

## Vega 5000 Analog Media Gateway

- ☑ **EXCLUSIVE** Local Survivability
- ☑ 24 or 50 FXS ports
- ☑ 2 FXO ports
- ☑ Flexible Call Routing for Fallback and Least Cost Routing
- ☑ Emergency PSTN Backup
- ☑ Interoperability with a Wide Range of Legacy and IP Equipment
- ☑ Voice, FAX and Modem Support

### Service Provider Applications:

- » Customer premises gateway for SIP trunking
- » Low-density PSTN gateway
- » Survivability for IP phones

### Enterprise Applications:

- » Enterprise VoIP networking
- » PSTN trunking for IP-PBXs
- » Enterprise IP telephony gateway



## Overview

The Vega 5000 analog media telephony gateway is designed to simplify the integration of legacy phone systems to IP infrastructure. The Vega 5000 connects analog handsets & devices to an IP network, typically either an internet telephony service provider (ITSP) or a corporate network, while providing two additional network-facing analog ports for connection to telephone lines or an analog PBX.

Vega 5000 analog media gateways are available with 24 or 50 FXS ports (for connection to standard analog telephones) & 2 FXO ports (for connection to PSTN telephone lines or a PBX).

### ENP – Enhanced Network Proxy (Optional)

This option enables continuity of service during WAN/SIP outage and may be configured to operate in a number of ways including:

- » Standalone proxy
- » IP device survivability
- » IP device call routing
- » Emergency call routing
- » SIP to SIP call routing

### Open, Non-Proprietary Interfaces

All Vega gateways support SIP, H.323 and T.38 fax.

The gateway can be configured for different country requirements, such as tones and line impedance.

All Vega gateways have proven interoperability with a wide range of existing telecommunications & VoIP equipment.

### Lifeline PSTN Backup

When powered the Vega can route calls to or from the two FXO ports. Under power failure conditions the two FXO ports provide a hard-wired bypass to two FXS ports allowing PSTN calls to be made even under this failure condition.

### Density

With up to 50 FXS ports in a chassis that is only 1U high & half a rack deep, these gateways provide exceptional density.

## Technical Specifications

### Interfaces

#### VoIP

- » SIP
- » H.323 version 4
- » Audio codecs:
  - G.711 (a-law/ $\mu$ -law)
  - G.729a (8kbps)
  - G.723.1 (5.3/6.4 kbps)
  - \*GSM
- » FAX Support – up to G3 FAX, using T.38
- » Modem Support – up to V.90, using G.711
- » Up to 50 VoIP channels

#### Telephony Interfaces

- » 25 ports per RJ-21 connector
- » 2 FXO ports on RJ-45 connectors
- » 600R, 900R or CTR-21 line impedance

#### LAN Interfaces

- » 2 RJ-45s, 10 BaseT/100 BaseTX, full/half duplex

### Features

#### Telephony Features

*Available on FXS ports:*

- » Call Waiting
- » Call Forward – Unconditional, Busy, No-Answer
- » Call Transfer – Blind, Consultative
- » 3-Way Conference
- » Do Not Disturb
- » Message Waiting Indicator – Audible, Visual
- » Music on Hold
- » Executive Barge

#### Telephony Features

- » Caller ID presentation – UK, DTMF, Bellcore GR30, ETSI
- » Caller ID screening allows connections to be accepted only from selected call sources
- » H.323 gatekeeper registration
- » SIP Registration & Digest Authentication

#### Operations, Maintenance & Billing

- » HTTP(S) web server
- » Radius Accounting & Login
- » Remote firmware upgrade:
  - Auto code upgrade
  - Auto configuration upgrade
- » SNMP V1, V2 & V3
- » Syslog
- » TFTP / FTP support
- » VT100 – RS232 / Telnet/SSH
- » Voice readback of IP parameters

#### Routing & Numbering

- » Dial Planner – sophisticated call routing capabilities, standalone or gatekeeper/proxy integration
- » Direct Dialing In (DDI)
- » SIP registration to multiple proxies

#### Call Quality

- » Adaptive jitter removal
- » Comfort noise generation
- » Silence suppression
- » 802.1p/Q VLAN tagging
- » Differentiated Services (DiffServ)
- » Type of Service (ToS)
- » QoS statistics reporting
- » Echo cancellation (G.168 up to 128ms)

#### Security & Encryption

- » \*Media – SRTP
- » \*SIP – TLS
- » Management – HTTPS, SSH Telnet
- » Configurable user login passwords
- » \*Enhanced Network Proxy (ENP)

### Hardware

#### Certification

<i>EMC (Class A)</i>	<i>Safety</i>	<i>Telecoms</i>
EN55022	EN60950	TBR21
EN55024	IEC60950	FCC Part 68
FCC Part 15	UL60950	CS-03
AS/NZS3548	AS/NZS60950	VCCI

#### Environmental

- » 0° .. 40°C
- » 0% .. 90% humidity (non-condensing)

#### FXS Line Length

- » 1500ohm, up to 8km

#### Indicators

*LED:*

- » Power
- » System ready
- » Lifeline, FXS calls active
- » LAN: speed / activity

#### Physical Dimensions

- » 437mm (17.2") x 43mm (1.7") x 275mm (10.8") width/height/depth
- » Weight: 6.5kgs
- » Rackmount brackets supplied 483mm (19") 1U

#### Power

- » 100..240 VAC, 47..63 Hz, 1..0.5 A for 24 ports
- » 100..240 VAC, 47..63 Hz, 2..1 A for 50 ports
- » 48V DC (subject to MOQ) (Optional)

#### Program Storage

- » Code & configuration data are stored in FLASH & executed from RAM

\* Optional

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