





MoCA 2.5 CNU with 1x 1GbE port

IONE-CNUOO1-1X1GO-OTM Item 6461

User manual

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## 2. GET STARTED

## 2.1 INTRODUCTION

Congratulations for purchasing Inverto®'s OneNet™ MoCA Access 1GbE CNU network adapter. The adapter is a simple and flexible solution for accessing internet through Inverto®'s OneNet™ MoCA Access broadband solution. By leveraging the ubiquity of coaxial cabling within the modern home, the adapter enables Internet connectivity over a coaxial connection via its 1GbE Ethernet port. It also features a CATV (TV/STB out) coaxial port to allow for existing connections at the coaxial wall port.

This user manual explains the procedure to connect and setup the adapter.

## 2.2 PACKAGE CONTENT

- OneNet<sup>™</sup> MoCA 2.5 network adapter
- Power Adapter
- Quick Start Guide
- Ethernet Cable

## 2.3 REQUIREMENTS

- Available coaxial port in installation area
- Available electrical wall socket in installation area

### 2.4 FEATURES

- 1 Gb/s Ethernet port
- COM coaxial input port (Data + CATV RF)
- CATV coaxial output port (CATV RF)
- Power/Ethernet/Coaxial LEDs:

Indicator	Colors	Description
Power LED	Green	Off: No power Green: Power on
Ethernet LED	Green	Off: No link Green: 10M/100M/1G link
Coaxial LED	Green	Off: No MoCA link Green: MoCA link ok and secured

# 3. Connecting the adapter

Connecting the Adapter is a simple process (this assumes that a OneNet™ MoCA Access Controller was installed, connected to an internet link at its input port and to the coaxial network on its output ports). Connect the COM port of the CNU adapter to the coaxial connection available at your location and the Ethernet port to your PC or LAN/WLAN router to enable internet connectivity. If the coaxial network carries also a CATV RF signal, you may connect the CATV port to your TV or CATV STB.

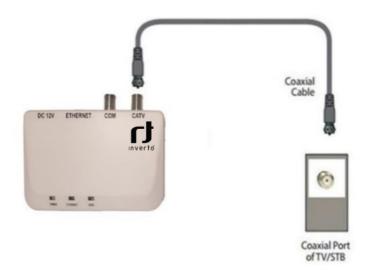
## 3.1 CONNECTING THE ADAPTER

The CNU adapter takes the Internet signal from the coaxial network (COM port) and delivers it

to the internal network (ETHERNET port), and can keep proving the TV/set-top box with a CATV signal, if available over the coaxial network, via its CATV port.

To connect the Adapter, please follow the following sequence:

- Remove the end of the coaxial cable connected to the TV or set-top box from its coaxial wall port.
- 2. Connect the end of the coaxial cable removed in step 1 to the CATV coaxial port on the side of the adapter.



3. Connect another coaxial cable into the coaxial wall port left unconnected in step 1.

4. Connect the other end of the coaxial cable installed in step 3 to the COM coaxial port on the side of the adapter



5. Connect one end of an Ethernet cable into the Ethernet port of your LAN/WLAN modem/router or directly to your PC.

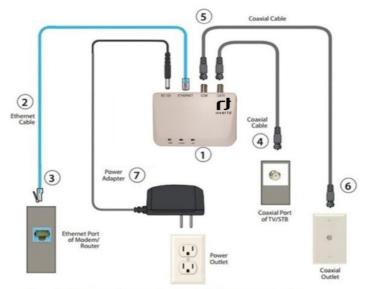


- 6. Connect the other end of the Ethernet cable into the Ethernet port on the side of the CNU Adapter.
- 7. Plug the provided power adapter into the Power port on the side of the CNU Adapter.



8. Plug the other end of the power adapter (external, 12VDC, 1A) into an electrical outlet.

When complete, the setup should look similar to the figure below:



Note: Circled numerals correspond to installation step numbers.

# 4. Specifications

## Chipset technology

MoCA 2.5: MXL3710, MAC data rate @ 2.5Gbps

PHY: 1.0G

### **Network Interfaces**

1 RF Output for CATV Female F-Type Connector 1 Ethernet Port 10/100/1000Mbps

## Supported protocols

10/100/1000BASE-T (IEEE802.3 Clause 40), Energy-Efficient Ethernet (IEEE 802.3az)

### **MoCA** specifications

Operating Frequencies:

OFDM 1024-QAM, TDD D-Band (1125~1675MHz)

Channel bandwidth:

RF Level:

Tx return loss in 1125MHz-1675MHz band: Max output power per channel for 3 channels: Maximum output power per channel for 4 channels: Maximum output power per channel for 5 channels: Minimum sensitivity:

