Quick Start Guide

Cloud-Enabled Outdoor 60GHz PTMP + 5GHz + 2.4GHz

Model name(HVIN) : ML-60-10G-360

IgniteNet

1. Unpack the MetroLinq

Package Contents
- MetroLinq™ 10G Tri-Band Omni
- Pole-mount kit — bracket, 8 bolts,

Tools/Items Required
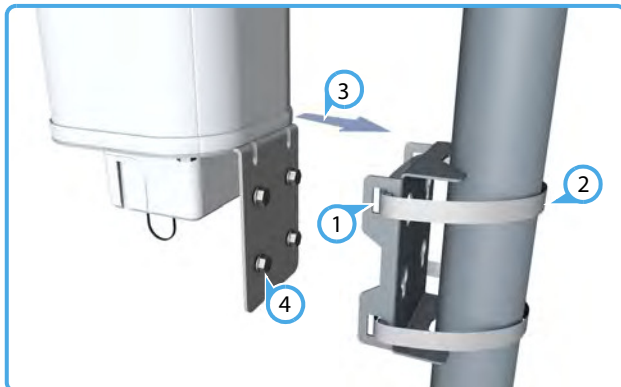- 13 mm socket wrench
- Flat-head screwdriver
- Ethernet cables

2. Assembly

1. Attach the port cover to the base of the unit using the included four screws.

2. Attach the mounting bracket to the base of the unit using four bolts.

3. Insert four bolts into the holes in the mounting bracket, leaving the heads a few millimeters from the bracket.

3. Mount the MetroLinq on a Pole

1. Feed the two steel-band clamps through the pole-mount bracket mounting points.

2. Fasten the steel-band clamps around the pole to secure the pole-mount bracket to the pole.

3. Mount the MetroLinq onto the pole-mount bracket.

4. Tighten the four bolts to secure the MetroLinq.

4. Grounding

1. Ensure the structure on which the unit is to be mounted is properly grounded and in compliance with ETSI ETS 300 253.

2. Verify that there is a good electrical connection to a grounding point (no paint or isolating surface treatment). Use the included (M4) screw to attach a grounding wire (not included) to the grounding point on the unit, and then to ground.

⚠️ **Caution:** The earth connection must not be removed unless all supply connections have been disconnected.

5. Connect Cables

1. Connect outdoor-rated Category 5e or better cable to the **ETH PoE IN** RJ-45 port. (The other end of this cable connects to the PoE power injector.)

2. Install a 10G SFP+ transceiver in the **SFP+** port, and then connect fiber optic cabling to the transceiver.
   The following transceivers are supported:
   - 10GBASE-SR
   - 10GBASE-LR

6. Connect Power

a. PoE Power

1. Connect outdoor-rated Category 5e or better cable from the MetroLinq to the **POE** port on the power injector.

2. Connect Category 5e or better cable from the **LAN** port on the power injector to a LAN switch.

3. Connect the power cord to the power injector and to a nearby AC power source (100-240 VAC, 50/60 Hz).

⚠️ **Caution:** The power injector is designed for indoor use only. Never mount the power injector outside with the MetroLinq unit.
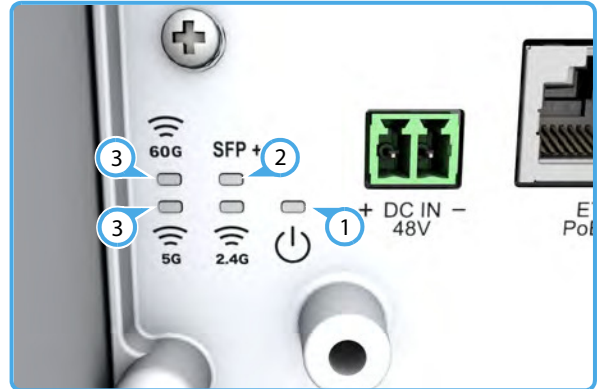
b. DC Power
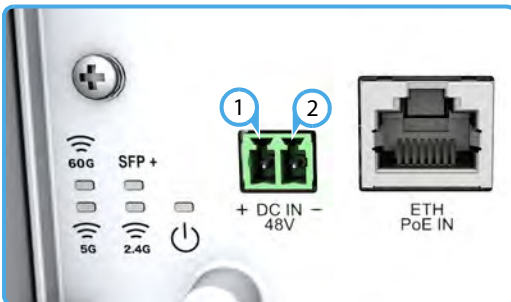
⚠️ **Warning:** Before wiring the DC block or connecting power to the device, ensure that power to the feed lines is turned off at the supply circuit breaker or disconnected from the power bus.

1. Connect the DC power feed wire to the DC block "+" pin.

2. Connect the ground/return wire to the DC block "-" pin.

7. Verify MetroLinq Operation

1. The **Power** LED should be on green.

2. When connected, the **SFP+** link/activity LED should be on/blinking green.

3. During normal operation, the wireless LEDs should be on/blinking green.

8. Connect to the Web User Interface

To access the web interface, connect a PC directly to the MetroLinq's **ETH PoE IN** RJ-45 port. In a web browser, enter the default management IP address of 192.168.1.20 to access the web login page.
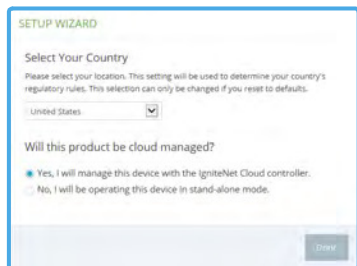

Log in to the web interface using the default settings:

- Login Name — root
- Password — admin123

ℹ️ **Note:** To reset the MetroLinq to factory default settings, press and hold down the AP's **Reset** button for 5 seconds.

