Anywhere AX51 Network Node User Guide

Anywhere AX51 Network Node User Guide

Contents

1 SAFETY INSTRUCTIONS
2 COMPLIANCE
3 FCC Statement
4 QUICK START GUIDE
4.1 PACKING LIST
4.2 SETUP PROCEDURES
5 PORT AND LED DEFINITION
6 HARDWARE INSTALLATION
6.1 INSTALLATION REQUIREMENTS
6.2 POLE MOUNTING PROCEDURES (POLE SIZE Ø 25-75 MM)
6.3 WALL MOUNTING PROCEDURES
7 WATERPROOFING THE RJ45 CONNECTOR USING THE CABLE GLAND
8 EXTERNAL ANTENNAS FOR AX52/ AX52e
9 Documents / Resources
9.1 References
10 Related Posts

SAFETY INSTRUCTIONS

a. Compliance is required with respect to voltage, frequency, and current requirements indicated on the manufacturer's label. Connection to a different power source than those specified may result in improper operation, damage to the equipment, or pose a fire hazard if the limitations are not followed.
b. Read the instructions before you connect the system to its power source.
c. This product must be connected to an IEC60950 compliant limited power source.
d. Installation of the equipment must comply with local and national electrical codes.
e. This product relies on the building's installation for short-circuit (overcurrent) protection.
f. Do not operate your wireless network device near unshielded blasting caps or in an explosive environment unless the device has been modified to be especially qualified for such use.
g. The equipment requires the use of the ground wire as a part of the safety certification, modification or misuse can provide a shock hazard that can result in serious injury and death.
h. To comply with FCC radio frequency (RF) exposure limits, antennas should be located at a minimum of 7.9 inches (20 cm) or more from the body of all persons.
i. Contact a qualified electrician or the manufacturer if there are questions about the installation prior to connecting the equipment.

Warning: Do not use this product in a location that can be submerged by water.
Warning: Stay off this product during an electrical storm to avoid electrical shock.
Warning: Do not touch the device surface during operation due to high temperature

COMPLIANCE

FCC marking and the FCC ID on this product represent the product in compliance with part 15 of the FCC regulations and approved by the Federal Communications Commission. The product is to be sold within and outside the US.

CE marking on this product represents the product in compliance with health, safety, and environmental protection

standards in the radio equipment directives 2014/53/EU under European Commission and the product is to be sold within and outside the European Economic Area (EEA).

	AT	BE	BG	HR	CY	CZ	DK
	EE	FI	FR	DE	EL	HU	IE
	IT	LV	LT	LU	MT	NL	PL
	PT	RO	SK	SI	ES	SE	UK

Warning: The 5.15 to 5.35 GHz band is restricted for indoor use in the above EEA countries.

FCC Statement

This equipment has been tested and found to comply with the limits for a **Class B** digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. this device must accept any interference received, including interference that may cause undesired operation.

Caution: Any changes or modifications not expressly approved by **AX51 Anywhere Network Node** for compliance could void the user's authority to operate this equipment.

RF Exposure
This equipment complies with **FCC RF** radiation exposure limits set forth for an uncontrolled environment. This device and its antenna must not be co-located or operating in conjunction with any other antenna or transmitter.

The antennas used for this transmitter must be installed to provide a separation distance of at least **20 cm** from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

OFCA
This product in compliance the HKCA 1039 (Issue 6) standards issued by the Hong Kong Communications Authority.
Warning: The 5.15 to 5.35 GHz band is restricted for indoor use in Hong Kong.

RCM marking on this product represents the product in compliance with AS/NZS 4268 as regulated by Australian Communications and Media Authority (ACMA).

KC marking on this product, if any, represents the product in compliance with the clause 2, Article 58-2 of Radio Waves Act in Korea.

NCC marking and the NCC certificate number on this product, if any, represent the product in compliance with the LP0002 (4.7) Low-power Radio-frequency Devices technical regulations and approved by the National Communications Commission in Taiwan.
Warning: Deployment in Taiwan shall meet NCC requirements below.

