Ethernet over VDSL2

4-Port Managed Access Multiplexer

UVE7314-M User Manual

Rev. 1.1

Quick Installation Guide

Step 1:   Broadband Router Connections for UVE7314-M

A. Connect UVE7314-M Giga Ethernet port to Broadband Router as the following connection.
B. Connect Notebook PC LAN port to Broadband Router LAN port.
C. Connect UVE7314-M RJ11 PHONE port to a Telephone Set or POTS Line.
D. Connect AC Power. Switch power on, the POWER LED will be **Green** ON.
E. The UVE7314-M will start downloading and testing.   In 20 seconds, the DSL LED indicators will start flashing 3 times and be ready for configurations.

Figure A.   UVE7314-M Connections with Broadband Router & PSTN
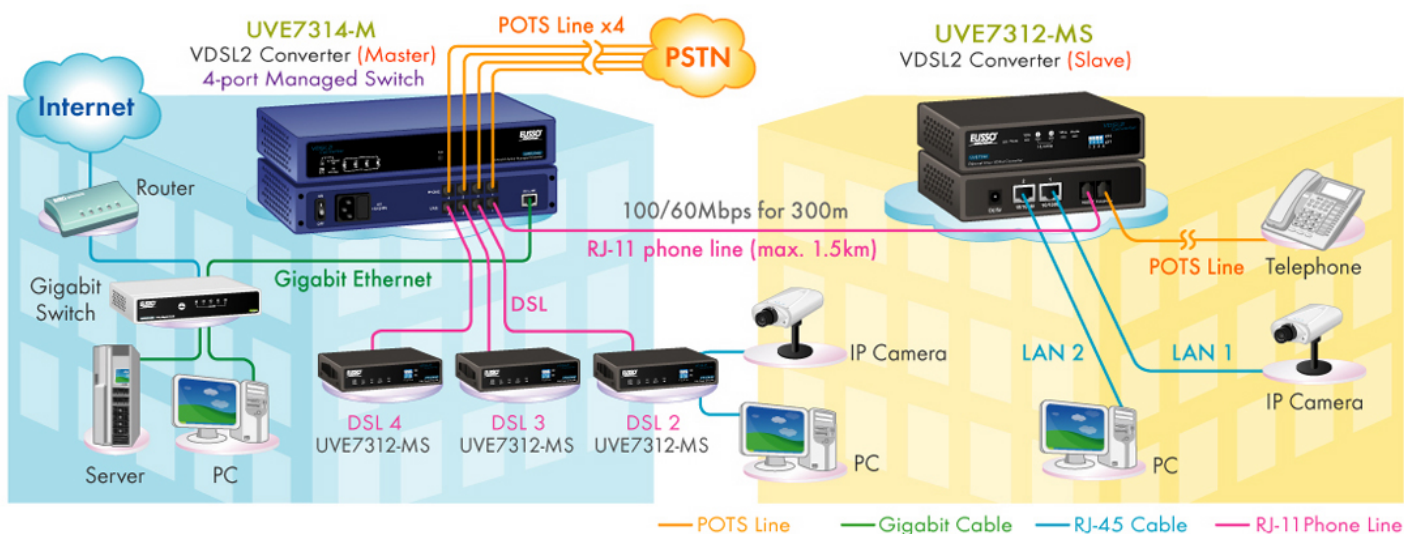
Step 2: Settings for UVE7314-M from PC Web Browser

A. UVE7314-M address is default at **192.168.168.168**. Make sure the Notebook PC LAN port is within the same network and with IP address, e.g. 192.168.168.167, and Netmask of 255.255.255.0.

B. Enter the IP address **192.168.168.168** from PC Web browser for configuration settings.
   Example: Enter **http://192.168.168.168** from IE Web browser.
   The login page will be displayed as following.

C. Enter the user name and password into the blank field. The default settings are
   Username: **admin**
   Password: **@admin@**
   Click the "**OK**" button to enter for configurations.

