VWM1030

System Overview

VWM-Max series

WiMAX Office Gateway

Features

- **Residential / SoHo gateway**
- **Remote management**
- **Superior voice quality**
- **Embedded router**

GENERAL DESCRIPTION

The Venceip VWM1030 Office Gateway is a member of the VWM-Max family, a line of WiMAX-based Broadband Wireless Access systems and Triple-Play Multi-Service Gateways.

The VWM1030, VoIP analog telephone adaptor, enables service providers to deliver high-quality VoIP service that uses traditional analog telephones and fax machines to their Small Office/Home Office (SoHo) customers. It is a cost-efficient means for service providers to migrate their customers' traditional analog telephones and fax machines onto IP-based networks.

The VWM1030 reduces subscribers' costs and simplifies installation by including an embedded router and 4 LAN ports, thus eliminating the need for an external router and or switch. It also reduces service providers' costs because it's remotely manageable for software upgrades and troubleshooting. Each VWM1030 has two analog voice lines (FXS) that support independent telephone numbers.

VWM1030 Office Gateway is specifically tailored for the diverse needs of Small Office/Home Office (SoHo) end-users. VWM1030 products offer a complete set of data and Voice over IP solutions in a single box, eliminating the need to purchase, install and maintain several separate units to support multiple applications.

VWM1030 systems are designed to complement VWM-Max Broadband Wireless Access systems, allowing support of multiple customer types over the same infrastructure. The VWM1030 products connect to Venceip IEEE802.16d and IEEE802.16e WiMAX-based outdoor units over a CAT5 cable, where the cable serves for bi-directional transfer of data and signaling as well as for power feeding to the outdoor equipment.

VWM1030 Highlights:

- **Superior voice quality** using various QoS mechanisms enabling high quality voice even when bandwidth is limited.
- **Independent telephone numbers** supported by two analog voice lines (FXS) including embedded SIP client or MGCP.
- **Integrated web server** for easy provisioning
- **Auto provisioning and configuration** with TFTP and HTTP to aid large installations
- **Embedded router and DHCP server** eliminates the need for separate home router.
- **NAT server enables connection of phones and PC** while using one IP address
- **4/10/100BaseTX LAN ports** that can be connected to multiple computers or other home network equipment.
- **Embedded Firewall and DMZ** secures home network from Internet intruders and attacks.
- **Connects to 16d or 16e ODU CPE** through a single cable

VWM1030 System Specifications

VoIP Features:

Protocols	SIP (RFC 2543, RFC 3261)
	MGCP (RFC 2705, NCS)*
	ITU H.323*
CODECs	ITU G.711 (u-law, A-law)
	ITU G.723.1
	ITU G.726
	ITU G.729A/B
	T.38 fax relay (SIP)
	Automatic fax/modem detection
	Voice Activity Detection (VAD)
	Comfort Noise Generation (CNG)
	Caller ID
	5 REN distance dependent)
	RTP voice packet encapsulation
QoS	VLAN tagging IEEE 802.1q
	Voice priority over data IEEE 802.1p
	IEEE 802.3
	Traffic shaping using bandwidth limitation per port
	L3 TOS marking

Interfaces:

Indoor to Outdoor	10/100BaseTX auto sending (IEEE 802.3u)
	Connector RJ-45
	Transmission Full/half duplex, auto negotiation, auto detect, auto polarity, cross or straight cable
	DC supply to outdoor unit
LAN	4 10/100BaseTX LAN ports
	10/100BaseTX auto sending (IEEE 802.3u)
	Connector RJ-45
	Transmission Full/half duplex, auto negotiation, auto detect, auto polarity, cross or straight cable
	10BaseT UTP, Cat. 3, 4, 5 100m.
	100BaseTX UTP, Cat. 5 100m
Telephone	2 independent phone lines (FXS)
	Analog Connector RJ-11 (POTS
Ethernet Standards	IEEE 802.3
	IEEE 802.3u
	IEEE 802.1q VLAN tagging support
	IEEE 802.1p QoS support

Standards:

Emission and Safety Regulations	EMI FCC Part 15 Class B, FCC Part 68,
	EN55022 Class B
	Safety UL 1950,CSA 22.2 No. 950, EN60950
	Immunity EN50082-1

Router Features:

IP Routing	PPPoE (RFC 2516), PPTP
	Dynamic Host Configuration Protocol (DHCP) server (RFC 2131), client (RFC 2131), and relay
	Network Address Translation (NAT)
	RFC 2068 HTTP
	Static and dynamic IP address assignment
Embedded Servers	Embedded DHCP server (dynamic IP addressing)
	Embedded HTTP server (remote Web based management)

Management:

Features	Internet Web-based management
	Interfaces Web, remote auto configuration via TFTP/HTTP, Telnet
	IP Configuration DHCP or static
	SW Download TFTP/HTTP, secure, reliable mechanism
	Syslog

General:

Indicators	Management Green flashing (CPU traffic)
	Voice Green (softswitch registration)
	Ready Green flashing
	Power Green
	Activity/Link Green flashing
	Security
	Passwords, Encrypted configuration file, Access Lists
Dimensions	(H) 1.77” (L) 7.36” (W) 4.72”
	45mm (H) x 120mm (W) x 187mm (D)
Power	110-230 VAC external power supply
Weight	0.6 kg (1.32 lb)
Operating Temperature	0º ~ 40º C (32º - 100º F)
Operating Humidity	10% - 90% non-condensing