

Coaxial LAN Converter

VDSL2 Converter

User's Manual

Coaxial LAN Converter

Unpacking Information

Thank you for purchasing the Coaxial LAN converter. Before installation, please check that your package contains the following items:

1. One Coaxial LAN Converter
2. One power adapter
3. One user's manual

Introduction

General Description

The Coaxial LAN Converter supports the signal conversion between traditional Ethernet and Coaxial cable technology. The device is a right solution to integrate current Ethernet application with Coaxial cable line which is existed in many old buildings, like hotel, office and apartment environment.

The BNC port supports asymmetry data transmission bandwidth up to 100Mbps and transmission distance up to 900m.

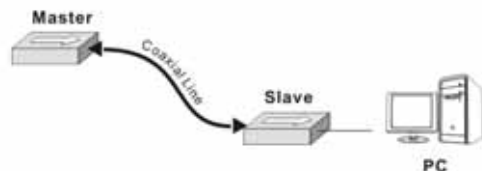
It is ideal for providing video-on-demand and multi-media service to apartment, hotel and campus without rewiring cable consideration. Moreover, the distance expansion also provides wide range coverage.

The converter is plug-n-play without any software to configure and also fully compliant with all kinds of network protocols. Moreover, the rich diagnostic LEDs on the front-panel provide the operating status of the system.

The cable specifications of the connection are listed as following:

- 10BASE-T, Category 3, 4 or 5 UTP/STP
- 100BASE-TX, Category 5 UTP/STP
- Coaxial line

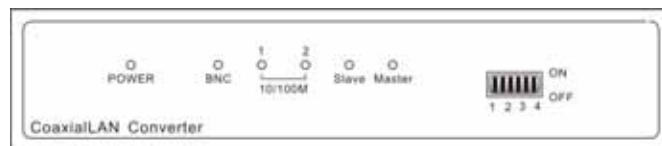
The drawing listed below is typical application for the Coaxial LAN Converter.



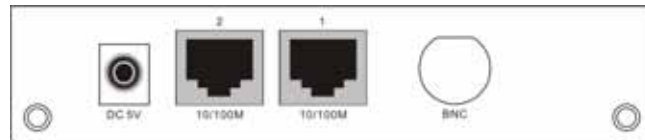
Key Features

- Complies with IEEE802.3 10BASE-T standard
- Complies with IEEE802.3u 100BASE-TX standard
- Supports 1 * BNC port for Ethernet over coaxial line
- Provides 2 * RJ-45 ports for 10/100Mbps Ethernet
- Provides 1 * Dip Switch for mode selection
- Data transmit on coaxial line
- BNC port supports maximum throughput 60Mbps/100Mbps (upstream /downstream) over 1000ft (400m)
- Long-reach throughput is around 70Mbps downstream over 3000ft (900m)
- Mini size design (120 x 75 x 25mm)
- Provides rich diagnostic LED indicators
- External power adapter

The Front Panel



The Rear Panel



Dip Switch Settings

	Pin1	Pin2	Pin3	Pin4
	Side	Mode	Rate limit	SNR
ON	Slave (CPE)	Fast	No limit	6dB
OFF	Master (CO)	Interleave	50/20 Mbps	9dB

Pin1: Master, slave switch

Slave (CPE): Coaxial LAN converter acts as Slave / Customer Premise Equipment (CPE) side.

Master (CO): Coaxial LAN converter acts as Master / Central Office (CO) side.

Pin2: Impulse noise protection

Fast mode: Direct data transmission with latency less than 1 ms.

Interleave mode: Provides communication protection for up to 250ms impulse noise with latency less than 6 ms.

Pin3: Rate limit control

No limit: Provides up to 100Mbps/50Mbps line rate in short line.

50/20 Mbps: Line rate limited to 50/20Mbps.

Pin4: General protection

6dB: Original channel noise protection with 6 dB SNR.

9dB: Better channel noise protection with SNR up to 9 dB.

Note: SNR (Signal Noise Rate) = Signal / Noise. Switch on this pin depends on your network demand.

LEDs Definition

LED	Status	Operation
Power	Green	The device is powered on.
	Off	The device is powered off.
BNC	Green	The port is connected.
	Blinking Green*	Data transmitting/receiving.
	Off	No valid link on this port.
10 / 100M	Green	The port is connected.
	Blinking Green*	Data transmitting/receiving.
Master	Green	The device acts as Master mode.
	Off	The master mode is off.
Slave	Green	The device acts as Slave mode.
	Off	The slave mode is off.

* Once the converter connects to a power source, the LEDs of 10/100M blink once, and the converter begins looking for other converter automatically. During searching, the BNC LED keeps blinking; it stops blinking after success detection.

Product Specifications

Standard	IEEE802.3 standard IEEE802.3u standard Ethernet over coaxial cable
Interface	2 * RJ-45 10/100Mbps Ethernet ports 1 * BNC connector for Ethernet over Coaxial cable 1 * DIP switch for selective transmission and Slave/Master modes
LED indications	Power*1, BNC*1, LAN*2, Master mode*1, Slave mode*1
Emission	FCC Class A, CE, VCCI Class A
Temperature	Operating -- 0°- 40°C (32° ~ 104°F) Storage -- -10°- 70°C (14° ~ 158°F)
Humidity	Operating -- 10% ~ 90% (non-condensing) Storage -- 5% ~ 95% (non-condensing)

VDSL2 Converter

Unpacking Information

Thank you for purchasing the Ethernet over VDSL2 converter. Before installation, please check that your package contains the following items:

1. One Ethernet over VDSL2 converter
2. One power adapter
3. One telephone line
4. One user's manual

Introduction

General Description

The VDSL2 Converter supports the signal conversion between traditional Ethernet and innovative VDSL2 technology. The device is a right solution to integrate current Ethernet application with the new building phone line networking technology, like hotel, office and apartment environment.

