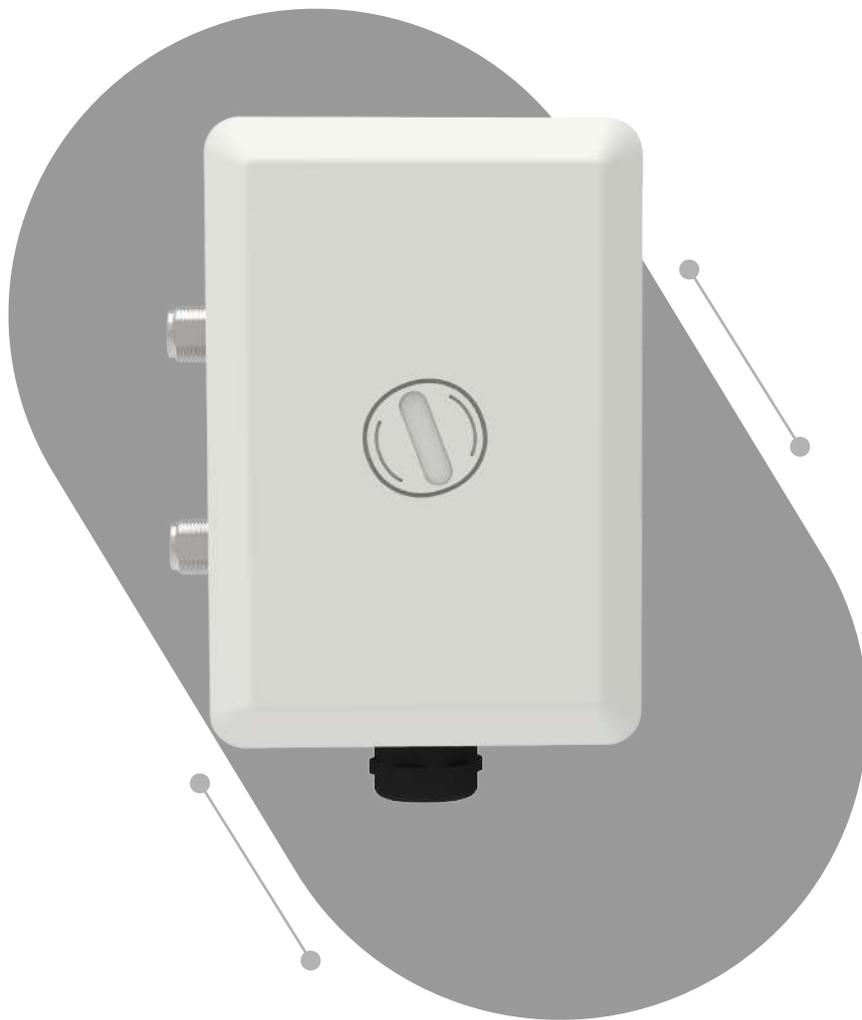


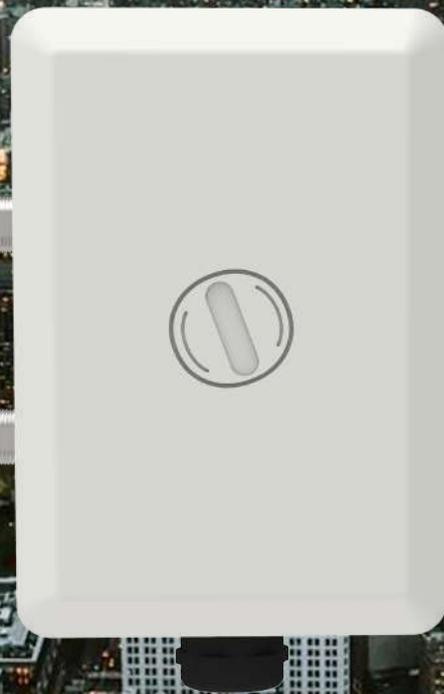
Quick Start Guide



Unlicensed Band Radio
High Capacity Radio

ion4le/ion4le_ext

ANYWHERE
EVERYWHERE



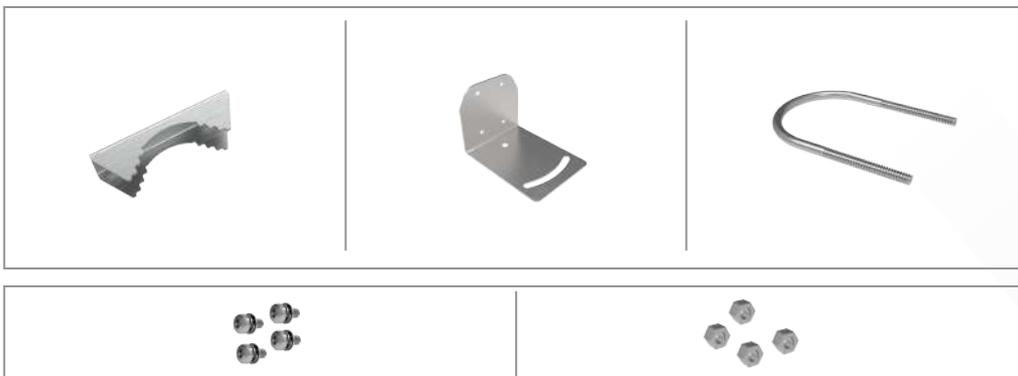
Introduction

Thank you for purchasing our Unlicensed Band Radio (UBR).IO enterprise/carrier grade P2P/P2mP solution is designed to serve highly critical enterprise applications in unlicensed 5 GHz spectrum for short-range and long-range links.

Packaging Content



2X2 UBR (Qty: 1)



Mounting Kit

Pole Clamp (Qty:1), L Plate (Qty:1),
 U bolt (Qty:1), SEMS Screw (Qty:4),
 Hex Nuts (Qty:4)

Product Specifications

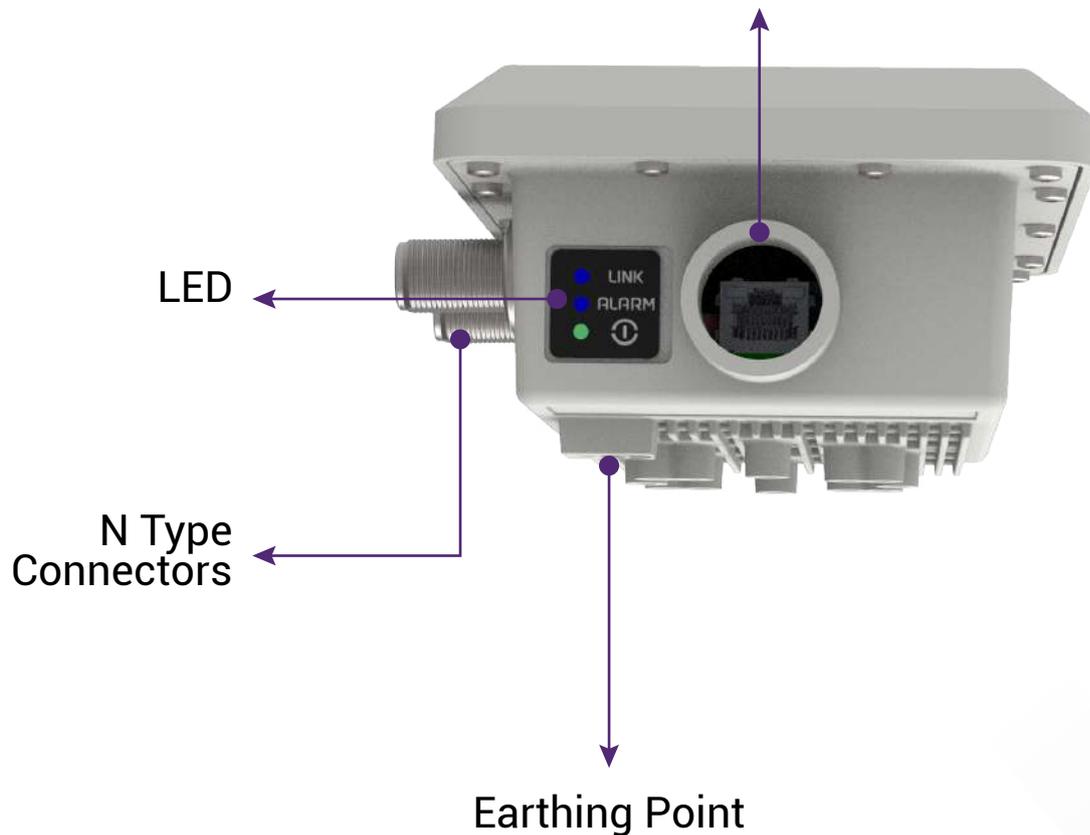
| | |
|-----------------------------|--|
| Peak Throughput (aggregate) | Up to 700 Mbps Aggregate UL/DL Throughput |
| Radio Mode | 2X2 |
| Modulation | Upto 256 QAM |
| Channel Bandwidth | 10/20/40/80 MHz |
| Wireless QoS | 802.11e WMM |
| Wireless Security | WPA, WPA2 and 128-bit AES PSK with hardware acceleration |
| Power Supply | IEEE 802.3af/at PoE |
| Power Consumption (Max) | <15W (max) |
| Antenna Type | Options for external high performance antenna |
| Management | Standalone (via GUI) or through appliance-based EMS or cloud-based |
| Enclosure Dimensions | 209x125x72 mm or 8.23x4.92x2.83 inches |
| Weight | 0.775 kg |
| Operating Temperature | ion4le: -15° C to 60° C ion4le_ext: -40° C to 60° C |
| Certifications | FCC Class A, CE, MTCTE, RoHS 3.0, IP67 |

