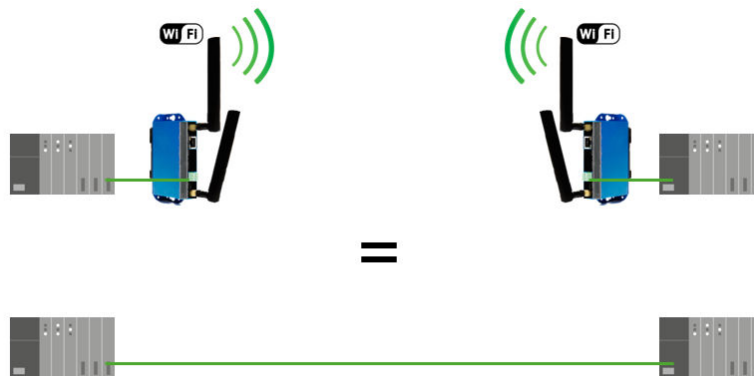# Application note

Starting with XWLAN WI-FI Bridge

1) **MAIN SPECIFICATIONS**
   - General characteristics
   - Power supply
   - Ethernet interface
   - Wi-Fi interface
   - Antennas
   - Mechanical plan
2) **DIAGNOSIS**
   - LED status
   - Using Status menus
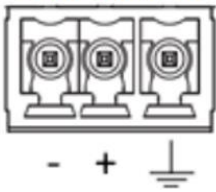   - XWLAN router configuration modification
3) **HOTLINE SUPPORT**

Latest update: **17/07/2024**

1) MAIN SPECIFICATIONS

1.1) General characteristics

General characteristics	
Dimensions	127 x 67 x 23 mm, without antennas connectors
Weight	200g without accessories, 228 g with connectors and antennas
Casing	IP 30
Operating Temperature	-20°C to +60°C
Storage Temperature	-40°C to +85°C

1.2) Power supply

Power connector		
3-way terminal block 9 to 48 VDC	**Signal name**	**Pin**
	Ground	-
	Vdc	+
	Earth	

Power supply	
DC	Power supply DC wide range 9 to 48 VDC, protected against reverse polarity, 5,5W typ., 10W max 3 points Phoenix connector

Power supply available in option (not included within the pack):

AS07 (Part Number: 0020301)

- 220/24DC 24W
- DIN-Rail mounting
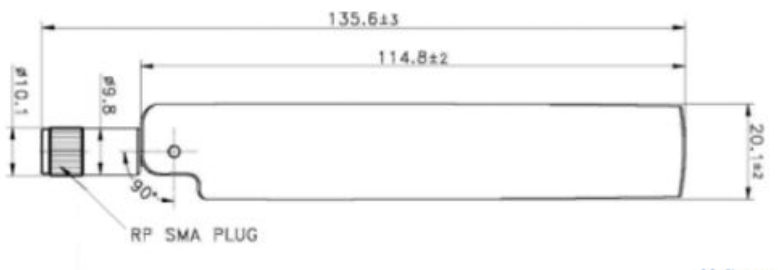
1.3)   Ethernet Interface

Ethernet Interface	
Ports quantity	1
Ports type	Auto MDI/MDI-X 10 Base T/100 Base Tx/1000 Base T with automatic negotiation (10/100/1000 Mbps), according to 802.3u

LAN Connector (Ethernet)	
Female connector RJ45	The port supports auto-negotiation function, i.e. it automatically selects the 10 Mbps, 100 Mbps or 1000 Mbps transmission speed and the half or full duplex mode corresponding to your equipment.

1.4)   Wi-Fi Interface

Wi-Fi Interface	
Wi-Fi interface quantity	1
Radio mode	IEEE 802.11a/h, 802.11b, 802.11g, 802.11n
Operating band 802.11b/g/n	2.4 GHz ; 2.412 to 2.484 GHz
Antennas quantity	2

1.5) Antennas

Antennas	
Antennas type	Dipole, dual-band, omnidirectional, articulated
Operating band	2,4 / 5,8GHz
Connector	RP-SMA male
Gain	3dBi

The performance of Wi-Fi routers is given regarding that:

