

Step 1: RJ-11 connection

- 1 x RJ11 jack (The RJ11 Line port is used to connect to telephone that is connected to VDSL CO and CPE Modem (Point-to-point solution))
- The line port has 2 connectors: Either RJ-11 port is connected or terminal block is connected using straight connection or cross-over connection. When inserting a RJ-11 plug, make sure the tab on the plug clicks into position to ensure that it is properly seated.

Step 2: RJ-45 Connecting

- The Modem provides 2 Ethernet port, which support connection through Ethernet operation.
- It is used to connect from VDSL2 Modem (CO) using single pair phone cable to VDSL2 Modem (CPE) side (point to point solution).

Step 3. Power connection

- Use the included power adaptor (DC 12V/1A) to connect the Modem power socket to an appropriate power source.

Notes:

- Be sure phone wire has been installed before VDSL2 Modem powered on.

Cabling Requirements

Connection Type	Cable Requirements	Maximum Length
Ethernet Port (RJ-45)	100 Mbps: Cat 5~7 UTP/STP	100 meters max for MUX or HUB to endpoint
VDSL Port (RJ-11)	24-26 Gauge phone wiring Do not recommend 28 or above Gauge	1.5M/ 5M: 3km 100MM: 300m

5

DIP switch configuration

ON/OFF	Pin1 Mode	Pin2 Band	Pin3 SNRM	Pin4 Interleave/INP
ON	CO Mode	High Band	9db	8ms/INP=2
OFF	CPE Mode	Low Band	6db	1ms/INP=0



Note:

- 1, The DIP switch default value are OFF.
- 2, Please power off VDSL2 Modem, before making any transmission mode configuration.

Troubleshooting

Symptom: Power indicator does not light up (Green).

- Causes: Defective external power supply.
- Solution: Check the power plug by attaching with a functioning one. Check the power cord with other devices. If both tests fail, have the power supply replaced by qualified distributor.

Symptom: Link indicator does not light up (Green).

- Causes: Network interface, network cable or switch port may be faulty.
- Solution:

1. Power off and reconnect the VDSL modem.
2. Verify that the modem and attached device are power on.
3. Be sure the cable is plugged into both the modem and corresponding device.
4. Verify that the proper cable type is used and its length does not exceed specified limits.
5. Check the modem on the attached device and cable connections for possible defects.
6. Make sure the phone wire must be connecting VDSL2 Modem first, when powered on.
7. Replace the defective modem or cable if necessary.

6

Symptom: VDSL Link cannot be established.

- Causes: VDSL setting failure or phone cable length is over the specification limit.
- Solution:

1. Please make sure that the phone wire must be connected between VDSL2 Modem (CO) and VDSL2 Modem (CPE) when both are power on. VDSL2 Modem (CO) will do link speed Modem (CO)

can't detect VDSL2 Modem (CPE) over phone wire while both power on, this will cause the link to fail.

2. Please check phone wire, we recommend use 24 gauge with twisted pair and without rust, and the length is not over 3 km.

3. Please check the correct Dip Switch setting. (CO: PIN1 ON, CPE: PIN1 OFF)

4. Please reinsert power when change cable length or link time over 3 minutes.

-----For more details, please refer to user manual -----

1. Go to <http://www.micronet.com.tw>-->Support->Download Center->Product name search --> "SP3501C"

2. Scan QR code



Communicate via **Micro network**



Micronet
Making Communication Easier

Quick Installation Guide

VDSL2 CO / CPE Modem

Model No.: SP3501C



WEEE Directive & Product Disposal

At the end of its serviceable life, this product should not be treated as household or general waste. It should be handed over to the applicable collection point for the recycling of electrical and electronic equipment, or returned to the supplier for disposal.

Introduction

Micronet introduces the next-generation broadband access solution, with the newest VDSL2 technology, to carriers and MxU (Multi-Dwelling/Multi-Tenant Units) environments that need for new services such as IPTV, video conferencing, VoIP, peer-to-peer file sharing, and interactive gaming. Micronet SP3501C VDSL2 CO / CPE Modem are fully compliant with ITU-T G.993.2 VDSL2 standard also supports both central office (CO) and customer-premises equipment (CPE) modes selectable through DIP Switch that is able to provide the newest broadband solution with ADSL-like long-reach performance and high-speed symmetrical bandwidth up to 100Mbps.

Package Contents

Prior to the installation of the device, please verify the following items are in the package:

- VDSL Modem
- Quick Installation Guide
- RJ-45 Cable
- Power Adaptor

Key Features

- Compliant with ETSI, ITU, ANSI standards
- Compliant with IEEE802.3 10BASE-T and IEEE802.3u 100BASE-TX standards
- Supports RJ-11/Terminal Block combo for Line port.
- Supports high bandwidth up to 100Mbps symmetric over Line ports
- Support long reach mode up to 3 km with 24 gauge phone wire
- Support auto speed for Line port and Interleave mode selectable through CO side DIP switch
- DIP switch with CO and CPE mode selectable
- Supports long packet size up to 1536 bytes
- Supports Surge protection
- Supports wall mounting
- Mini size and metal case design
- Supports point-to-point applications

Tour of the System

Front Panel



Rear View



Modem Front Connectors

Connectors	Description
Line (RJ-11)/ Terminal block	Connecting to VDSL2 Mode. (Do not use RJ11 and Terminal Block at the same time.)
LAN1/LAN2	Connecting to an Ethernet network device.

LED definition

LED	Status	Operation
PWR(Power LED)	Green	Device is powering on or reset ok.
LAN 1-2 (Ethernet LED)	Green	Lights up steadily to show good linkage.
	Flashing Green	Flashing to show data transmission.
CO (Local Side) (CO LED)	Green	Indicate the VDSL2 Mode is running at CO(Master) mode.
CPE (Remote Side) (CPE LED)	Green	Indicate the VDSL2 Mode is running at CPE(Slave) mode.
LINE (VDSL LINK LED)	Green On (Steady)	The Internet or network connection is up.
	Green Blinking slowly	The CO device is auto-detecting CPE device.
	Green Blinking fastly	The CO device has detected a CPE device and ready to connect. The device is sending or receiving data.
	Green Off	The Internet or network connection is down or has malfunctioned.

Modem Front Connectors

Connectors	Type	Description
Power	DC Power Jack	External Power Adapter: Input: AC 85~240Volts/ 50~60Hz Output: DC 12V/1A
DIP Switch	4 Pins DIP Switch	Provide 4 selectable transmission modes.
Ground	Ground Lug	Please connect the ground lug to the earth. To prevent a electric shock when user touches.

Hardware Installation

Installation Requirements

- Power requirements: DC 12V/1A or above
- The Modem should be located in a cool dry place with at least 10cm of space at the front and back for ventilation.
- Place the Modem out of direct sunlight, and away from heat sources or areas with a high amount of electromagnetic interference.