Note:

Optional hardware customization includes in-built temperature sensor, in-built buzzer, dying gasp, and GNSS-1 (GPS + GLONASS) options. For more information, please contact our Sales Team.

Product Overview

LAN + PoE Port (with gland)
Power up the device using PoE
adaptor and a regular Ethernet Cable



Installation Set-up

The 2x2 UBR has four threaded holes on its rear side specifically designed for affixing the mounting bracket. This mounting bracket is designed to facilitate easy pole mounting by utilizing its components.

- ⋮⋮⋮ **1.** Align L Plate with the holes at the back of UBR and use provided SEMS screws to fix it.



- ⋮⋮⋮ **2.** Position the pole clamp as per the illustration.



- ... 3. Pass the U-bolt along with the hex nuts through the pole clamp, as depicted in the image below.



- ...
- ...
- ...
4. Secure the U-bolt firmly to affix it onto the pole by tightening the hex nuts, as demonstrated in the image below.



Attaching External Antennas

:::: Dish Antenna ::::

:::: **1a.** Attach the UBR to an external dish antenna using an RF cable, as illustrated in the image below.

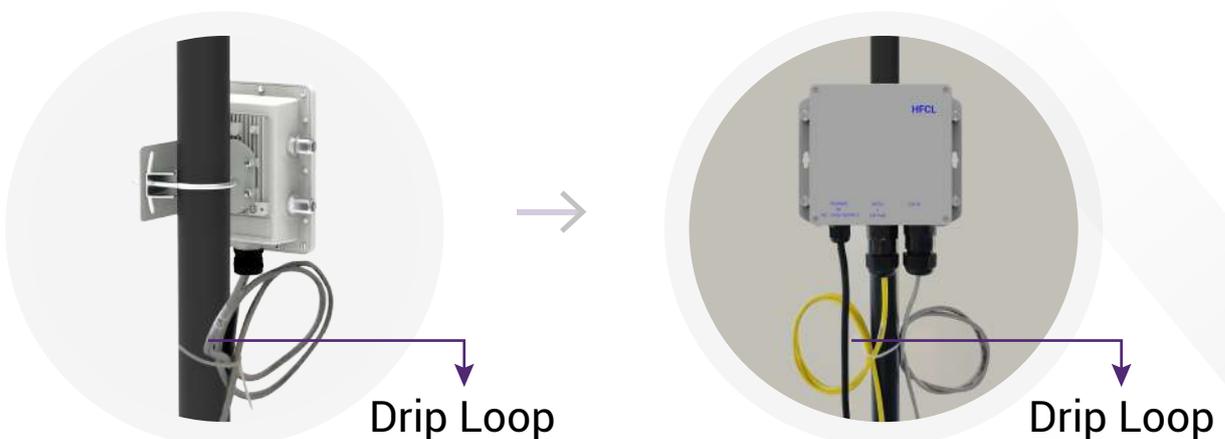


:::: Sector Antenna ::::

:::: 1b. Attach the UBR to an external sector antenna using an RF cable, as illustrated in the image below.



:::: 2. To avoid the water ingress, give "Drip Loop" in the cable, as illustrated below.



WARNING: HFCL cannot be held liable for any damages incurred during the process.