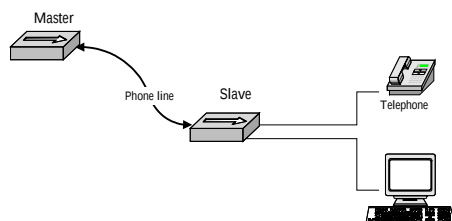
The EoVDSL2 port supports symmetry and asymmetry data transmission bandwidth up to 100Mbps and transmission distance up to 1500m. It is ideal for providing video-on-demand and multi-media service to apartment, hotel and campus without rewiring cable consideration. Moreover, the distance expansion also provides wide range coverage.

The converter is plug-n-play without any software to configure and also fully compliant with all kinds of network protocols. Moreover, the rich diagnostic LEDs on the front-panel provide the operating status of the system.

The cable specifications of the connection are listed as following:

- 10BASE-T, Category 3, 4 or 5 UTP/STP
- 100BASE-TX, Category 5 UTP/STP
- Ethernet over VDSL2, Twisted-pair telephone wires

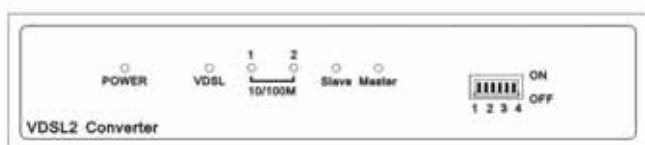
The drawing listed below is a typical application for the Ethernet over VDSL2 converter.



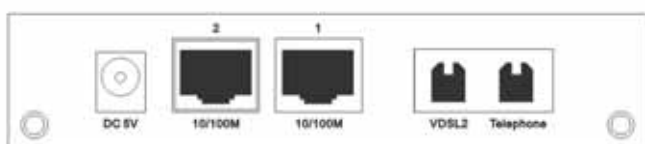
Key Features

- Complies with IEEE802.3 10BASE-T standard
- Complies with IEEE802.3u 100BASE-TX standard
- Compliance with VDSL2 ITU-T G.993.2
- Supports 1 * RJ-11 port for Ethernet over VDSL2
- Provides 1 * RJ-11 port for telephone connection
- Provides 2 * RJ-45 ports for 10/100Mbps Ethernet
- Provides 1 * Dip Switch for mode selection
- Voice and Data work on the same telephone line
- EoVDSL2 port supports maximum bandwidth 100Mbps/50Mbps (downstream /upstream) over 1000ft (300m)
- Long Reach VDSL2 performance around 17Mbps downstream over 5000ft (1500m)
- Mini size design (120 x 75 x 25mm)
- Provides rich diagnostic LED indicators
- External Power Adapter

The Front Panel



The Rear Panel



Dip Switch Settings

	Pin1	Pin2	Pin3	Pin4
	Side	Mode	Rate limit	SNR
ON	Slave (CPE)	Fast	No limit	6dB
OFF	Master (CO)	Interleave	50/20 Mbps	9dB

Pin1: Master, slave switch

Slave (CPE): EoVDSL2 converter acts as Slave / Customer Premise Equipment (CPE) side.

Master (CO): EoVDSL2 converter acts as Master / Central Office (CO) side.

Pin2: Impulse noise protection

Fast mode: Direct data transmission with latency less than 1 ms.

Interleave mode: Provides communication protection for up to 250ms impulse noise with latency less than 6 ms.

Pin3: Rate limit control

No limit: Provides up to 100Mbps/50Mbps line rate in short line.

50/20 Mbps: Line rate limited to 50/20Mbps.

Pin4: General protection

6dB: Original channel noise protection with 6 dB SNR.

9dB: Better channel noise protection with SNR up to 9 dB.

Note: SNR (Signal Noise Rate) = Signal / Noise. Switch on this pin depends on your network demand.

LEDs Definition

LED	Status	Operation
Power	Green	The device is powered on.
	Off	The device is powered off.
VDSL	Green	The port is connected.
	Blinking Green*	Data transmitting/receiving.
	Off	No valid link on this port
10/100M	Green	The port is connected.
	Blinking Green*	Data transmitting/receiving.
Master	Green	The device acts as Master mode.
	Off	The master mode is off.
Slave	Green	The device acts as Slave mode.
	Off	The slave mode is off.

* Once the converter connects to a power source, the LEDs of 10/100M blink once, and the converter begins looking for other converter automatically. During searching, the VDSL LED keeps blinking; it stops blinking after success detection.

Product Specifications

Standard	IEEE802.3 standard IEEE802.3u standard Ethernet over VDSL2 VDSL2 ITU-T G.993.2
Interface	2 * RJ-45 10/100Mbps Ethernet ports 1 * RJ-11 connector for EoVDSL2 1 * RJ-11 connector for telephone connection 1 * DIP switch for selective transmission modes
LED indications	Power*1, VDSL*1, LAN*2, Master mode*1, Slave mode*1
Emission	FCC Class A, CE, VCCI Class A
Temperature	Operating -- 0 ⁰ - 40 ⁰ C (32 ⁰ ~ 104 ⁰ F) Storage -- -10 ⁰ - 70 ⁰ C (14 ⁰ ~ 158 ⁰ F)
Humidity	Operating -- 10% ~ 90% (non-condensing) Storage -- 5% ~ 95% (non-condensing)

FCC Certifications

This Equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

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.

CE Mark Warning

This equipment complies with the requirements relating to electromagnetic compatibility, EN 55022 Class A for ITE, the essential protection requirement of Council Directive 89/336/EEC on the approximation of the laws of the Member States relating to electromagnetic compatibility.

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