The RoHS, China RoHS and WEEE markings on this product represent the product is designed to meet EU Restriction on Hazardous Substances Directive 2011/65/EC, China environmental declaration with Environment-Friendly Use Period (EFUP), and the Directive 2002/96EC on Waste of Electrical and Electronic Equipment respectively

QUICK START GUIDE

PACKING LIST

- **AX51**

- **AX52**

- **AX52e**

AX51, AX52 or AX52e Anywhere Network Node x 1

Mounting kit x 1

Cable gland x 2

Quick start guide x 1

IMPORTANT: Anywhere Node Manager (A-NM) v2.0.x or newer is required for the setup process. It is available at the Anywhere Networks partner portal.

SETUP PROCEDURES

REQUIRED EQUIPMENT

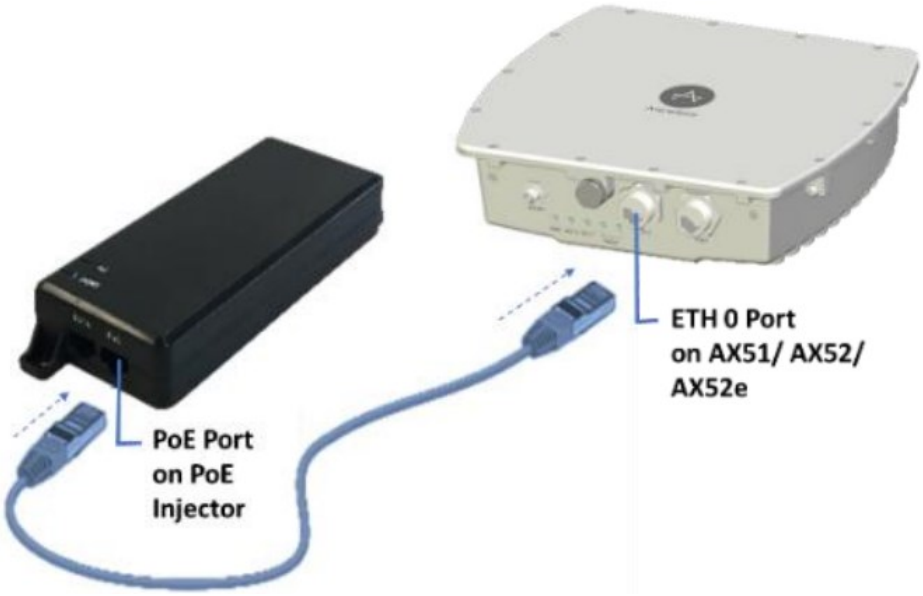
1. **Computer with below system requirements:**
    - **Windows 10/11 64-bit**
    - **A-NM v2.0.x or newer**
    - **NOTE: For the installation of A-NM, please refer to the A-NM User Manual.**
2. Two Cat 5e Ethernet Cables.
3. 802.3at PoE switch or PoE injector (sold separately).

