

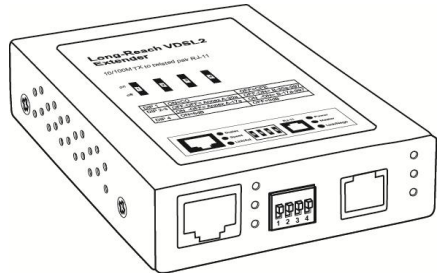
## Introduction

This device is a Long Reach Ethernet Extender with one Ethernet port (on 1 RJ-45 connector) and one VDSL2 port on 1 RJ-11 connector. This extender is a bridge mode modem accommodating well proven Ethernet and VDSL2 technologies to extend Ethernet over single-pair phone line by using a VDSL2 signal. Up to 100/60 Mbps (or 90/90 Mbps with synchronous data rate) transition bandwidth within 300m and 40/10 Mbps for 1km long range connections that provides ultra-high performance to the pervasive telephone line network. Its plug-n-play solution minimum installation time & cost by allowing video streaming and data to share the same telephone pair without interference.

With one DIP switches configuration, the Extender including the CO (Central Office) site and CPE (Customer Premise Equipment) site. It supports high bandwidth VDSL2 over existing telephone wires in the "last mile" from the ISP / Telecom / Service provider's fiber mode to the buildings and customers' home.

## 10/100Base-Tx VDSL2 Long Reach Ethernet Extender

### Quick Installation Guide



### Key Features

- One Ethernet Port (RJ-45)
- One VDSL port (RJ-11)
- Compliant with ITU-T G.993.2 (VDSL2)
- Extending Ethernet over single-pair phone line by using VDSL2 signal
- Up to 90/90 Mbps transition bandwidth within 350m and up to 40Mbps for 1km long range connections
- Selectable DIP Switch for CO/CPE mode, Annex A/B-17a/30a and SNR Control

## Front Panel (LEDs)

### LED Indicator

LED	Status	Description
Duplex	On	RJ 45 port full duplex
	Off	RJ 45 port half duplex
Speed	On	RJ 45 connect at 100M
	off	RJ 45 connect at 10M
Link/Act	On	RJ 45 port is link
	Blinking	RJ 45 port Data is transmitting or receiving
Power	On	Power is on.
	Off	Power is off.
CO	On	Work as Master at Core center
	off	Work as CPE at Edge site
Negotiation /Link /Act	Blinking	Negotiation
	On	Link is connected
	flash Blinking	Data Active

