As business telecom requirements evolve, Sangoma VoIP Gateways are the ideal solution to connect your current infrastructure with VoIP infrastructure. Our broad customer base trusts our gateways for small business, enterprise, contact center, and service provider solutions. Not only do we provide the most fault tolerant and resilient gateway on the market; we are also becoming the most popular choice for interoperability with SIP trunk providers and large vendors.

Implementing a Vega Gateway is ideal for your business continuity plans. Even in the case of external network failures, you can stay connected. Local Survivability keeps SIP endpoints operational in the event that connectivity to the main switch is lost. Award-winning IP-to-TDM stand-alone gateway devices effectively bridge disparate technologies easily and cost-effectively.

Vega Gateways support ISDN BRI, PRI, FXS, FXO, and E1/T1 line codes and protocols. Easily deployed by Service Providers, Vega gateways feature auto-detection and simple GUI-based configuration. The Vega series also includes models for multi-tenant applications via legacy telephone wiring and systems.

**√ Local Survivability: Stay Connected**

**√ Emergency PSTN Backup**

**√ Flexible Call Routing for Fallback and Least Cost Routing**

**√ Interoperable with a Range of Legacy and IP Equipment**

**√ Voice, Fax and Modem Support**

**√ Hardware Failover Using Port Bypass (Vega 400G Only)**

**√ Optional Available Annual Support and Software Maintenance Plans**

**Service Provider Applications**

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

**Enterprise Applications**

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

### Vega Series

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*Optional
Technical Specifications

Interfaces

VoIP Interface
- Fax support — up to G3 FAX, using T.38
- Modem support — up to V.90, using G.711
- Up to 120 VoIP Channels Depending on model
- IPv4
- Audio Codecs:
  - G.711 (a-law/u-law) (64 kbps)
  - G.723.1 (5.3/6.4 kbps)
  - G.729a (8kbps)
  - G.726
  - T.38

Telephony Interface
- ETSI BRI
  - 2x or 4x S/T interfaces presented on RJ-45
  - Point to point or point to multipoint
  - Each interface can be configured NT or TE
- Analog
  - Vega 60G: 1 FXO/FXS port per RJ-11
  - Vega 3000G: Up to 24 FXS ports
  - Vega 3050G: Up to 50 FXS ports
  - 60R, 90R or CTR-21 line impedance
- Primary Rate ISDN User configurable NT/TE
  - T1: N11/N12
  - AT&T 5ESS
  - CAS (RBS) | DMS100
  - ISO QSIG
  - CAS Private Wire 400G only
  - E1: Euro-ISDN
  - ISO QSIG
  - VN4
  - CAS R2MFC
  - CAS Private Wire 400G only

LAN Interface
- 2x RJ-45s Vega 3000G and Vega 60G have only 1
- 1000BaseT Vega 100G/200G/400G/100 BaseT
- 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 Vega 60G only

Operations, Maintenance & Billing
- HTTP(S) web server
- RADIUS accounting & login
- Remote firmware upgrade
- Auto configuration upgrade
- SNMP V1, V2 & V3
- TFTP/FTP support
- VT100 — RS232/Telnet/SSH

Routing & Numbering
- Direct Dialing In (DDI/DID)
- SIP registration to multiple proxies
- Dial planner — sophisticated call routing capabilities, standalone or gatekeeper/proxy integration
- NAT traversal

Security & Encryption
- Management — HTTPS, SSH Telnet
- Configurable user login passwords
- SIP/TLS and SRTP

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)

Redundancy
- Hardware failover using port bypass Vega 400G only

Compliance
- EMC (Class A)
  - EN 55032:2012
  - EN 55024:2010
  - FCC Part 15
  - ICES-003
- Safety
  - EN 62368-1:2014
  - IEC 62368-1:2014
  - UL 60950-1 (Vega 400)
  - CSA 60950-1 (Vega 400)
  - AS/NZS 62368.1:2018

TELECOMS
- TBR3 (Vega 60G)
- TBR4 (Vega 100G, 200G, 400G)
- TBR21 (Vega 60Gv2)
- FCC Part 68
- CS-03 —Part 1 (Vega 60Gv2)
- CS-03-Part VI (Vega 100G, 200G, 400G)

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

FXS Line Length
- 8 km at 1 REN, depending on environment

Dimensions
- All units are standard 1U high and support rack mount

Power Supply
- Internal PSU
  - Vega 400G & 3050G
- External AC/DC Converter
  - Vega 60G, 100G, 200G & 3000G

LAN Interface
- 2x RJ-45s Vega 3000G and Vega 60G have only 1