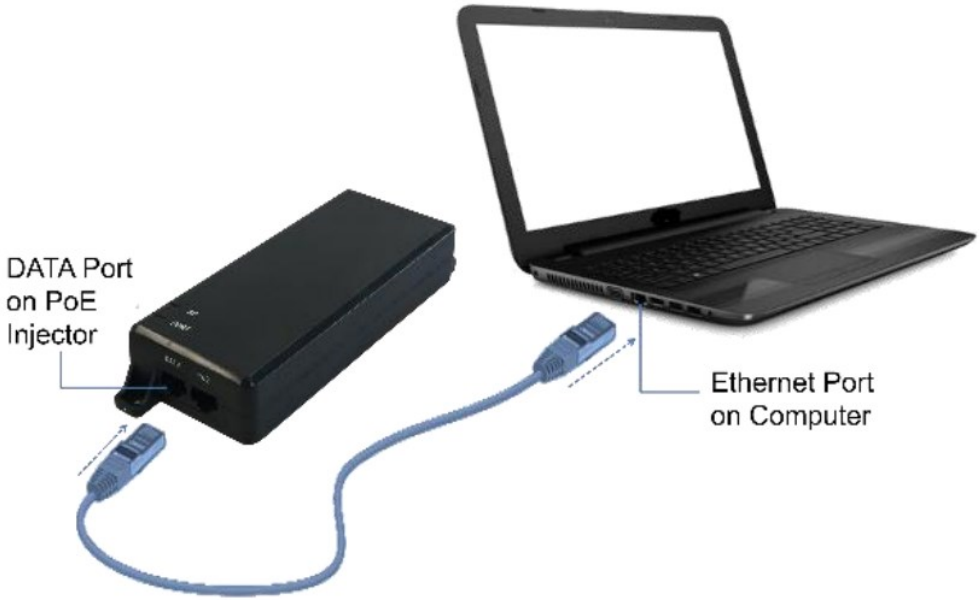
Computer

Cat 5e Ethernet cable

PoE injector

SET UP DEVICE

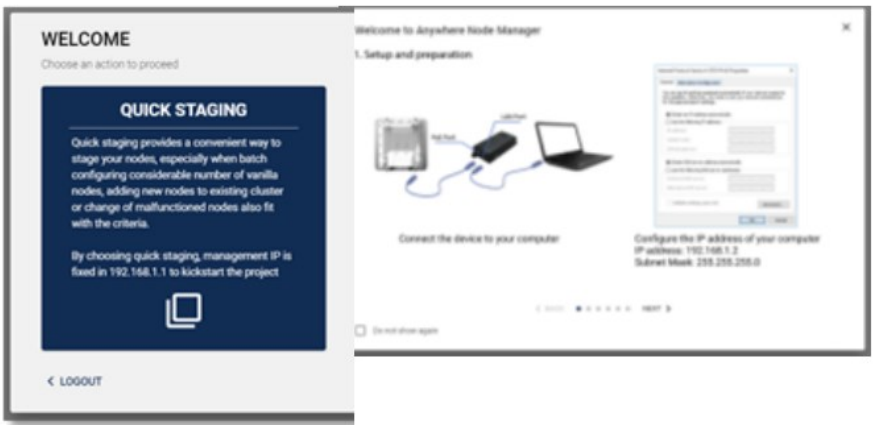




1. Connect the “PoE” port on the PoE injector to the “ETH 0” port on the AX51/ AX52/ AX52e using an Ethernet cable.
2. Connect your computer’s Ethernet port to the “DATA” port on the PoE injector using another Ethernet cable.
3. Connect the AC plug on the PoE injector to power source to power up the AX51/ AX52/ AX52e.
4. Verify the “PWR” LED on the AX51/ AX52/ AX52e is in steady green.

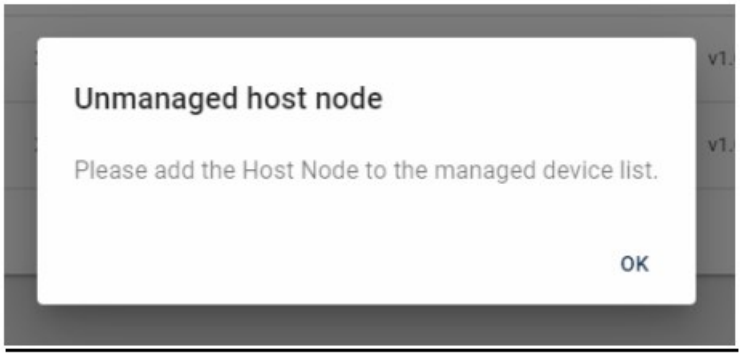
RUN A-NM IN QUICK STAGING

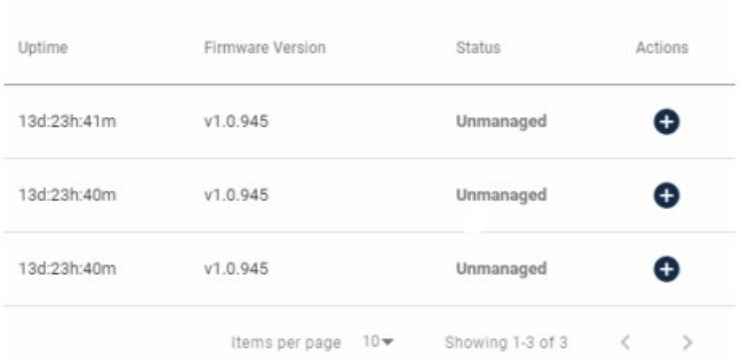
1. Sign up and run the A-NM software in “Quick Staging” mode.
2. Carefully read the Quick Instructions before use, click **“NEXT”** to go through all of them. Then click **“COMPLETE”** to start.