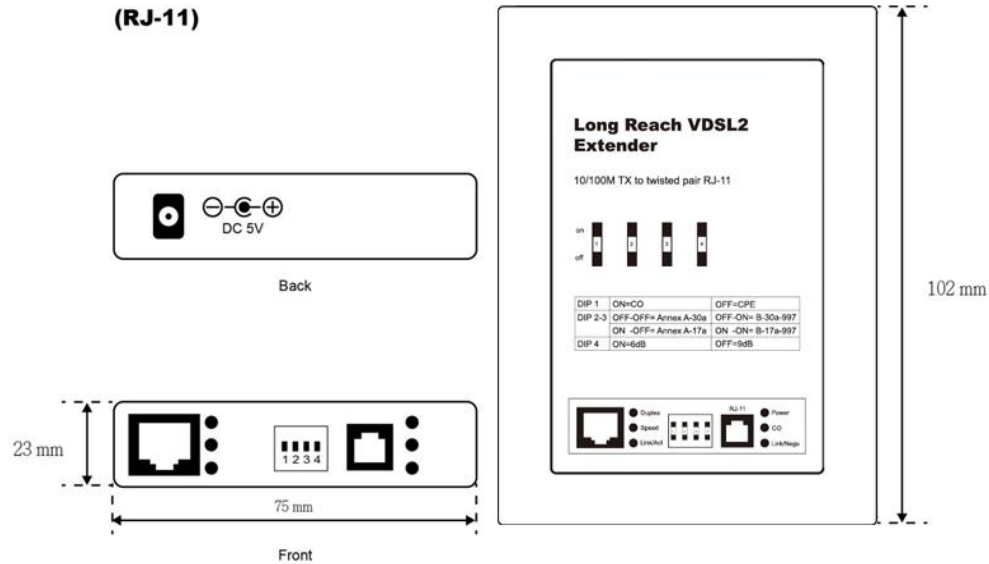
## DIP Switches Mode Configuration

DIP	1	2	3	4
On	CO	OFF-OFF: Annex A-30a		6dB
Off	CPE	OFF-ON: B-30a-997 ON-OFF: Annex A-17a ON-ON: B-17a-997		9dB

- DIP 1 CPE or CO mode selection.  
CO: Short of Central Office. After CO is configured, the device acts as master device of the VDSL connection.  
CPE: Short of Customer Premises Equipment. After CPE is configured, the device acts as the terminal/client of the VDSL Connection.  
When connected the VDSL extenders, one of the end must be configured to CO, the other end must be configured to CPE.
- DIP 2/3: Type of VDSL2 Frequency.  
Default configuration is OFF-OFF, it represents for Annex A-30a.  
Please check with the service provider before configured the DIP 2/3.
- DIP 4: Signal Noise Rate selection.  
Higher SNR means Less Noise, the data transmitting quality is better. However, if the device wants to remain better SNR, the transmission rate may become lower.  
For example, with the SNR 6dB, the transmission performance is higher than 9db SNR. The DIP allows you to select 6dB or 9dB depends on your application.



## Mechanical



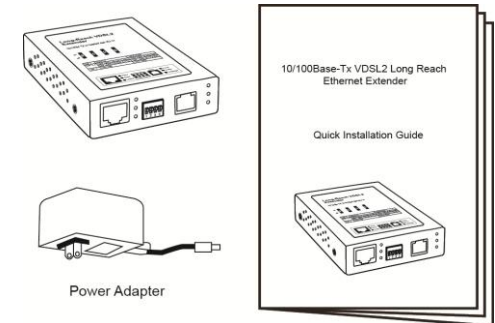
## Technical Specifications

<b>Standards</b>	IEEE802.3 10Base-T IEEE802.3u 100Base-TX IEEE802.3x Full Duplex ITU-T G.993.2 (VDSL2)
<b>Interface</b>	Ethernet: 10/100Base-TX RJ-45 Connector, Auto-MDI/MDI-X RJ-11 female Phone Jack DC Jack
<b>Switching</b>	MAC Address: 2K Transmission Method: Store and Forward
<b>LED Indicators</b>	Duplex Speed Link / Act Power Master Link / Negotiation
<b>DIP</b>	DIP 1: CO/CPE mode DIP 2-3: Annex A-30a, B-30a-997, A-17a, B-17a-997 DIP 4: SNR 6/9dB
<b>Power Input</b>	Adapter: 100~240VAC to DC 12 Volt Output Consumption : Max. 4.8W @ 12V
<b>Dimensions</b>	102 x 75 x 23 mm (L x W x H)
<b>Weight</b>	0.21 kg
<b>Operating Temperature</b>	0 to 45°C
<b>Storage Temperature</b>	-20 to 90°C
<b>Humidity</b>	10 to 90% RH (non-condensing)
<b>Certifications</b>	FCC Class A, CE

## Package Contents

Before you start to install this switch, please verify your package that contains the following items:

- Two VDSL2 Long Reach Ethernet Extenders
- Two Power Adaptors
- Quick Installation Guide



Note: If any of these items is found missing or damaged, please contact your local supplier for replacement.

## FCC Warning

This device has been tested and found to comply with limits for a Class A digital device and pursuant to Part 15 of FCC Rules. These limits are designed to provide a reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates and radiates radio frequency energy. If it's not installed and used in accordance with the user's manual, it may cause interference. In which case, users will be required to correct interference at their own expenses.

## CE Warning

This is a Class A product. In a domestic environment, this product may cause radio interference in which case the user may be required to take adequate measures.