## VDSL CO/CPE Modem VDTU2-104(CO)/ 204(CPE)

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#### Very-High-Bit-Rate Digital Subscriber Line 2

VDSL2 (Very-High-Bit-Rate Digital Subscriber Line 2, ITU-T G.993.2 Standard) is an access technology that exploits the existing infrastructure of copper wires that were originally deployed for POTS services. It can be deployed from central offices, from fibre-fed cabinets located near the customer premises, or within buildings.

ITU-T G.993.2 VDSL2 is the newest and most advanced standard of DSL broadband wireline communications. Designed to support the wide deployment of Triple Play services such as voice, video, data, high definition television (HDTV) and interactive gaming, VDSL2 enables operators and carriers to gradually, flexibly, and cost efficiently upgrade existing xDSL-infrastructure.

ITU-T G.993.2 (VDSL2) is an enhancement to G.993.1 VDSL that permits the transmission of asymmetric and symmetric (Full-Duplex) aggregate data rates up to 200 Mbit/s on twisted pairs using a bandwidth up to 30 MHz.

VDSL2 deteriorates quickly from a theoretical maximum of 250 Mbit/s at 'source' to 100 Mbit/s at 0.5 km and 50 Mbit/s at 1 km, but degrades at a much slower rate from there, and still outperforms VDSL. Starting from 1,6 km its performance is equal to ADSL2+. ADSL-like long reach (LR) performance: ADSL-like long reach performance is one of the key advantages of VDSL2. LR-VDSL2 enabled systems are capable of supporting speeds of around 1-4 Mbit/s (downstream) over distances of 4 to 5 km, gradually increasing the bit rate up to symmetric 100Mbit/s as loop-length shortens. This means that VDSL2-based systems, unlike VDSL1 systems, are not limited to short loops or MTU/MDUs only, but can also be used for medium range applications.

#### Features

- Compliant with IEEE 802.3 & 802.3u Ethernet Standards
- Compliant with ETSI, ITU, ANSI VDSL standards
- Provides 4 x 10/100M auto-sensing RJ-45 Ethernet ports
- Supports Bandwidth setup with 100 Mbps VDSL RJ-11 ports
- POTS / ISDN Splitter port RJ-11 x 1 (Splitter on board)
- Indication LED x 6: Power LED x1
  Ethernet Link/Active LED x 4
  VDSL Link LED x 1
- Supports auto speed for VDSL2 port
- Supports Web management(HTTP)
- Supports TFTP
- Supports PPPOE
- Supports uPnP
- Supports NAT/DHCP/DMZ
- Supports Firewall
- Supports Route & Switch mode
- Supports Loop back
- Supports SNR indicator
- Provides surge protection for VDSL2 port

### Ordering Info

- VDTU2-104 :VDSL2 CO side Modem
- VDTU2-204: VDSL2 CPE side Modem

#### **Specifications**

Standards	IEEE 802.3 IEE 802.3u	
	Compliant ETSI, ITU, ANSI VDSL2 standards	
Interface	10/100M auto-sensing/auto-MDIX RJ-45	
	Ethernet ports x 4	
	VDSL2 RJ-11 port x 1	
	(NV-600L for CO/ NV-600R for CPE)	
	POTS / ISDN Splitter port RJ-11 x 1	
Switch method	store and forward	
Flow control	Full duplex	IEEE 802.3x
	Half duplex	Back pressure
Driver capable	100 M: 0.3 Km	
Indication LED x 6	Power LED x1	
	Ethernet Link/Active LED x 4	
	VDSL Link LED x 1	
Console port	RS-232C/115200bps	
Power	Input range: 100VAC~240VAC/50~60Hz	
	Output: 12VDC/1A	
Environment	Temperature	0°C — 50°C (Operating);
		-20 — 65°C (Storsge)
	Humidity	10 — 90% (non-condensing)
Dimensions(WxDxH)	146mm x 184mm x 40mm	
Weight	TBA	
EMI Compliant	CE, FCC, VCCI	
MTBF	TBA	

#### **Application**

