

## SWM-8VD-2TTX 8 PORTS VDSL SWITCH SWM-24VD-2TGTX 24 PORTS VDSL SWITCH VD 2FT-MV-S & M VDSL CO & CPE MODEM

### Features :

- VDSL: transmission over existing telephone wire
- Point to point solution with VD2FT-M & S modem
- Point to multipoint with VD2FT CPE and VDSL switch SWM-xxVD
- Phone Splitter on board for analog and ISDN-U lines.
- Rate/distance 15Mb—1km 10Mb—1.2km 5Mb—1.5km 4Mb/1Mb—1.9 km
- Bandwidth management (speed rate control) from 100kbps to 4/1M, 5M, 10M, 15Mbps with by adjustment downstream or upstream of VDSL ports.
- Support VLAN per port and Tagging VLAN
- MULTICAST : IGMP V1, V2
- VDSL and uplink ports trunking
- Spanning tree
- Management : Console, telnet, http, snmp
- Auto-sense MDI/MDI-X

### LAN EXTENSION AT 15 MPBS OVER 2 WIRES



CXR proposes a new range of VDSL equipments for the Ethernet distribution in campus and for the Internet distribution for Telco. The VDSL technology provides the most efficient transmission throughput with symmetrical mode over one pair of copper in the building.

The VDSL is the technology ideal solution of Ethernet deployment over the internal telephone installation. The VDSL frequencies spectrum allows this technology to cohabit with the voice transportation between PBX and phone sets with the use of filters splitters. CXR provide the VD-2FT-MV-S as a CPE modems working face to a single CO modem VD-2FT-MV-M or face to a CO VDSL concentrator SWM-xxVD.

This CPE is available with one or two 10/100BaseT ports or one Power Over Ethernet port POE for the remote power feeding of powerless camera

and IP phone set.

The SWM-8VD and SWM-24VD concentrate 8 and 24 Ethernet ports over VDSL to 2 up-link Fast or GigaEthernet. This switches are provided

with full Level 2 capability and could be integrate in a strategy of VLAN Ethernet switch.

The built-in splitter in CPE and CO allow their use over existing analogue or ISDN-U telephonic wire without disruption of service.

The SWM-8/24VD provide an economic and easy solution to deploy Internet access in hotel, university, schools! They are endowed of effective functions to manage the class and the quality of service, and the security of data between users.

The SWM-24VD is a powerful VDSL access system for ISP to provide high speed Internet access in short distance and with the capability to daisy chain them over a fiber optic backbone.

## PRODUCT REFERENCE

VD2FT-MV-S: CPE modem

VD2FT-MV-S-2TTX: CPE modem —2 Ethernet 10/100 Base T

VD2FT-MV-S-POE: CPE modem —Power On Ethernet

VD2FT-MV-M: CO modem

SWM-8VD-2TTX: 8 ports switch VDSL— 2 uplink 10/100 Base T

SWM-24VD-2TGTX: 24 ports switch VDSL— 2 uplink 10/100/1000 BaseT & GBIC

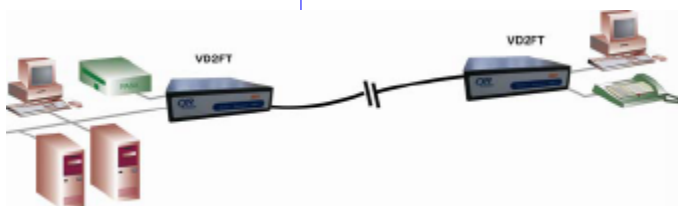


Managed Switch 24 ports 10/100 BaseT  
+ 4 Combo Giga

## VDSL POINT TO POINT CONNECTION

A couple of VD-2FT-MV-S and VD-2FT-MV-M modems assures an interconnection of Ethernet networks with a symmetrical 15 Mbps rate up to 1km or with an asymmetrical 4/1Mbps rate over a telephone line of 1.9 km length. This plug and play solution offering a full transparent communication to the VLANs.

They can be installed on the existing telephone lines while pre-serving the analogic phone service or ISDN-U, thanks to the built-in splitter.



