

Wireless Modem V280



Enabling High-Speed Wireless Broadband Services

- DOCSIS Compatible
- Downstream speeds up to 25 Mbps
- Upstream speeds up to 4 Mbps
- Integrated VoIP and VPN Support
- RJ-45 and USB Interfaces
- Robust RF performance
- Software Upgradeable
- Easily Configurable
- Supports up to 64 network devices
- 700 MHz (UHF), 2.5 GHz (MMDS), 3.5 GHz

Vyyü's system uses an adapted version of the cable industry's DOCSIS standard, and provides a high capacity, IP centric, TDMA based point to multipoint solution with extensive support of networking services, privacy through link layer encryption, SNMP based network management and provisioning.

The V280 wireless modem, used in conjunction with the V3000 wireless hub, allows the service provider to configure a system for each specific deployment scenario (residences, SOHO, businesses, MDUs). The V280 Wireless Modem is based on DOCSIS modified for robust operation in a wireless environment. Radio frequency performance is enhanced through a combination of flexible modulation and data rates. Additionally the V280 wireless modem acts as an automatic learning bridge. It learns the MAC addresses of the attached PCs and avoids forwarding local traffic to the wide area network. The V280 wireless modem supports a wide range of networking services including:

- Downstream data rates up to 25 Mbps, Upstream data rates up to 4 Mbps
- VoIP and VPN
- IP Filtering (up to 40 IP filters can be defined)
- PPPoE
- DHCP

General Characteristics

Dimensions	5.25 x 4.25 x 1 inches / 13 x 11 x 2.5 cm
Operating Temperature	32°F - 112°F / 0° C to 45° C
Power	800 mA at 9V
Power Supply	110 - 220 VAC
LED Indicators (4)	Power, Status, RF/Link, LAN/USB

Interface

Specifications

Data interface	RJ45 – 10/100 baseT Ethernet full/half duplex USB
IF Interface	75 ohm Type F Female Connector

Wireless Modem IF Characteristics

Data	Downstream	Upstream
IF Frequency Range	85 to 855MHz	5 to 65 MHz
RF Frequency Range	700 MHz (UHF), 2.5 GHz (MMDS) and 3.5 GHz	
IF Channel Bandwidth	6MHz / 5.25/3.5/1.75 MHz	400, 800, 1600 & 3200kHz
Modulation Format	QPSK, 16QAM & 64QAM	QPSK & 16QAM
Forward Error Correction	ITU-T J.83 Annex B/C/A Reed Solomon/Trellis Decoder	Reed Solomon Encoder
IF Signal Level	-20 to + 40 dBmV	7 to 59 dBmV

Wireless Modem System Service Characteristics

Network Management	Protocol	SNMP
	MIB	RFC1213, RFC1493, RFC2233, RFC2669, RFC2670, DOCSIS Privacy MIB
	Provisioning	As per DOCSIS
Security	Link layer encryption	DES CBC, 40 & 56 Bits per user
	Key distribution	Two layers key distribution protocol, which include DES-ECB and RSA public key encryption and HMAC-SHA1 authorization
Upstream Quality of Service	Committed Information Rate (CIR) per user	32 Kbps—2 Mbps (up to 4 Mbps best effort)
	Peak Information Rate (PIR) per user	32 Kbps—2 Mbps
Downstream Quality of Service	Supported by an add-on packet shaping device at the base station	
IP protocols	Network Protocols	IP, ICMP, ARP, PPPoE, 802.1Q/p, IP Multicast
	VoIP	G711, G729, G723
	Transports Protocols	TCP, UDP, RTP
	Application Protocols	SNMP, TFTP, DHCP
# IP Data Services	64 CPE MAC Addresses	

Order Information

Part Number

V280 220v Power Supply	6290-060
V280 110v Power Supply	6290-061

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