

satellite signals. Depending on user scenario, either ubiquitous or limited-site indoor location is required, or both.

Location fusion

AGNSS satellite positions are fused with TWIG Point Netloc hybrid indoor location. TWIG Point Netloc provides turn-key indoor location, worldwide, on service activation. Then, custom on-site beacons (SRD, WiFi, BLE) can be added as needed with TWIG Point Site.

Maps and more

Locations are visualized on custom site maps and floor plans from TWIG Point Site as well as on world-wide street maps and satellite images. Enables location tracing and locating with addresses.

Situational awareness

See at a glance the location of persons on street map or floor plan and their device and alert status. Drill down on address, heading, speed, battery, and communication status.

Deploy devices in minutes

TWIG Point Remote Configurator makes TWIG devices fast to deploy and flexible to operate. See devices' status at a glance in dashboard.

Reporting

View and filter events log. Export to other applications.

Compatible TWIG device types

- TUP93EU, TUP92EU and, TUP91EU.

TWIG Point SP

TWIG Point SP is a modular suite of cloud services to help you and your system to manage and monitor TWIG personal alarm devices.

Deployed internationally in minutes, the TWIG Point SP combines ease of use and remote device management with powerful features such as location fusion, custom floor plans and API.

The no-nonsense Service Provider model puts you in the driver's seat: Your business, your customer relations, your pricing.



POST

/trackings/stop End tracking

PUT

/trackings/{trackingId}/activate Activate tracking

PUT

/trackings/{trackingId}/deactivate Deactivate tracking

GET

/trackings/{trackingId}/ Tracking

Parameters

Name	Description
trackingId <small>* required</small>	
string	
(path)	

Execute

Clear

Responses

Response content type: application/json

Twig Point API

Application Programming Interface

Twig Point API provides system integration between your ARC and Twig Point functions, including facility to invoke complete Twig Point modules with user interface.

Objective is to support your service architecture and reduce your CAPEX, OPEX and time-to-market: Pick Twig Point modules to augment your system, or deploy Twig Point as turn-key platform.



REST JSON API

- Full access to Twig Point resources from your system
- Synch account and device registration



Automate account and device synch

- Synch over Twig Point API



Web Programming Interface

- Invoke turn-key Twig Point modules, complete with user interface, from your system
- Minimise SW development time and cost



Optional 3rd party ARC provider support

- Set Twig devices to send IP/SMS/voice alarms only to 3rd party ARC
- Use Twig Point or your system for management and tracking



Minimal system integration

- Many Twig Point services work with your ARC without integration

Augment your ARC system with Twig Point - Maximum flexibility, minimum integration

Twig Point Remote Configurator, Twig Point AGNSS and Twig Point Site can be used without changes to your ARC system.

Deploying Twig Point Netloc requires only minimal format changes to an existing Twig MPTP compatible ARC system. Please contact Twig Support for details.

Optionally use Twig Point platform for tracking and device and site management and route alarms only to a specialized 3rd party ARC.

Optionally automatically synch new customer accounts and devices in your ARC system to Twig Point, over Twig Point API.

Optionally run Twig Point Remote Configurator, Twig Point Site and Twig Point Monitor modules complete with user interface from your ARC system over Web Programming Interface.

System Scenario A

Twig Point turn-key ARC and management system. No need for system integration.

System scenario B

Specialist ARC service provider. Device management and location fusion on Twig Point. No need for system integration.

System Scenario C

Specialist ARC service provider. VAR/SP proprietary management system runs Twig Point Remote Configurator and Twig point Site with Web Programming Interface. Twig Point Netloc run for hybrid indoor location. Twig Point API only used to synchronise new customer accounts and devices automatically to Twig Point.

For technical documentation, please contact Twig Support.

Twig Point SP

Twig Point SP is a modular suite of cloud services to help you and your system to manage and monitor Twig personal alarm devices.

Deployed internationally in minutes, the Twig Point SP combines ease of use and remote device management with powerful features such as location fusion, custom floor plans and API.

The no-nonsense Service Provider model puts you in the driver's seat: Your business, your customer relations, your pricing.

TWIG Point SP

Service Description

TWIG Point Remote Configurator

- Turn-key over-the-air configuration of compatible TWIG personal alarm devices
- Editing device settings
- Writing and reading device settings
- Saving and retrieving device settings in TWIG Point settings file
- Dashboard showing device type, version and status in real time
- Mobile data usage typically 3 kB per uploaded configuration data set

TWIG Point NetLoc

- Turn-key world-wide WiFi + cellular locating of compatible TWIG personal alarm devices (off-site)
- Deploy onsite beacons (TWIG Beacon SRD, WiFi, BLE) with TWIG Point Site
- Improves location availability when there is no GPS / GNSS signal e.g. indoors
- Near global coverage, with typical location inaccuracy 30 m (WiFi) - 100 m (city cell only) -10 km (rural cell only)
- Inaccuracy estimate transmitted to ARC
- Mobile data usage typically 0.3 kB per positioning
- Strategy of using cellular, GPS/GNSS and TWIG Beacon location configurable