- « antennas can be seen ».
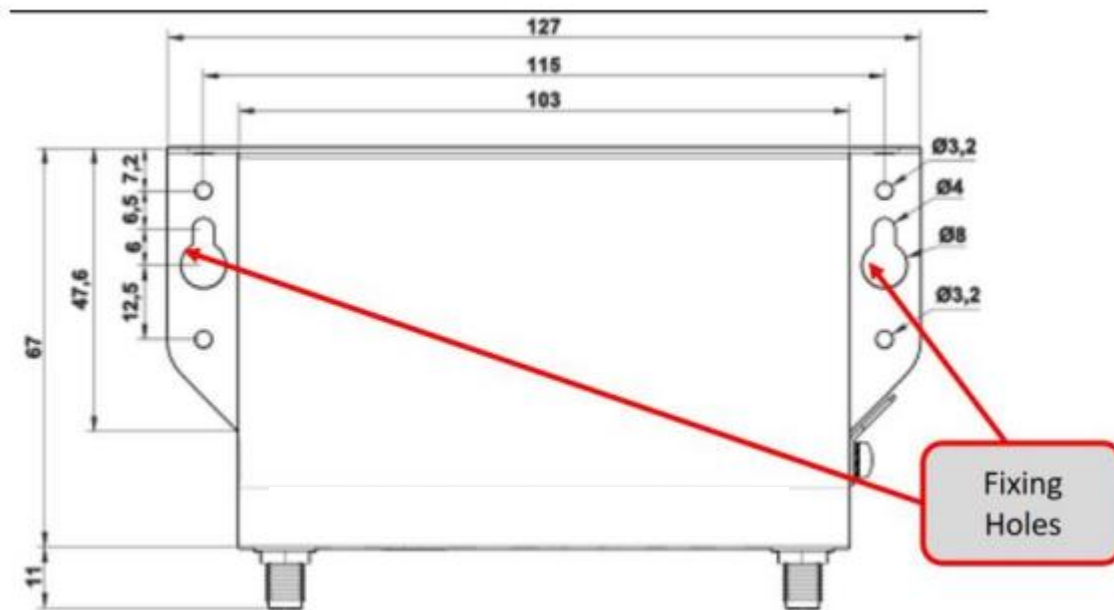- Use of 2 antennas per router.

    ➔ reach up to **400m**

If you need to remote the antennas, we offer the **ANT311** (Part Number: 0010503) (delivered with 2.5m of cable).

Note: the router can be used with only one antenna but in this case:
- Emission level is reduced by 3dBi.
- Bandwidth decreases significantly.

1.6) Mechanical plan

The XWLAN Wi-Fi router can be installed on DIN-Rail (DIN-Rail grip included into the pack), or mounted on a horizontal tray.
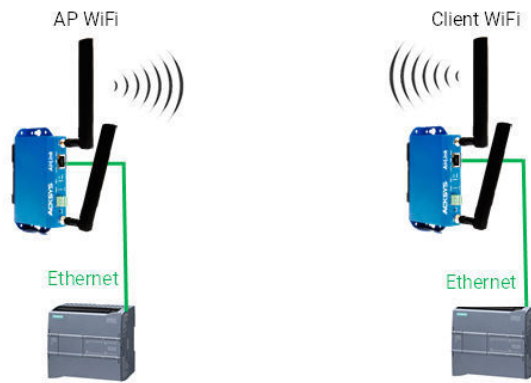
2) DIAGNOSIS

2.1) LED status

LEDs status	
Power	Steady green: the product is correctly power supplied
Diag.	Steady red: 40s start-up phase
	Steady green: Connected
Wi-Fi Act.	Blue: Sending/Receiving Data on the Radio
Wi-Fi State	Off: Wi-Fi not connected
	Blinking green: remote XWLAN not associated
	Steady green: remote XWLAN associated
Eth. Link/Act	Steady green: Ethernet link established
	Blinking green: Sending/Receiving Data on the Ethernet interface

The 2 routers Wi-Fi are configured on the IP addressing plan in 192.168.111.0/24.
- 192.168.111.253 for the *Access Point:*
  - o **XWLAN-E-100 (Part Number: 4071002)** (AP Wi-Fi)
- 192.168.111.252 for the *Client:*
  - o **XWLAN-E-100 (Part Number: 4071001)** (Client Wi-Fi)

Access to the diagnosis page (Status menu) is protected:

Id: *user*

Password: *UserXWLANE100*

2.2) Checking the association with the remote XWLAN Wi-Fi router.

