Application instructions
How to take in use Wi-Fi communication with TWIG devices

twig™

Wi-Fi and VoIP compatible TWIG device models, types and firmware

TWIG One   **TWIG One Ex**   **TWIG Easy**

- Device type TLP53EU
- Device model with SRD3
- Device FW CT5P.02.010.000 or later
- The 5th character of the device serial number is a letter

Twig Com Ltd. TLP53EU
TWIG One   IP67
SN:
123WA800010563   R-NZ
IMEI:
350588280823139
Made in Finland
Safety instructions in manual   CE

TWIG Neo   **TWIG SOSCard**

- Device type TLP54EU or TLP56EU
- Device model with SRD3
- Device FW CT5P.02.010.000 or later

Wi-Fi communication with TWIG personal alarm devices

Wi-Fi compatible TWIG personal alarms enable VoIP (Voice over IP) calls and sending of MPTP messages over Wi-Fi. The following paragraphs describe how to set up your TWIG device both for transfer of MPTP messages and calls over Wi-Fi.

Supported Wi-Fi networks and authentication types

- Wi-Fi compatible TWIG personal alarm devices support only 2,4 GHz Wi-Fi network. 5 GHz Wi-Fi network is not be supported.
- The supported authentication types are: Open, Security WPA_PSK, SecurityWEP, Security 802.1X, Security WPA2 and Security WPA/WPA2.

Configuration of Wi-Fi networks

Wi-Fi settings can be configured with any of the following 4 options:
1) TWIG Configurator PC software
2) TWIG Point Remote Configurator cloud service or
3) MPTP command ?CNF via SMS message or GPRS.
4) On TWIG Point Add/Edit page

Maximum amount of configurable Wi-Fi networks for TWIG device is 5.
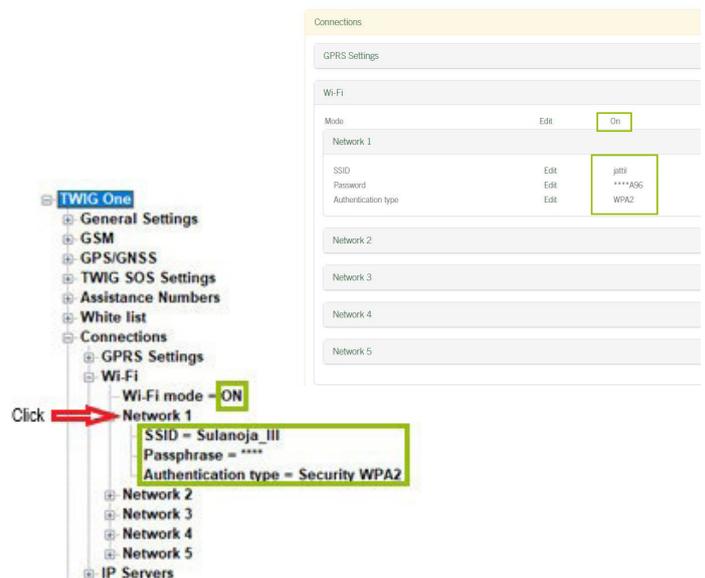
Device settings

Wi-Fi mode
- In TWIG Configurator and TWIG Point Remote Configurator, select Communications > Wi-Fi > WiFi mode = ON.
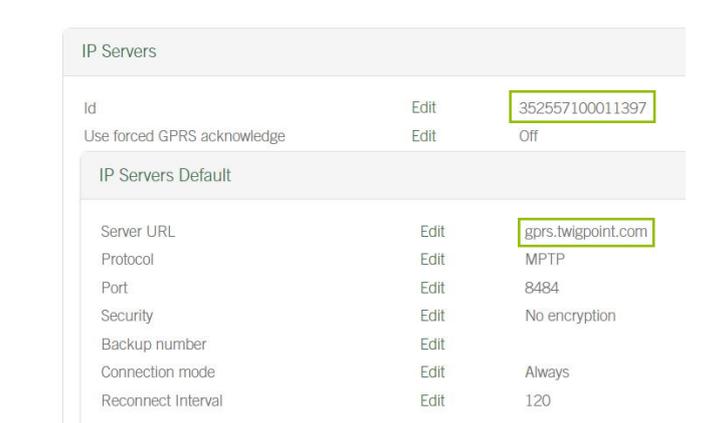- For SMS or GPRS configuration, the MPTP command ?CNF is 4000.