D. The system status page will be displayed as follows.

E. Now UVE7314-M is ready for web configurations.

Status

- ▸ System Admin
  - ▴ IP Config
  - ▴ Password Setting
  - ▴ Upgrade Firmware
- ▸ VDSL Setting
  - ▴ MIB Monitor
  - ▴ Port Status
  - ▴ Port Setting
- ▸ L2 Setting
  - ▴ VLAN Setting

Model Name	:
Software Version	: 1.4.0-122407-110146
WUI Version	: 1.4.1-Beta-030508-185726
MAC Address	: C8:08:08:01:38:00

Contents

1. Introduction

The **UVE7314-M** is a VDSL2 Access Multiplexer (DSLAM) with one Gigabit Ethernet port (RJ-45 connector) and four VDSL ports (RJ-11 connectors) + four POTS ports (RJ-11 connectors) with DSL splitters.　The DSLAM (Digital Subscriber Line Access Multiplexer) is accommodating well proven Ethernet and VDSL technologies to extend Ethernet over single-pair phone line with VDSL signal.　Up to 100/60 Mbps downlink/uplink bandwidth within 300m and 40/10 Mbps for 1km long range connections, it provides ultra-high performance to the pervasive telephone line network to quickly deploy a high-speed IP-based network for high-speed Internet access and video-on demand services, in addition to voice services.

The Gigabit Ethernet Uplink Port acts as the bridge to the Internet for end-users connected through the UVE7314-M VDSL ports. UVE7314-M also features build-in POTS/ISDN splitters which fits most popular standards worldwide so that the VDSL service can share the existing phone line with the end-users' POTS/ISDN telephone line service, thus reducing cost and overall wiring requirements.

The UVE7314-M can be easily configured through web-based management interface. The intelligent web-based management allows for streamlined configuration of the UVE7314-M through a single IP address. The UVE7314-M can be configured on a per-link basis for transmission mode, rate limitations, and signal-to-noise (SNR) margin.

The UVE7314-M provides comprehensive hardware diagnostics and is easy to maintain. The UVE7314-M is designed to build in to a 1U rack- unit. The resulting compact, cost-effective form factor offers systems integrators, small business and building owners an attractive Long Reach Ethernet solution.

2. Features

◆ 4 full-duplex VDSL links via RJ-11 connectors

◆ 4 corresponding POTS/ISDN lines via RJ-11 connectors

◆ Build-in POTS/ISDN worldwide standard splitter for each VDSL port

◆ Gigabit Ethernet for uplink

◆ Flexible MIB configuration of network resources via web-base interface or command line interface

◆ Supports VDSL MIB RFC-3728 standard

◆ Supports VDSL MCM MIB RFC-4070 standard

◆ Selectable fast and interleaved mode

◆ Selectable target data rate and target SNR margin

◆ Supports whole system firmware upgrade through networks

◆ Compact 1U rack mount design

◆ Compliant with ETSI, ITU and ANSI standards

3. Specifications

◆ Board dimension: 208mm x 320 mm
◆ Power supply: 110/220 VAC
◆ Power consumption: 30 Watt maximum.
◆ Interface:
RJ-11 female Phone Jack
RJ-45 female Ethernet jack
◆ Up-Link Port: Full Gigabit Ethernet support with auto MDIX.
◆ Phone: Industry standard phone jack with on board surge protection.
◆ Splitter: Fit for most common standards (US, EU, Japan, or China)
◆ Standard: Full ITU-T G.993.1 (VDSL) and G.997.1 compatible.

4. LED Indicators & Reset Button

On the front panel of UVE7314-M , there are 12 LED indicators as the following

POWER: "**Green On**" indicates power is on and normal.

ACT: "**Green On**" indicates Up-Link Ethernet port is in connection.
           "**Flashing**" indicates Up-Link Ethernet Port data activities.

1000M: "**Green On**" indicates Up-Link Ethernet port is in Gigabit connection.

100M: "**Green On**" indicates Up-Link Ethernet port is in 100M connection.

Port 1 Data: "**Green Flashing**" indicates port 1 data activity.
Port 1 Line: "**Green Flashing**" indicates DSL 1 is in handshaking.
           "**Green ON**" indicates DSL 1 is in connection.

Port 2 Data: "**Green Flashing**" indicates port 2 data activity.
Port 2 Line: "**Green Flashing**" indicates DSL 2 is in handshaking.
           "**Green ON**" indicates DSL 2 is in connection.

Port 3 Data: "**Green Flashing**" indicates port 3 data activity.
Port 3 Line: "**Green Flashing**" indicates DSL 3 is in handshaking.
           "**Green ON**" indicates DSL 3 is in connection.

