

# Sangoma Media Gateways

## Vega 200: Dual E1/T1 Digital Gateway

- ☑ Fixed Configuration of 60 VoIP Calls
- ☑ Built-in E1/T1 Resilience
- ☑ Voice, FAX and Modem Support
- ☑ Flexible Call Routing for Fallback and Least Cost Routing
- ☑ Emergency PSTN Backup
- ☑ Interoperability with a Wide Range of Legacy and IP Equipment
- ☑ Local Survivability \*Exclusive to Vega\*

### 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



Front View



Vega 200 – Rear View

## Overview

The Vega 200 VoIP gateway connects digital telephony equipment to IP networks.

Each unit purchased comes ready to use with capacity for 60 simultaneous calls. There are no future options or upgrades available.

Each E1/T1 interface can be independently configured as network side or terminal side. The Vega 200 gateway can therefore be connected to a PBX & the PSTN simultaneously. This configuration provides:

- » No disruption to the configuration of existing equipment
- » Flexibility & choice for call routing

### Integrated Bypass Relays For Resiliency

The Vega 200 gateway incorporates additional RJ45 sockets and fails over to these during outages. This resource can be utilised to achieve hardwired connection from the PBX to the PSTN for instances when the Vega is installed between the two. Or alternatively to failover to a back-up E1/T1 Vega gateway & thereby providing dual redundancy.

## Open, Non-Proprietary Interfaces

The Vega 200 gateway supports the following signalling schemes:

- » ETSI ISDN
- » NI1, NI2, AT&T 5ESS, DMS100
- » ISO QSIG Basic Call & QSIG feature transparency
- » Channel Associated Signalling (CAS)

All Vega gateways support SIP, H.323 & T.38 FAX.

The Vega 200 gateway has proven interoperability with a wide range of existing telecommunications & VoIP equipment.

## Ordering Information

| SKU    | Item Description                      |
|--------|---------------------------------------|
| VS0155 | Vega 200 – Dual T1/E1 Digital Gateway |

## Technical Specifications

### Interfaces

#### VoIP

- » SIP
- » H.323 version 4
- » Audio codecs:
  - » G.711 (a-law/ $\mu$ -law) (64 kbps)
  - » G.729a (8kbps)
  - » G.723.1 (5.3/6.4 kbps)
- » Clearmode
- » FAX Support – up to G3 FAX, using T.38
- » Modem Support – up to V.90, using G.711
- » Up to 60 VoIP channels

#### Telephony Interfaces

Primary Rate ISDN (User configurable NT/TE):

##### E1

- » Euro-ISDN
- » ISO QSIG
- » VN4
- » QSIG Feature Transparency (H.323)
- » CAS R2MFC

##### T1

- » NI1/NI2
- » AT&T 5ESS
- » DMS100
- » CAS (RBS)
  - E&M wink start
  - Loop start
  - Ground start
- » ISO QSIG
- » QSIG Feature Transparency (H.323)

*Bypass relays terminating onto RJ45 for resiliency*

#### LAN Interfaces

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

### Features

#### Identification

- » Caller ID presentation
- » Caller ID screening allows connections to be accepted only from selected call sources
- » SIP Registration & Digest Authentication
- » H.323 gatekeeper registration

#### Operations, Maintenance & Billing

- » HTTP(S) web server
- » RADIUS Accounting & Login
- » Remote firmware upgrade
  - Auto code upgrade
  - Auto configuration upgrade
- » SNMP V1, V2 & V3
- » TFTP/FTP support
- » VT100 – RS232/Telnet/SSH

#### Routing & Numbering

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

#### 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

- » Management – HTTPS, SSH Telnet
- » Configurable user login passwords

### Hardware

#### Certification

| EMC (Class B) | Safety      | Telecoms (ISDN) |
|---------------|-------------|-----------------|
| EN55022       | EN60950     | E1: TBR4        |
| EN55024       | IEC60950    | T1: FCC Part 68 |
| FCC Part 15   | UL60950     | T1: CS-03       |
| AS/NZS3548    | AS/NZS60950 |                 |
| VCCI          |             |                 |

#### Environmental

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

#### Indicators

##### LED:

- » Power
- » ISDN: NT/TE & Link up
- » 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") 1

#### Power

- » 100..240 VAC, 47..63 Hz, 1..0.5 A
- » -48V DC also available, 1.2A (Max)

#### Program Storage

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

Sangoma is continuously improving its products, features, design, therefore, specifications in this data sheet may be modified without prior notice or obligation.