Getting the UBR Online

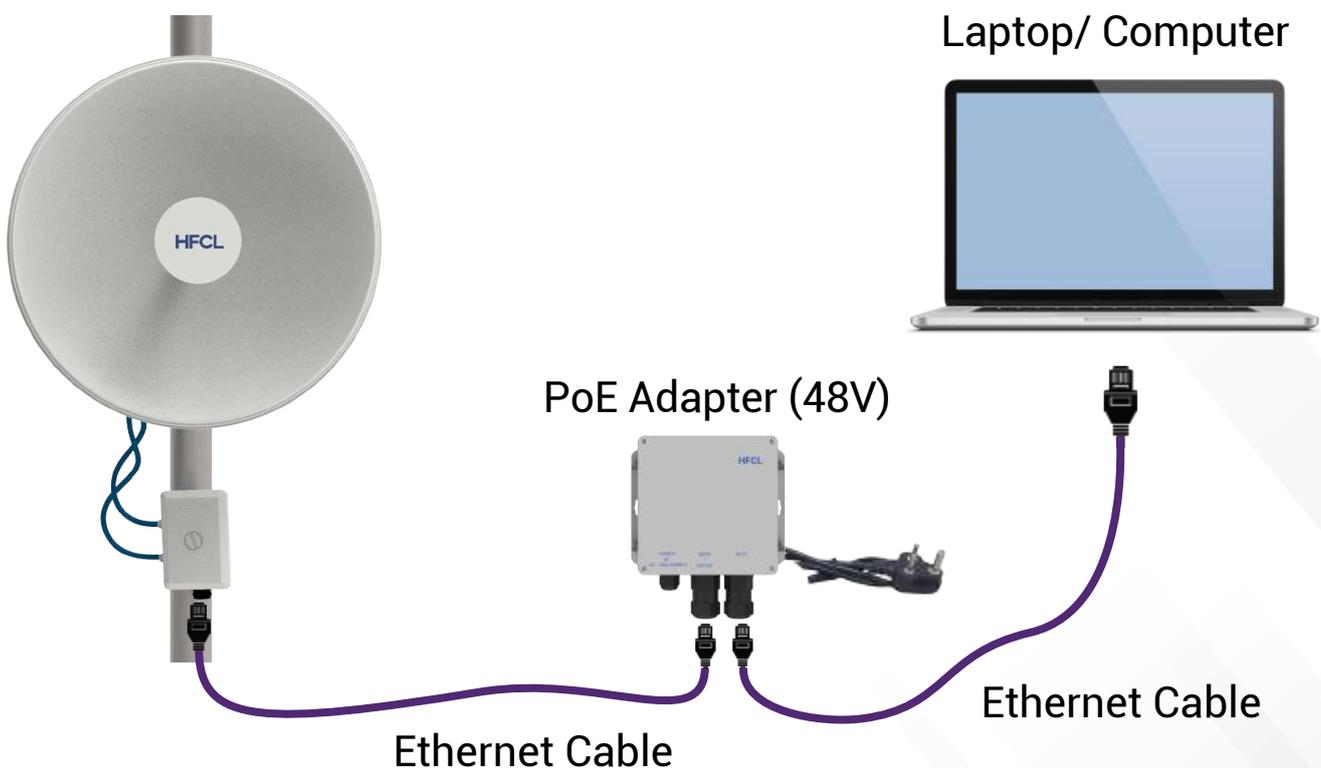


Step 1:

