

# **HCNA Coax MDU Ethernet Endpoint**

## **User's Guide**

V1.0

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## **INTRODUCTION**

This HCNA (HomePNA3.1 over Coax) coax MDU Ethernet endpoint connects any Ethernet device to a high speed access for Internet access. This bridge brings you the newest Ethernet compatible technology that uses the coaxial cable as the network's physical wiring thereby eliminating the need to install new wiring. It is designed to operate on the coaxial TV cable installed in building.

This bridge is to connect PCs or set-top-box to broadband access of cable operators by simply plugging into the existing coaxial F-Type connector in home.

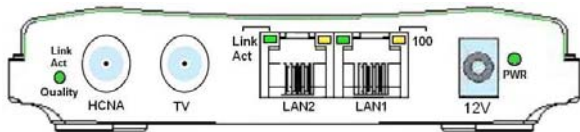
## **Features**

- Plug & Play
- Using existing coaxial TV cable to provide in-building distribution network of broadband access
- Shares Internet access and cable TV video
- 1 port connection compliant with HomePNA 3.1 over Coax (HCNA) standard
- 2 Standard 10/100BaseT Fast Ethernet ports for connecting to PC or Set-Top-Box(STB)
- MDI/MDIX Auto Crossover Support
- QoS Priority Mapping Support
- Configurable QoS, TagVLAN, Bandwidth Control
- Statistics and Status Information Support

# HARDWARE INSTALLATION

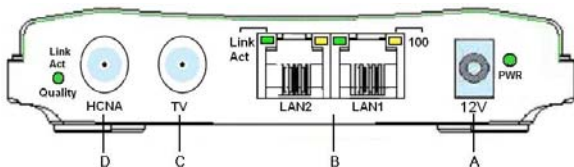
## Parts Names and Functions

### LED Indicators on the Rear Panel





Port	LED	Status		
		ON	Flashing	OFF
12V	<b>PWR</b>	Powered by DC12V	N/A	Not powered
LAN1	<b>Link Act</b>	Link	Receive or Transmit	Disconnect or Link fail
	<b>100</b>	100Mbps	N/A	10Mbps
LAN2	<b>Link Act</b>	Link	Receive or Transmit	Disconnect or Link fail
	<b>100</b>	100Mbps	N/A	10Mbps
HCNA	<b>Link Act</b>	Link	Receive or Transmit	Disconnect or Link fail
	<b>Quality</b>	Green:High Orange:Medium Red:Low		


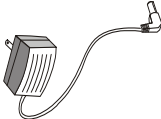
## Ports on the Rear Panel



	Port Name	Type	Functions
A	<b>12V</b>	DC	Connect to the power adapter plug.
B	<b>LAN1/LAN2</b>	RJ-45	Connect to Ethernet port on PC or Set-Top-Box for Internet Access.
C	<b>TV</b>	F	Connect to TV
D	<b>HCNA</b>	F	Connect to F-Connector on wall

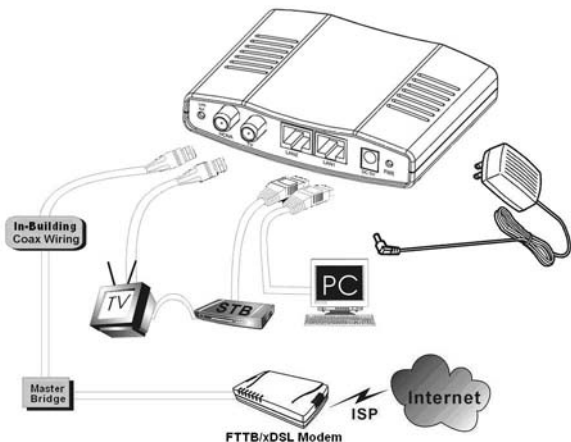
## Essential Hardwares

Items Included	Description	Purpose
	HCNA to Ethernet Bridge	Main Unit
	Coaxial Cable (F-Type/ RG-59U)	Connects from HCNA port to coax F-Type connector on the wall outlet.

	<p>CAT5 Ethernet cable</p>	<p>Connects from LAN port to Ethernet enabled devices as PC or STB</p>
	<p>DC12V Power adapter</p>	<p>Connects from Power port of the main unit into a wall outlet</p>

## Hardware Connections

1. Select a convenient location for the bridge near the PC or Ethernet device to which it will be connected. The bridge should be kept away from excessive heat.
2. Using one coaxial cable to connect the **HCNA** port to F-Type connector on the wall. Using another coaxial cable to connect the other F-type **TV** port to TV set (optional).
3. Connect the **LAN1/LAN2** port to your Ethernet-equipped device.
4. Connect the power adapter to the **12V** port into a wall outlet.



The figure above shows how to connect an FTTB or xDSL modem and PC or STB to the in-building coaxial cable network.

Now you should have connected the **LAN** port, **HCNA** port and the **12V** port to the appropriate devices or lines. LED will be as:

PWR	ON
LAN Link/Act	ON
HCNA Link/Act	ON (Green or Orange)

For more information on LEDs, see section entitled ["LED Indicators on the Rear Panel"](#)

## **TROUBLESHOOTING**

The bridge has been designed to be a reliable and easy to use connection device. Please refer to the list below to aid in troubleshooting.

### **The Power (green PWR) LED is off.**

- *Make sure the power adapter is properly plugged into a live electrical outlet.*

### **The LAN(Ethernet) LED is off.**

- *Make sure the connection to LAN port is secure.*
- *The Ethernet device to which you are connected should be powered on and properly configured.*

### **The HCNA Link/Act/Quality LED is off or red**

- *Make sure the connection to HCNA port is secure.*
- *HCNA device to which you are connected should be powered on and properly configured.*
- *Make sure the quality of coaxial connector and cable is good.*

# **SPECIFICATIONS**

## **Standards**

- IEEE 802.3 10BaseT Ethernet
- IEEE 802.3u 100BaseT Fast Ethernet
- HomePNA 3.1 over Coax compliant

## **Data Rates**

- HCNA: 224/192 Mbps maximal
- Ethernet: 10/100 Mbps

## **Transmission Range**

- HCNA : Up to 65dB attenuation
- Ethernet: 100 meters maximum

## **Power Consumption**

- 12V DC, Less than 4 watt

## **Certifications**

- CE, FCC Part 15

## **LEDs**

- Power
- Ethernet Link/Activity/Speed
- HCNA Link/Activity/Quality

## **Connectors**

- Two F-Type connectors, one for connecting with HCNA device, and one for TV Bypass
- Two RJ-45 for 10/100Mbps Ethernet

## **Cables**

- HCNA: F-Type RG-59U coaxial cable
- Ethernet: CAT5 or better UTP