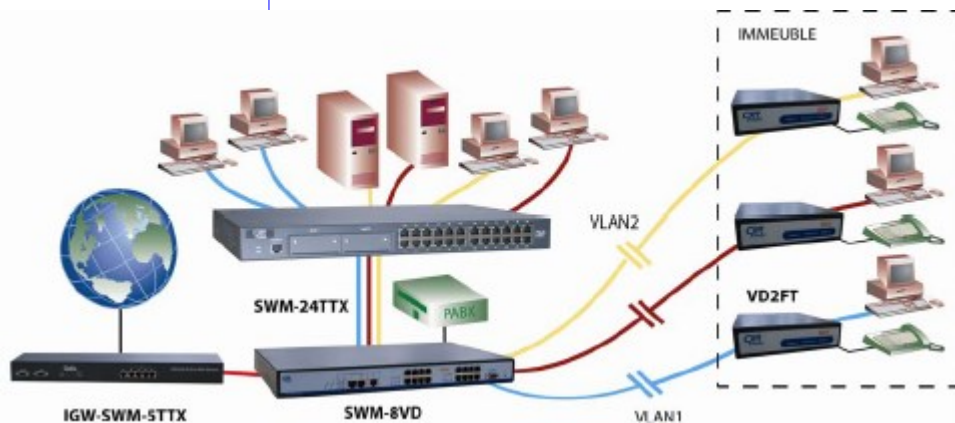
## ETHERNET SWITCH WITH VLAN SECURITY

SWM-8/24VD are Ethernet switches allowing 8 or 24 users to link up to the Ethernet network by a telephonic pair.

Each port could be individually configured either activated forbidden. The class of access is defined in rate (4/1 (asymmetric) and 5/10/15 Mbps (Full duplex) to the respective distances of 1.9, 1.5, 1.2 and 1Km)

The security of data transmission is assured per port based on VLAN per port or tagged. The traffic's optimization provide the filtering storm of broadcast, spanning tree and guarantees the confidentiality of data and access to other stations. The SWM-xxVD is a Level 2 switch and could providing tagged VLAN and QoS with other switches.

The SWM-8/24VD is supporting authenticate 801.1x. By using an Internet gateway IGW-SWM-5TTX or an external Radius server with an Internet access router, the SWM-xxVD provide all needs for the sales of Internet access service inside hotel, school, academic center, hospital, rental building. This service could be manage in house or outside over Internet links from an ASP.



## MANAGEMENT

The management of the SWM-8/24VD is simple and efficient. The administration could be setup over a local RS232 or the Ethernet network in Telnet or HTTP protocols. The access to the configuration is protected per password, and could be limited to only one station for a better security via the Ethernet network. The equipment include a full RMON probe and could analyze VDSL and Ethernet links.

The VD2FT-MV-M (CO model) is set-up per console port. A Windows management software is provided with the equipment. This software give access to setup of both equipment and traffic information.

Managed Switch 24 ports 10/100 BaseT  
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## SWM-24-VD-2TGTX

The SWM24VD-2TGTX is a 24 ports switch VDSL with 2 up-link 10/100/1000BaseT ports auto-sensing and 1 fiber GigaBit (GBIC) ports. Compatible splitters are included and provide extraction of analogue and ISDN-U digital phone line. The 24 ports VDSL concentrator delivers an automatic or set-up bandwidth dedicated per port from 4/1, 5,10 to 15 Mbps.

The SWM24VD-2TGTX integrates the following features :

Quality of service, IGMP snooping for Video applications, port based VLAN and tagging VLAN, Ethernet speed control by port, the capability to cascade until 4 SWM-24VD with Ethernet ports and the trunking of VDSL ports.

## TECHNICAL FEATURES



**VDSL** : QAM, Infineon 10 Base S

**Bandwidth/lines** : 4M/1M-1.9km, 5M-1.5km, 10M- 1.2km, 15M-1km.

**Throughput** : 15 Mbps, 1 km cable cat. 3, AWG 24 8.8 Gbps switching capacity, 4.72 maximum forwarding bandwidth (forwarding rates based on 64bytes packets) 6.5Mpps forwarding rate

**IEEE** : 802.3, 802.3u, 802.3ab, 802.3z  
**Ethernet** : 10 / 100 /1000 Base T, auto-sense, MDI/MDI-X, 1 \*10/100/1000 Mbps GBIC fiber.

**Features** : • Copper/Fiber auto-link and hot swap function; Splitter inside for POTS/ISDN-U (130Khz-2B1Q code), In-band management , GVRP 802.1q; 802.1Q tagging port base VLAN, 802.1v Protocol & port base VLAN, 802.1p QOS, IGMP snooping, 802.1x port base network access control for connects wireless network, 802.1d spanning tree, 802.1ad trunking, BOOTP & DHCP client, RMON , MAC filtering, Broadcast storm filtering, port mirroring, TFTP firmware upgrade. Cascading , up to 4 units.