9. Complete the Setup Wizard

Select the country of operation for the AP. Setting the correct country ensures that the radios operate within local regulations specified for Wi-Fi networks.

Manage the MetroLinq with the IgniteNet Cloud Controller

Go to **cloud.ignitenet.com** to register your AP.

Log in and select **Devices** from the menu. Click **Add Device** and enter the MetroLinq serial number and MAC address to register the MetroLinq with your cloud network. The serial number and MAC address can be found on the product packaging or label.

Manage the MetroLinq in Stand-Alone Mode

If you select to manage the MetroLinq in stand-alone mode, use the web interface to manually make your configuration changes.

For more information on MetroLinq configuration in stand-alone mode, refer to the *User Manual*, which can be downloaded from **ignitenet.com/support**.

Safety and Regulatory Information

FCC Class B

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 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

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

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.

For product available in the USA/Canada market, only channel 1–11 can be operated. Selection of other channels is not possible.

IMPORTANT NOTE:
FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 34 cm between the radiator and your body.
Professional installation is required

Industry Canada

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

For product available in the USA/Canada market, only channel 1~11 can be operated. Selection of other channels is not possible.

Pour les produits disponibles aux États-Unis / Canada du marché, seul le canal 1 à 11 peuvent être exploités. Sélection d'autres canaux n'est pas possible.

IMPORTANT NOTE:
IC Radiation Exposure Statement:

This equipment complies with IC RSS-102 radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 40 cm between the radiator and your body.

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 40 cm de distance entre la source de rayonnement et votre corps.

CE Statement

This equipment complies with EU radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20 cm between the radiator and your body.

All operational modes:
2.4 GHz: 802.11b, 802.11g, 802.11n (HT20), 802.11n (HT40),802.11ac (VHT20),802.11ac(VHT40)
5 GHz: 802.11a, 802.11n (HT20), 802.11n (HT40), 802.11ac (VHT20), 802.11ac (VHT40), 802.11ac (VHT80),802.ad

The frequency and maximum transmitted power limit in EU are listed as below:
2412-2472 MHz: 20 dBm
5500-5700 MHz: 30 dBm
57-66 GHz

Europe - EU Declaration of Conformity

Hereby, **IgniteNet Inc.** declares that the radio equipment type: MetroLinq™ 10G Tri-Band Omni, ML-60-10G-360 is in compliance with Directive 2014/53/EU and Directive 2014/35/EU.

The full text of the EU declaration of conformity is available at the following Internet address: www.ignitenet.com -> support.

NCC Statement (Taiwan)

低功率電波輻射性電機管理辦法

第十二條 經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。

第十四條 低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。前項合法通信，指依電信法規定作業之無線電通信。低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

電磁波曝露量 MPE 標準值 1mW/cm²，本產品使用時建議應距離人體 20 cm。

Warnings and Cautionary Messages

Warning: This product does not contain any serviceable user parts.
Warning: Installation and removal of the unit must be carried out by qualified personnel only.
Warning: When connecting this device to a power outlet, connect the field ground lead on the tri-pole power plug to a valid earth ground line to prevent electrical hazards.

Caution: Wear an anti-static wrist strap or take other suitable measures to prevent electrostatic discharge when handling this equipment.
Caution: Do not plug a phone jack connector in the RJ-45 port. This may damage this device.
Caution: Use only twisted-pair cables with RJ-45 connectors that conform to FCC standards.

Hardware Specifications

Chassis

Size (L x W x H:)	180.39 x 180.39 x 470.35 mm (7.1 x 7.1 x 18.52 in.) with bracket
Weight	xx kg (xx.x lb)
Temperature	Operating: 0 °C to 50 °C (32 °F to 122 °F)
Humidity	Operating: 10% to 90% (non-condensing)

Network Interfaces

Ports	**ETH PoE IN** Port: 1000BASE-T, passive PoE **SFP+** Port: 10GBASE-X
60 GHz Radio	IEEE 802.11ad
2.4 GHz Radio	IEEE 802.11b/g/n
5 GHz Radio	IEEE 802.11a/n/ac
Antennas	15 dBi (5 GHz), 12 dBi (2.4 GHz), and 17.2 dBi (60 GHz)
Radio Frequencies	2412–2472 (FCC, IC, CE, AU, MIC, NCC, SRRC) 5150–5250 (FCC, NCC) 5470–5725 (CE, MIC, AU) 5725–5850 (FCC, IC, NCC, SRRC) 58.32–64.80 GHz

Power Supply

PoE	48 VDC passive PoE
Power Consumption	64 W maximum

Regulatory Compliances

Radio	EN 300 328 V2.1.1(2016-11) EN 301 893 V2.1.1(2017-03) EN 302 567 V2.1.1 47 CFR FCC Part 15.247 47 CFR FCC Part 15.407 47 CFR FCC Part 15.255 IC RSS-247 IC RSS-Gen Issue 4 RSS-102 Issue 5
Emissions	EN 301 489-1 V2.2.1 (2017-02) EN 301 489-17 V3.1.1 (2017-02) 47 CFR FCC Rules and Regulations Part 15 Subpart B, Class B Digital Device Canada Standard ICES-003, Issue 6, Class B
Manufacturer	Accton Technology Corporation 1, Creation 3rd Rd., Hsinchu Science Park, Hsinchu 30077, Taiwan, R.O.C