Network selection
- Add SSID, Passphrase and Authentication type manually for all Wi-Fi networks you use for Wi-Fi communication.
- In TWIG Configurator you can optionally double click Network title to get a list of available networks and select the wanted network. Authentication type will be automatically given during scanning. Add network password if requested.
- For SMS or GPRS configuration use MPTP commands 4010….4052.

ID and default server
- Click IP Servers to configure ID and default server settings.
- Write settings to device and reboot your device to update settings to device.
- Your device is now ready for Wi-Fi communication.
- Note! settings for VoIP calls will be defined separately on next page.

Connections		
GPRS Settings		
Wi-Fi		
Mode	Edit	On
Network 1		
SSID	Edit	jattil
Password	Edit	****A96
Authentication type	Edit	WPA2
Network 2		
Network 3		
Network 4		
Network 5		

⊟ TWIG One
  ⊞ General Settings
  ⊞ GSM
  ⊞ GPS/GNSS
  ⊞ TWIG SOS Settings
  ⊞ Assistance Numbers
  ⊞ White list
  ⊟ Connections
    ⊞ GPRS Settings
    ⊟ Wi-Fi
      Wi-Fi mode = ON
Click ➡ Network 1
        SSID = Sulanoja_III
        Passphrase = ****
        Authentication type = Security WPA2
    ⊞ Network 2
    ⊞ Network 3
    ⊞ Network 4
    ⊞ Network 5
  ⊞ IP Servers

IP Servers		
Id	Edit	352557100011397
Use forced GPRS acknowledge	Edit	Off
IP Servers Default		
Server URL	Edit	gprs.twigpoint.com
Protocol	Edit	MPTP
Port	Edit	8484
Security	Edit	No encryption
Backup number	Edit	
Connection mode	Edit	Always
Reconnect Interval	Edit	120

MPTP communication via Wi-Fi

For MPTP communication over Wi-Fi you can use TWIG Point or your own ARC. For both solutions you need to configure GPRS to SOS event phone number and assistance SMS phone number fields. Note! Device has to be connected to Wi-Fi network first. See instructions described above. If message transfer over Wi-Fi is not succesful, messages are sent via cellular network instead Wi-Fi.

TWIG Point as Alarm receiving centre (ARC)
• SOS event phone number = GPRS
• Assistance SMS phone number = GPRS

Your Alarm receiving centre (ARC)
• TWIG MPTP and GPRS protocols are integrated in your ARC.
• Define the url and the port of your ARC gateway to default server settings
• SOS event phone number = GPRS
• Assistance SMS phone number = GPRS

When GPRS is configured to above mentioned phone number fields, Wi-Fi mode is ON and Wi-Fi networks are defined, device uses Wi-Fi for MPTP communication.

VoIP calls (calls over Wi-Fi)

To be able to make Voice over IP calls via Wi-Fi network you need a VoIP account from a VoIP provider for softphone or a client program. Use your selected client program to register your TWIG device and VoIP account to SIP server. We recommend and support MicroSIP for VoIP calls with TWIG devices but you may use any other available softphone.

MicroSIP PC Client

MicroSIP PC Client is an open source portable SIP softphone for Windows to be used with TWIG devices for VoIP calls. MicroSIP allows to do high quality VoIP calls via open SIP protocol. From cloud of SIP providers you can choose the most suitable for you, register account and use it with MicroSIP. Read more on MicroSIP on https://www.microsip.org/.
Download latest version of MicroSIP PC Client to your computer on https://www.microsip.org/downloads.