**Management** : Console (DB9F), Telnet, HTTP, SNMP MIBB 1,2

**Security** : internal fan and temperature, monitoring an TRAP alarm. Surge protection on VDSL ports.

**VDSL Spectrum** : Receiver — 0.9 à 3Mhz

**Transmitter** — 4.5 à 7.9 Mhz

**Dimensions** : 444\*362\*44 mm—Rack Mount (1U, 19 ") Operating Temperature : 0°C à 50 °C.

**Storage Temperature** : -20 °C à + 65 °C.

**Humidity** : 10% - 90 % non-condensing

**GBIC Module** :

IEEE 802.3Z GbE, SONET/SDH Standards

Hot swap module

**GBIC modules references** :

GBIC-GSX-MM08 : MM850 nm, Giga Ethernet GSX , budget 0,5km GBIC-GSL-SM13-10 : SM1310nm, Giga Eth GLX , budget 10km GBIC-GSL-SM13-30 : SM1310nm, Giga Eth GLX , budget 30km

Other : contact us.

**Reference** : SWM-24VD-2TGTX

CA-TELC050-RJ21MM-1 : Telco cable RJ21 Male/Male Lg 1m

**Leds**:

PWR, POST (power on self test)

24 VDSL link status

Lan : Act, 100, 1000, Full

**Connectors** :

VDSL : 2 \* TELCO RJ21 50 points (POTS & VDSL line)

Ethernet : 2\* RJ45 + 1 GBIC

RS232 : DB9F - Reset Bouton

**Rear Panel**

Power : 110 – 240 Vac, 30 W —ON/OFF switch.

Fans : 2

Standards :

EMI by FCC/CE

Safety by EN60950

**Accessories** : SWM-24VD-2TGTX :

Rack mount set (19")

Power 230V

CD ROM and MIB

**MTBF** : 71.531 hours



Managed Switch 24 ports 10/100 BaseT  
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## SWM-8VD-2TTX

The SWM8VD-2TTX is a 8 ports VDSL switch with 2 x10/100BaseT auto - sensing, for LAN/ Internet access and stacking. The concentrator 8 ports VDSL delivers a dedi-cated bandwidth per port between 4/1, 5/10/15 Mbps. This switch include 8 splitters for analog and ISDN-U digital line. Compatible splitters are included with the analogi-cal and numeric telephones (ISDN-U).

The SWM8VD-2TTX integrates the following functionalities:

Quality of service, IGMP snooping for the Video applications, port based VLAN and Tagged, Ethernet speed control by port, the possibility to cascade until 4 SWM-24VD per the Ethernet ports and the trunkink capability of the VDSL and Ethernet ports.

## TECHNICALS FEATURES



**Features :** same as SWM24VD  
Ethernet : 2 \* 10/100 BaseTX , auto-sense , MDI/MDI-X Dimensions : 412\*258\*44 mm—Rack Mount (1U, 19 “)

**Leds :**  
PWR, POST (power on self test)  
8 VDSL link status  
Lan : Link , Act, Speed , Full Duplex

**Connectors :**  
VDSL : 2\* 8 RJ11 (POTS & VDSL line)  
Ethernet : 2\* RJ45  
RS232 : DB9F

**Product reference :** SWM-8VD-2TTX  
Power : 110 – 240 Vac, 12 W—ON/OFF switch — Reset bouton

**Standards :**  
EMI by FCC/CE Safed by EN60950

**Accessories :**  
SWM-8VD :  
Rack mount set (19’’) Power 230V

**CD ROM and MIB**  
**MTBF :** 64.639 hours.

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## VD2FT : TECHNICALS FEATURES

**IEEE :** 802.3, 802.3u

**Modulation :** ETSI, ITU, ANSI VDSL standards

**Bandwidth/lines :** 4M/1M-1.9km, 5M-1.5km, 10M- 1.2km, 15M-1km.

**Dimensions :** 95\*110\*24 mm— Metal box

**Leds :**  
Ready, Ethernet, Link (pour le status VDSL)

**Connectors :**  
VDSL : 1\* RJ11 (Splitter POTS/ISDN inside)  
Phone : 1 \* RJ11  
Ethernet : RJ45 – 10/100BaseT MDI/MDI-X  
Surge protection  
Spectrum compatibilities xDSL, ISDN (2B1Q/4B3T)

**MTBF :** 67.000 h

**Product Reference :**

VD2FT-MV-S : VDSL CPE Modem  
VD2FT-MV-M : VDSL CO Modem  
VD2FT-MV-S-2TTX : VDSL CPE Modem, 2 Eth  
10/100 BT VD2FT-MV-S-POE : VDSL CPE Modem, Power On Ethernet  
POE standard : 802.3af

**Accessories :** VD2FT-MV-S

Power DC Plug  
230Vac—5VDC—1A  
Ethernet RJ45-RJ45 1M  
Line RJ11—RJ11 1M  
CD ROM

**Accessories :** VD2FT-MV  
Power DC Plug : 85/230Vac  
50/60Hz —5VDC—1A, 3.5W  
Ethernet RJ45-RJ45 1M  
Line RJ11—RJ11 1M  
Console DB9F—RJ45  
CD ROM and utilities



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