ADD THE DEVICE INTO THE MANAGED DEVICE LIST

3. As the managed device list is empty, the dialog box “Unmanaged host node” shall be shown.
4. Click “OK”.

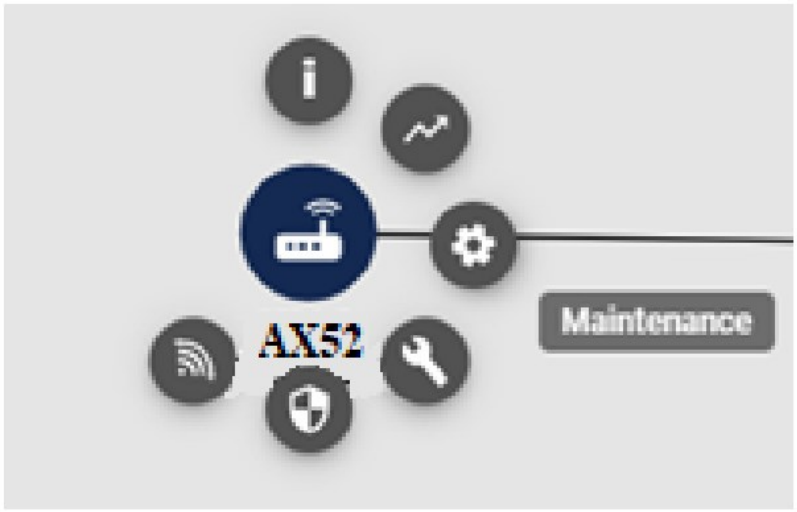




5. Verify the device with the MAC or SN, then click the “+” sign button to add it into the managed device list. Then the device would be available for management.

UPDATE THE DEVICE FIRMWARE

6. It is suggested to update the firmware to the latest version (management license is required). This can be done by right clicking the device icon and select the Maintenance. For detailed instructions, please see the A-NM User Manual.
7. The Quick Start procedure is now finished successfully.



For more information on how to configure the AX51/ AX52/ AX52e, please refer to the A-NM User Manual.

PORT AND LED DEFINITION

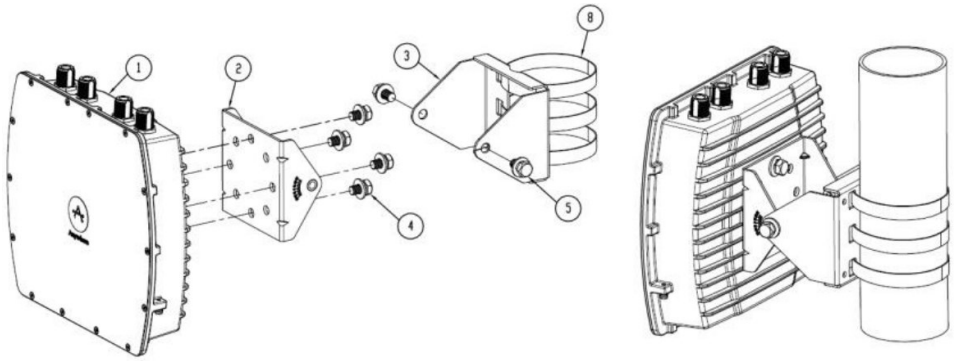
Port	Description		
ETH 0	10/100/1000M/2.5Gbps Base-T Ethernet port (RJ-45) with PoE **IN** function		
ETH 1	10/100/1000M/2.5Gbps Base-T Ethernet port (RJ-45)		
H/V(For AX52)	N-type coaxial connector from Radio 1 for horizontal / vertical polarisationantenna output		
RADIO 0/1, H/V(For AX52e)	N-type coaxial connector from Radio 0/1 for horizontal / verticalpolarisation antenna output		
DC 48-56V	M8-3 male socket for DC 48-56V power input		
2. LED	**Function**	**State – Colour**	**Indication**
PWR	Power Status	Steady – Green	Power ON
		Off	No power to device
ETH 0/1	Network Link Status	Steady – Green	Ethernet link ready
		Flashing – Green	Ethernet link activity
		Off	Ethernet link unavailable
RADIO 0	Radio 0 Status	Steady – Green	Radio 0 is enabled
		Off	Radio 0 is disabled
RADIO 1(For AX52/ AX52e)	Radio 1 Status	Steady – Green	Radio 1 is enabled
		Off	Radio 1 is disabled
Note:	– Not setting up the AX51/ AX52/ AX52e according to the instructions in the user manual may cause malfunction.- The connection quality of the AX51/ AX52/ AX52e may vary between different environments.- Only use the mounting kits compatible with the AX51/ AX52/ AX52e For best practice, please consult Anywhere Networks authorizedinstallers.		