SIP server and transport protocol

To be able to make VoIP calls via Wi-Fi network you need a SIP server for your VoIP account creation. TWIG devices support only UDP transport protocol. We provide our SIP server sip.twigpoint.com but you can always use your own SIP server instead. Note! Use of sip.twigpoint.com requires All inclusive subscription.

How to use TWIG Point for VoIP calls?

With TWIG Point All inclusive subscription you get SIP server, VoIP numbers, passwords, names and SIP server name for your VoIP account registration. This paragraph explains how to use TWIG Point SIP server for VoIP calls with MicroSIP softphone.

When signed in to your TWIG Point All inclusive account, go to My settings and select VoIP Settings. In VoIP Settings you can find your VoIP account number, password, display name and SIP server. You have also 5 additional VoIP numbers available for devices.

VoIP settings for MicroSIP

Configure MicroSIP with your VoIP settings by adding the following information into MicroSIP. You can find your SIP server, Username, Domain and Password in your TWIG Point VoIP settings.

SIP Server
Add here your SIP server URL sip.twigpoint.com

Username
Your VoIP number is your Username

Domain
Add also here your SIP server URL sip.twigpoint.com

Password
Add the password related to your Username available in your VoIP account.

Display Name
Add the display name of your VoIP number. It doesn't have to be the name given in your TWIG Point VoIP account.

How to link VoIP account to your device with TWIG Point?

Add the device you want to configure to your TWIG Point All inclusive account. In TWIG Point you can link a VoIP account to your device by using the following configuration options.

1. My Settings

Go to My settings > Select VoIP Settings. Scroll to Devices without SIP settings and click Configure VoIP. Then click Link.

2. Device Manager

Go to My devices > Select device > Click VoIP Settings > Link

How to configure 3rd party VoIP accounts to device?

Use TWIG Point Remote Configurator or TWIG Configurator to configure your TWIG device with VoIP account from other SIP servers.

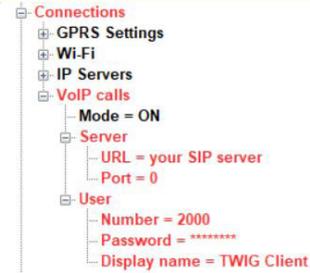Click Connections > VoIP. Configure settings as described below.

VoIP
Mode = Enabled

Server
Add your SIP server's URL and port

User
Add the VoIP number, Password and name given in your 3rd party account.

VoIP		
Mode	Edit	Enabled
Server URL	Edit	your SIP server
Server port	Edit	0
Number	Edit	2000
Password	Edit	****""
Display name	Edit	TWIG Client

- Connections
  - GPRS Settings
  - Wi-Fi
  - IP Servers
  - VoIP calls
    - Mode = ON
    - Server
      - URL = your SIP server
      - Port = 0
    - User
      - Number = 2000
      - Password = ********
      - Display name = TWIG Client

How to configure VoIP calls from device

Assistance VoIP calls
Configure an assistance VoIP call made from your TWIG device to another VoIP number. Add the destination number to Call Number and select VoIP as Call type.

- Assistance Numbers
  - Assistance Number 1
    - Call No = 2000
      - Type = VoIP

SOS cycle VoIP calls
Configure SOS event by adding a destination VoIP number to phone number field and select VoIP as Call type.

Note! TWIG Point SIP server allows VoIP calls only to VoIP numbers included in TWIG Point SIP server.
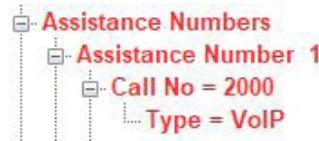
SOS Events		
Event 1		
Phone Number	Edit	2000
Name	Edit	
Event Type	Edit	VoIP Call
Event Retries	Edit	1
Event Group	Edit	1
SOS text	Edit	