Tab Status > WIRELESS

For a stable operation, the level of:

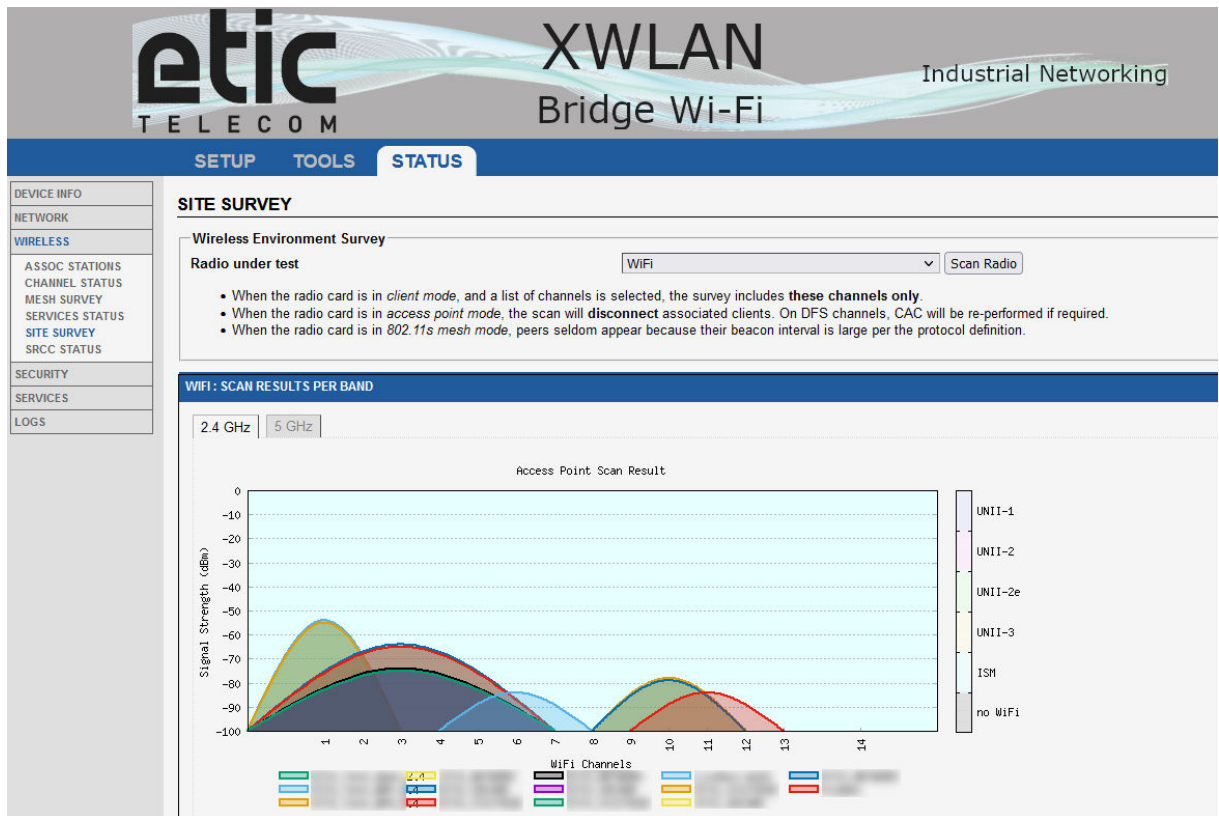- **SIGNAL** must be superior to the value of **-85dBm**

And also ratio

- **SIGNAL/NOISE** must be superior to the value **10**.

2.3) Checking the occupancy of Wi-Fi channels by Radio Scan.

In case of dysfunction, a check can be carried out (at the request of Etic Telecom's hotline) on the AP Wi-Fi router (**XWLAN-E-100-4071002**).

Tab Status > SITE SURVEY

2.4) XWLAN router configuration modification

Access to the configuration is protected by a *root* access.

Only ETIC TELECOM's technical support can make a configuration modification by setting up a remote access. (TeamViewer for example).

3) HOTLINE SUPPORT

Our product is Plug & Play. However, you can contact our customer support department if you encounter any difficulties during the commissioning or operation phase of your Wi-Fi bridge.

Feel free to contact our Hotline :
- hotline@etictelecom.com
- +33 4 76 04 20 05

etic
TELECOM

405 rue Lavoisier
38330 Montbonnot Saint Martin
Tél. +33 (0)4 76 04 20 00
www.etictelecom.com