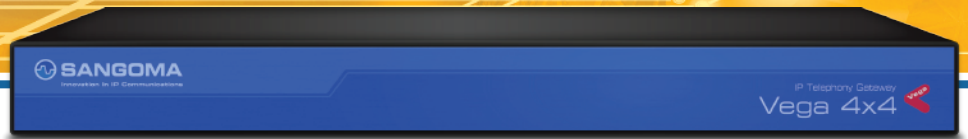


# Vega 4x4 Flexible Analog Gateway



Take advantage of the newest Voice over Internet (VoIP) technology by connecting legacy telephony equipment, such as private wire connections and other analog devices seamlessly to IP endpoints. Beneficial within the financial sector where Capital Market Traders still require human interaction with their customers, a Sangoma Vega 4x4 gateway seamlessly connects the two disparate technologies.

## The Most Flexible Analog VoIP Gateway In Its Class

As technology moves forward with VoIP, some legacy infrastructures are left behind. The Vega 4x4 gateway connects a range of legacy telephony equipment, including PBXs, analog private wires, audio sources and the PSTN to SIP networks. The Vega 4x4 supports up to 16 analog ports on 16 physical interfaces. The chassis is designed to be built out by the systems integrator or OEM to individual requirements.

### Supports 4 Analog Interfaces:

- » FXO
- » FXS
- » Audio
- » GenGen

**“The Vega 4x4 Gateway is ideal in the financial services sector that requires an ‘always on’ connection with their customers.”**

## Quick Facts

- » Modular Design Supports Up to 16 Calls
- » Voice, FAX and Modem Support
- » Supports FXO, FXS, Audio & GenGen
- » Ideal for Private Wire or Point-to-point Applications
- » Flexible Call Routing for Fallback & Least Cost Routing
- » Transparent Interop Between Analog & Digital Private Wires
- » Optional Annual Support & Software Maintenance Plans



Front



Back

## ADVANCED CAPABILITIES

### Local Survivability

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

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

### Open, Non-Proprietary Interfaces

#### The Vega 4x4 Supports SIP and T.38 Fax

Four module slots are available for different module types, each with 4 ports, and can be populated in any configuration.

The module types available are:

- » FXO for connection to PBX extension lines or the PSTN
- » FXS for connection to analog telephones or trunk ports
- » Audio for connecting two-way audio sources
- » SIP to SIP call routing
- » GenGen for connecting GenGen or magneto type lines

The Vega 4x4 gateway has proven interoperability with a wide range of existing telecommunications and VoIP equipment.

## USE CASES

### Applications

- » Connect dealerboards to legacy analog private wire connections
- » Bring audio sources, such as TV, into the SIP network
- » Connect worldwide private wires regardless of what's at the other end
- » Provide standards-based SIP private wires
- » Connect multiple analog sources to SIP infrastructure

# Vega 4x4 Flexible Analog Gateway

## TECHNICAL SPECIFICATIONS

### Interfaces

#### VoIP Interface:

- » SIP
- » Fax support - up to G3 FAX, using T.38
- » Modem support - up to V.90, using G.711
- » Up to 16 VoIP channels
- » Audio Codecs:
  - > G.711 (a-law/ $\mu$ -law) (64kbps)
  - > G.729a (8kbps)
  - > G.723.1 (5.3/6.4 kbps)
  - > G.726
  - > T.38

#### Telephony Interface:

- » FXS
  - > Up to 16 ports presented on RJ45
  - > 600R, 900R or CTR-21 line impedance
- » FXO
  - > Up to 16 ports presented on RJ45
  - > 600R, 900R or CTR-21 line impedance
- » GenGen
  - > Up to 16 ports presented on RJ45
  - > 75V RMS ringing
- » Audio
  - > Up to 16 ports presented on RJ45
  - > Unbalanced audio input, receive (mic) and transmit (speaker)

#### LAN Interface:

- » 2 RJ-45s, 1000BaseT / 100 BaseTX / 10 BaseT, full / half duplex

### Features

#### Identification:

- » Caller ID presentation on (FXS/FXO only)
- » Caller ID screening allows connections to be accepted only from selected call sources (FXS/FXO only)
- » SIP registration and 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
- » TR-069
- » Syslog
- » TFTP/FTP support
- » VT100 – RS232/Telnet/SSH

#### Routing & Numbering:

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

#### 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 tail)

#### Security & Encryption: \*Optional

- » \*Media – SRTP/ \*SIP – TLS
- » Management – HTTPS, SSH Telnet
- » Configurable user login passwords
- » Local Survivability

### Hardware

#### Certification:

- » EMC (CLASS B)
  - > EN55022
  - > EN55024
  - > FCC Part 15
  - > AS/NZS3548
- » Safety
  - > EN60950
  - > IEC60950
  - > UL60950
  - > AS/NZS60950

#### Environmental:

- » EMC (CLASS B)
  - > 0° .. 40°C
  - > 0% .. 90% humidity (non-condensing)

#### FXS Line Length:

- » 8 km at 1 REN, depending on environment

#### LED Indicators:

- » LAN: Speed/Activity

#### Dimensions:

- » 1U: 440mm (W) x 250mm (D) x 45mm (H)
- » Weight: 2.7kgs (6lbs)
- » Rackmount brackets supplied: 483mm

#### Power Supply:

- » External AC adapter
- » DC output 12V/5A (60W)
- » 100–240 VAC (50/60 Hz)