TWIG Point AGNSS

- Turn-key AGNSS (Assisted GNSS) service for compatible TWIG personal alarm devices
- More reliable positioning compared to un-assisted GNSS. First acquisition after moving from indoors to outdoors is made faster
- GPS/GNSS system usually offers no position availability indoors
- Mobile data usage typically 0.6 MB per month

TWIG Point Site

- Upload custom site maps and floor plans
- Drag and drop beacons and sensors in place
- TWIG Beacon SRD, WiFi, BLE, TWIG Tag, TWIG Door Sensor

TWIG Point Monitor

- Alarms monitoring
- Amber alert
- Geofences
- On Screen Messages
- Locating and tracking
- Street maps and satellite images
- Custom site maps and floor plans with TWIG Point Site
- Location fusion with TWIG Point Netloc and AGNSS
- Device management with TWIG Point Remote Configurator

TWIG Point API

- REST JSON API
- Run TWIG Point modules complete with user interface through Web Programming Interface

TWIG Point SP for Service Provider

- Service Provider account provides a convenient platform for your business
- Your customers, your pricing
- Creating and managing customer accounts
- Registration of customer devices
- Remote device management for superior customer service and reduced cost
- Enhanced customer location capability through TWIG Netloc and TWIG AGPS
- One invoice, download breakdown reports for your invoicing

Management

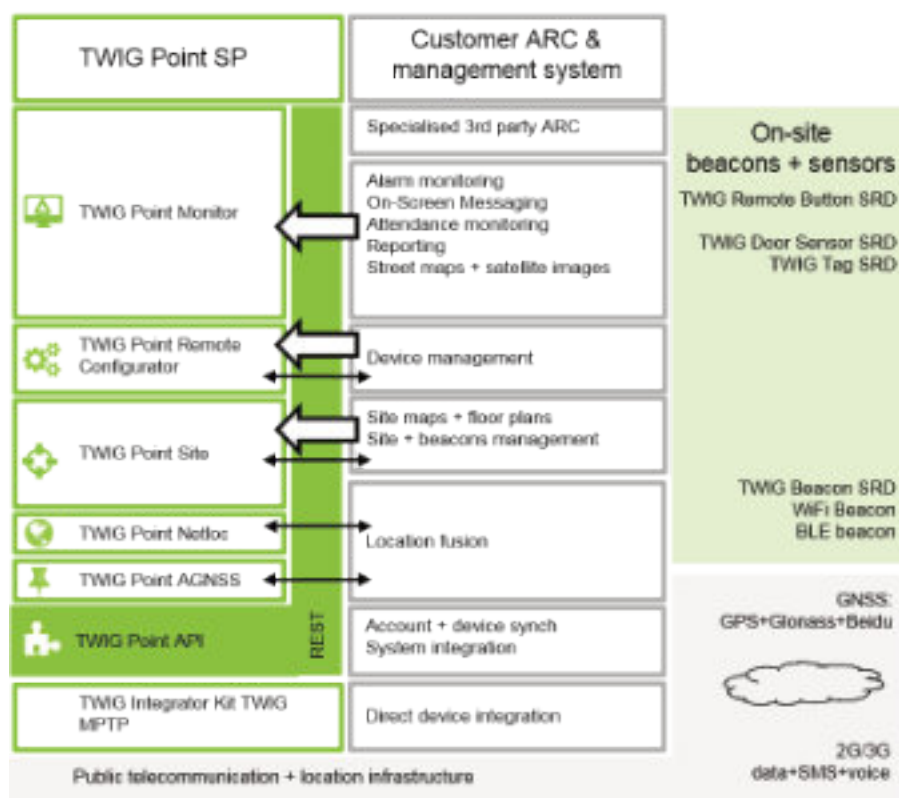
- Easy device registration through TWIG Point account
- Activate and deactivate TWIG Point services through dashboard
- Automatic billing
- Prerequisite: mobile data enabled SIM
- Mobile data usage typically 100 kB per month + use of services

Minimum ARC system modifications

- TWIG Point Remote Configurator, TWIG Point AGNSS and TWIG Point Site can be used without changes to the ARC system.
- Deploying TWIG Point Netloc requires only minimal changes to an existing TWIG MPTP compatible ARC system. Please contact TWIG Support for details.
- Optionally use TWIG Point platform for device and site management and route alarms to a specialized ARC
- Optionally synch accounts and devices between ARC and TWIG Point (TWIG Point API)
- Optionally run TWIG Point modules with UI from the ARC system (Web Programming Interface)

Compatible device types

- TWIG Point Remote Configurator: TUP93EU, TUP92EU, TUP91EU and RG310
- TWIG Point Netloc: TUP93EU and TUP92EU (SRD3 required for WiFi and BLE), TUP91EU (only cellular and SRD beacons)
- TWIG Point AGNSS: TUP93EU, TUP92EU, TUP91EU, TUP90EU and TCP90EU
- TWIG Point Site: TUP93EU and TUP92EU (SRD3 required for WiFi and BLE), TUP91EU (Only cellular and SRD beacons)
- TWIG Point Monitor: TUP93EU, TUP92EU, TUP91EU, TUP90EU and TCP90EU



Twig Com Ltd.
Lairolantie 14
FIN - 24910 SALO
FINLAND
Tel: +358 40 510 5058
Fax: +358 42 510 5058
sales@twigcom.com

www.twigcom.com

twig™