

Sangoma Media Gateways

Vega 100: Single E1/T1 Digital Gateway

- ☑ Fixed Configuration of 30 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 100 – Rear View

Overview

The Vega 100 VoIP gateway connects digital telephony equipment to IP networks.

Each unit purchased comes ready to use with capacity for 30 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 100 gateway can therefore be connected to a PBX or the PSTN. This configuration provides:

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

Integrated Bypass Relays For Resiliency

The Vega 100 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 100 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 100 gateway has proven interoperability with a wide range of existing telecommunications & VoIP equipment.

Ordering Information

SKU	Item Description
VS0154	Vega 100 – Single T1/E1 Digital Gateway

Technical Specifications

Interfaces

VoIP

- » SIP
- » H.323 version 4
- » Audio codecs:
 - » G.711 (a-law/μ-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 30 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.