## **CATV Output**

Operating frequency range: Transmit Mode return loss in 54MHz–1002MHz band: Insertion loss: Band flatness:

#### **Power Supply**

External:
Power Consumption:
AC input voltage (Volts):
AC input frequency:
Power supply Voltage:
DC / 12 Volts:
Efficiency:

## Mechanical

Back Panel Connectors & Keys DC connector RJ45 Ethernet connector MoCA connector -F-type female 75 Ohms CATV connector -F-type female 75 Ohms Master reset 5 x 100 MHz

≥ 6dB relative to 75 ohms
-4.5 dBm to +3.5 dBm
-5.3 dBm to +2.7 dBm
-6 dBm to +2 dBm
680 Mbps min with Receiver Power
Level: -50 < X < +1 dBm

54MHz–1002MHz ≥ 14 dB relative to 75 ohms -2.5 dB 2 dB

12V 1A AC/DC power supply < 6W
Min. 90 V | Typ. 100 -240 V | Max. 264 V
Min. 47Hz| Typ. 50/60 Hz | Max. 63 Hz
100-240 Vac input
Min. 11,4 Volts | Max. 12,6 Volts
85% (25% to 100% load)

#### **Dimensions**

110 x 70 x 28 (mm)

## Housing

Plastic casing: white color Wall mounting holes

## **Environmental/Storage**

Operating environmental temperature:

Relative humidity:

Altitude:

Storage (Non-operating) temperature:

Relative humidity:

Altitude:

Vibration (sinusoidal): Rough handling shocks: 0°C - 40°C

20% - 85%, non-condensing

< 2000m

-20°C + 60°C

5% - 95%, non-condensing < 2000m

According IEC 60028-2-6 According IEC 60028-2-31

## 5. Notices

### **5.1 WARRANTY**

The CNU is supplied with one year warranty.

#### 5.2 LOCAL LAW

This Limited Warranty Statement gives the customer specific legal rights. The customer may also have other rights which vary from state to state in the United States, from province to province in Canada, and from country to country elsewhere in the world. To the extent that this Limited Warranty Statement is consistent with local law, this Statement shall be deemed modified to be consistent with such local law. Under such local law, certain disclaimers and limitations of this Warranty Statement may not apply to the customer.

## 5.3 IMPORTANT SAFETY INSTRUCTIONS

Basic safety precautions should always be followed to reduce the risk of fire, electrical shock, and personal injury, including the following:

- Do not use this product near water-for example, near a bathtub, kitchen sink, laundry tub, heat registers, stoves, or other apparatus including amplifiers that produce heat.
- Do not block any ventilation openings. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus including amplifiers that produce heat.
- Use only the power adapter provided with the device

Safety certifications and designed with respect to:

- ROHS Certificate
- ROHS 2.0 standard 2011/65/EU and its amendment directive (EU) 2015/863

### 5.4 COAXIAL CABLE

If applicable, the coaxial cable screen shield should be connected to the Earth at the building entrance per ANSI/NFPA70, the National Electrical Code (NEC), in particular Section 820.93, "Grounding of Outer Conductive Shield of a Coaxial Cable," or in accordance with local regulation.

## 5.5 FCC

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part15 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 specific 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 and correct the interference by implementing one or more of the following measures:

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

## 5.6 DECLARATION OF CONFORMITY FOR PRODUCTS MARKED WITH THE FCC LOGO (USA ONLY)

This device complies with Part 15 of the FCC Rules license-exempt RSS standard(s). Operation is subject to the following two conditions:

 This device may not cause harmful interference;
 This device must accept any interference received, including interference that may cause undesired operation of the device.

3. Modifications: The FCC requires the user to be notified that any changes or modifications made to this device that are not expressly approved by Inverto may void the user's authority to operate the equipment.

### 5.7 CE

EN 55032: Electromagnetic compatibility of multimedia equipment - Emission requirements EN 55035: Electromagnetic compatibility of multimedia equipment - Immunity requirements

# 6. Technical support

#### 6.1 RESET AND FACTORY RESET

To reset the device, press the reset button available on the back panel of the CNU. To reset the device into factory default settings, press the reset button available on the back panel of the CNU for 10 seconds



# 7. Contact

FTA Communications Technologies SARL 17 Route de Luxembourg Gonderange L-6182 Luxembourg

Email for support: support@inverto.tv Fmail for contact: info@inverto tv





For purpose of brevity, some product descriptions in this sheet remain at platform level and may not be referred to as detailed datasheets of the products. Inverto Digital Labs reserves the right to amend, omit or add products, product-lines, and / or features without notice. As product specifications may change without notice, always contact Inverto to obtain the latest product specification sheets.

For further details contact: sales@inverto.tv