Port 4 Data: "**Green Flashing**" indicates port 4 data activity.
Port 4 Line: "**Green Flashing**" indicates DSL 4 is in handshaking.
           "**Green ON**" indicates DSL 4 is in connection.

On the front panel of UVE7314-M, there is a reset button for factory default settings.

5. Web-based Interface

Use IE explore and type "http://192.168.168.168" (default setting IP address is 192.168.168.168) to access the web-based management. The default account name and password are "admin", and "@admin@".


◆ **LAN Setting**
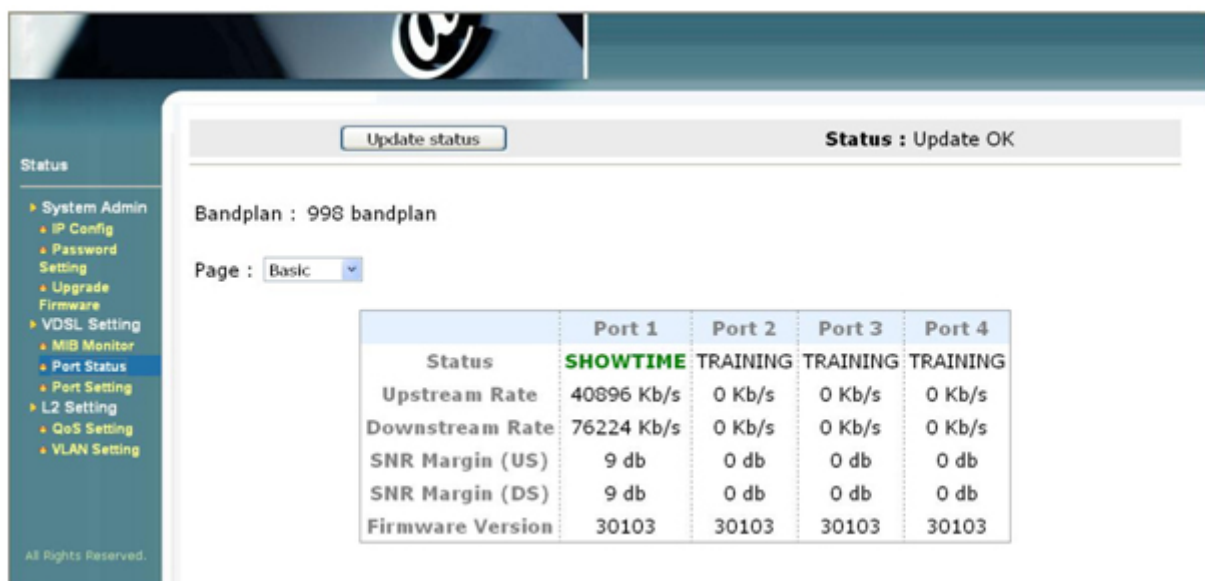LAN setting can be changed manually by configuring the IP address settings in the blank space for the HOPE module

◆ MIB Monitor

MIB Monitor allows users to monitor all the useful MIB information, and can be plotted into a statistic diagram or table for engineering purposes. The MIB data is able to be collected every 15 minutes or daily by selection, and can be kept for 1 month.
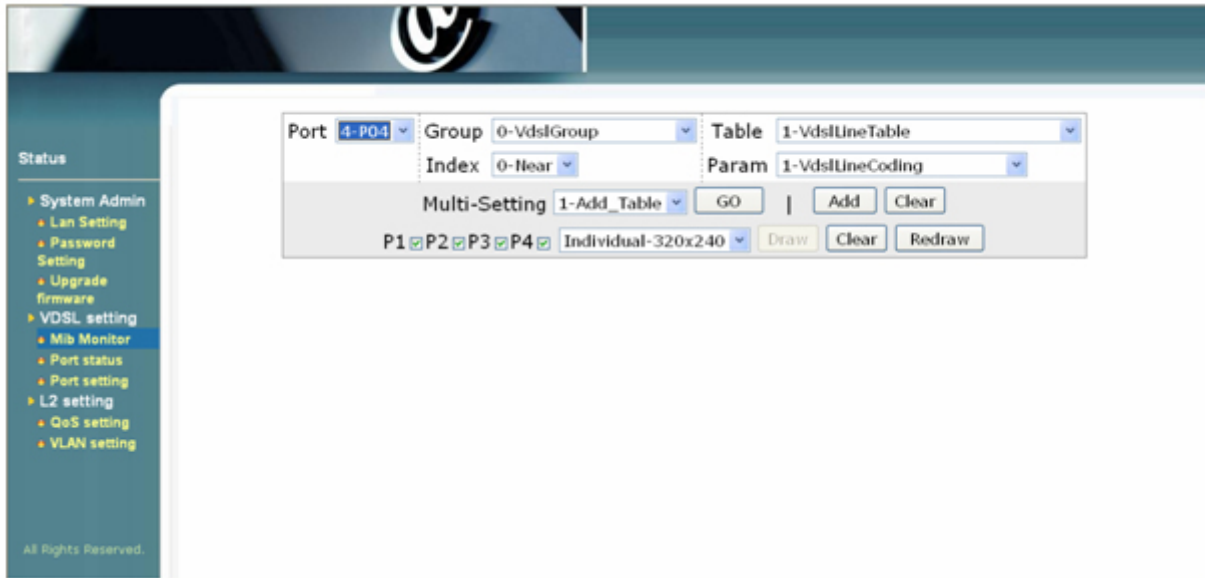