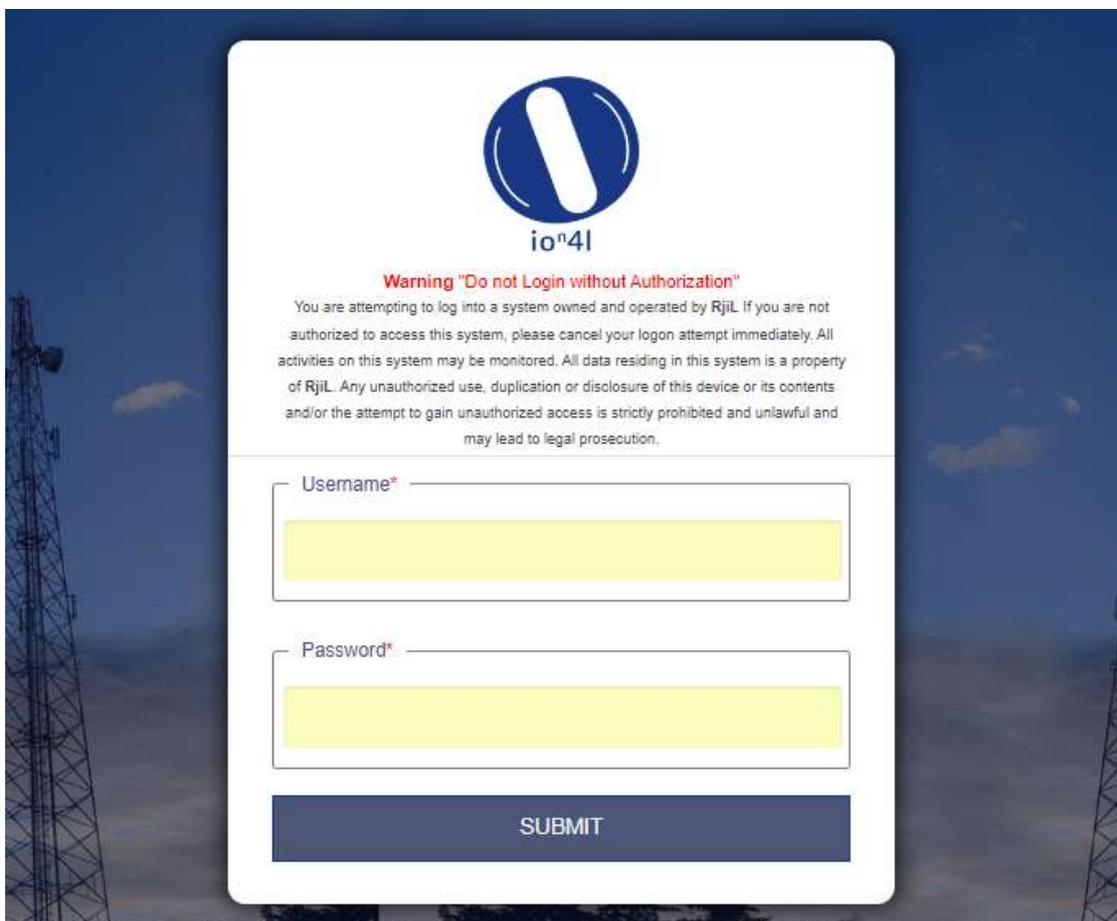
Power up the device and configure the UBR

Follow the steps mentioned below and connect UBR to a network

1. Connect an Ethernet cable to your laptop/computer.
2. Connect the opposite end of the Ethernet cable to the data port on the PoE adapter.
3. To power on the device, link the UBR's Ethernet port, designed for PoE support, to the power port on the PoE adapter.
4. Configure a computer with a 1-domain static IP address e.g. 192.168.1.X and a subnet mask of 255.255.255.0.



- 5. Open the web browser and enter “UBR IP address” in the address bar. The default static IP address for 2x2 UBR is set to “192.168.1.1”
- 6. A login screen will appear.
- 7. Enter the default login credential details:
User- admin, Password- HFcl!@23#ion



- 8. Refer our user manual on our website io.hfcl.com for detailed information to configure UBR.



Step 2:

Check the LED status



| LED COLOR | STATUS |
|------------------------------------|---|
| Green LED (Power Indication) | Green color notifies the user that the device is powered ON |
| Blue LED (RSSI/Link Indication) | Single Blink: -1 to -50 dBm Double Blink: -51 to -60 dBm Triple Blink: Lesser than -60 dBm NOTE: If link is down, then link LED will be in continuous OFF State. |
| Blue LED (Alarm Indication) | Single Blink: Minor Alarms Double Blink: Major Alarms Triple Blink: Critical Alarms |

Note: During Reboot and Factory Reset, all the three LEDs will glow for 7 secs and the power LED will continue to glow.

Safety Precautions



Observe the following safety precautions to avoid damage to the UBR

-  Do not power the device during installation

-  Do not subject the device to high temperatures

-  Keep away from high voltage cables

-  Do not power off the unit in the middle of an upgrade process

-  The gland should be ground facing all the time

-  Make sure the earthing wire is connected properly to the earthing point

-  Do not open the enclosure when the UBR is working

-  Fasten the device tightly



Contact Us:

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