HARDWARE INSTALLATION

INSTALLATION REQUIREMENTS

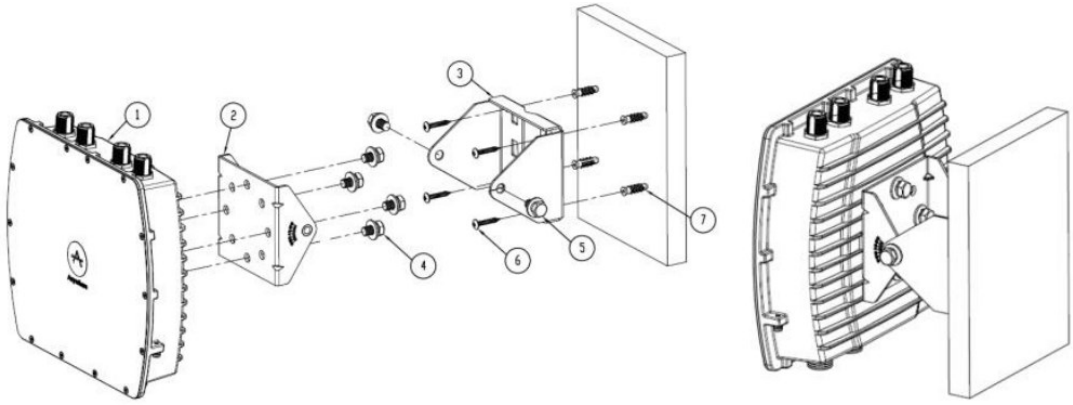
- Electrical tape and butyl mastic tape to weatherproof the connectors.
- Ethernet ports must be point downwards when mounted.

POLE MOUNTING PROCEDURES (POLE SIZE Ø 25-75 MM)



1. Attach Inner Mounting Bracket (item 2) to the AX51/ AX52/ AX52e (item 1) using the 4 sets M8-12L Integrated Screw (item 4).
2. Insert the Hose Clamps (item 8) through the three slots of the Outer Mounting Bracket (item 3).
3. Install the Hose Clamps onto the pole (ø25 to ø75 mm) and tighten the screws on the Hose Clamp until the Outer Mounting Bracket is securely mounted on the pole as shown.
4. Combine the Inner and Outer Mounting Brackets (items 2 & 3) by fixing the2 sets M8-16L Integrated Screw (item 5).

WALL MOUNTING PROCEDURES

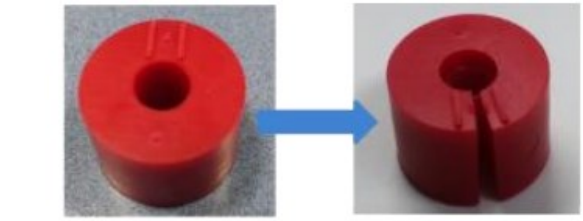


1. Attach Inner Mounting Bracket (item 2) to the AX51/ AX52/ AX52e using the 4 sets M8-12L Integrated Screw (item 4).
2. Mount the Outer Mounting Bracket to the wall using the 4 sets Wall Screw (item 6) and Plastic Anchor (item 7) supplied.
3. Combine the Inner and Outer Mounting Brackets (items 2 & 3) by fixing the 2 sets M8-16L Integrated Screw (item 5).