◆ Port Status

Port status shows the current connection status for each port, and all the port settings can be easily viewed with this status table.

Bandplan : 998 bandplan

Page : Basic

	Port 1	Port 2	Port 3	Port 4
Status	SHOWTIME	TRAINING	TRAINING	TRAINING
Upstream Rate	40896 Kb/s	0 Kb/s	0 Kb/s	0 Kb/s
Downstream Rate	76224 Kb/s	0 Kb/s	0 Kb/s	0 Kb/s
SNR Margin (US)	9 db	0 db	0 db	0 db
SNR Margin (DS)	9 db	0 db	0 db	0 db
Firmware Version	30103	30103	30103	30103

◆ Port Setting

User can configure fast/interleave mode, downstream rate limit, upstream rate limit and SNR margin for each port in the port setting section.
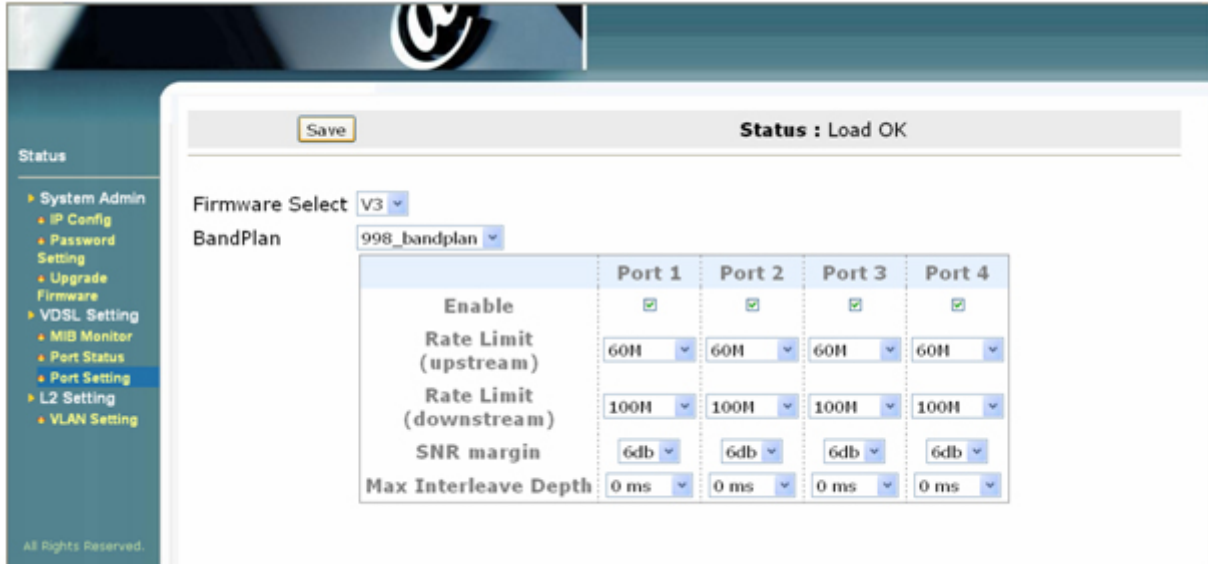
◆ VLAN Setting

VLAN setting allows different VLAN mapping for each DSL port connection.