WATERPROOFING THE RJ45 CONNECTOR USING THE CABLE GLAND

STEP 1

Split the Sealing open. Pass the Ethernet cable through the Sealing Nut, Sealing and Screw Nut.



STEP 2

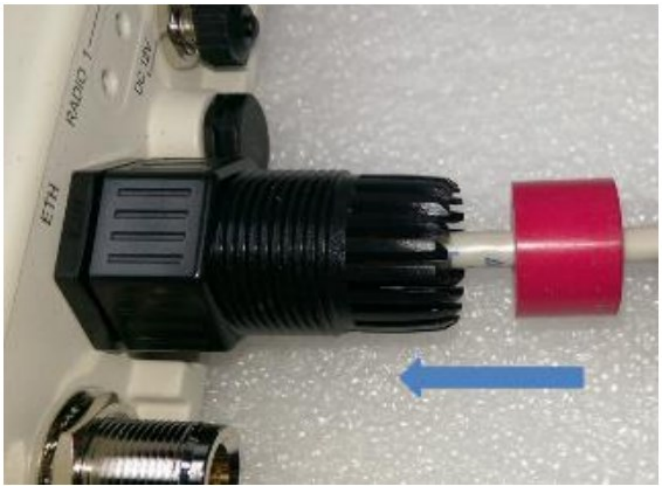
Plug the Ethernet cable into the AX51/ AX52/ AX52e “ETH 0” port until it locks to the jack. (Pictures are for reference only)

STEP 3

Tighten the Screw Nut with a torque value of 0.8 Nm.

STEP 4

Insert the Sealing into the Screw Nut.



STEP 5

Tighten the Sealing Nut with a torque value of 0.8 Nm*.

STEP 6

Assembly finished. Repeat Steps 1-6 on “ETH 1” port.

*** Ensure that the seal is tightened enough to ensure water proofing. However, take care not to use excessive force (over 0.8 Nm) as this may damage the cable gland.**

Warning: Weatherproofing the antenna and cable connections is essential and this can avoid cable connections become loose over time due to vibration and prevents water from entering the device. Anywhere Networks recommended that you use butyl rubber and electrical tape to weatherproof all the outdoor connections. For more information of the weatherproofing procedure, please refer to User Manual.

EXTERNAL ANTENNAS FOR AX52/ AX52e

GE.AN-5P19-02 can be connected to the AX52/ AX52e using RF cables with N-male connectors. Following are the information and suggested antenna connections on AX52/ AX52e.

Model	FrequencyRange	Gain	VerticalBeamwidth	HorizontalBeamwidth	Connector
GE.AN-5P19-02	4.9-5.875 GHz	19dBi	16°	16°	2 x N-female

Suggested Antenna Connections on AX52/ AX52e.

Model	Radio 0	Radio 1
AX52	N/A	GE.AN-5P19-02
AX52e	GE.AN-5P19-02	GE.AN-5P19-02

Warning: Antenna other than the above-mentioned antennas is not recommended to use. Professional installer is required if other type of antenna is to be used to ensure that the EIRP (Equivalent Isotropic Radiated Power) of the system is within the limit as allowed by the local radio authority.

-End of Quick Start Guide

Email: support@anywherenetworks.com
Web: www.anywherenetworks.com
Tel: +852 3899 1900 Fax: +852 3695 0820
Address: Unit D5, 19/F, TML Tower, 3 Hoi Shing Road, Tsuen Wan, New Territories, Hong Kong

Anywhere Networks reserves the rights to change, modify, transfer or otherwise revise the publication and the product specification without notice. All scaling metrics outlined in this document are maximum supported values. The scale may vary depending on the deployment scenario and features enabled.

Documents / Resources

	Anywhere AX51 Network Node [pdf] User Guide AX51, AX52, AX52e, AX51 Network Node, Network Node, Node

References

- Home - Anywhere Networks
- Home - Anywhere Networks