



# The Vega 400G is the Most Resilient, High Density VoIP Gateway in its Class



Sangoma's Vega 400G VoIP Gateway is a four port T1/E1/PRI supporting up to 120 simultaneous calls. The Vega 400G is interoperable with legacy and VoIP carriers and features exclusive Local Survivability and dedicated failover ports. For the financial sector, the Vega 400G supports the CAS Private Wire protocol to connect the legacy "always on" telephony equipment of Capital Market Traders with modern IP endpoints, helping them stay connected with their customers.

- Supports Up to 120 Simultaneous VoIP Calls
- Branch Office Survivability
- Voice, FAX, and Modem Support
- Flexible Call Routing for Fallback & Least Cost Routing
- Emergency PSTN Backup
- Interoperability with a Wide Range of Legacy & IP Equipment
- Ideal for Private Wire or Point-to-point Applications
- Available Annual Support & Software Maintenance Plans

## Choose the Right License for Your Business

For growing businesses, the Vega 400G is the best solution which can be field-upgraded from 30 to 60, 90, or 120 simultaneous calls.

## Rapid Deployment

Every Vega VoIP gateway features a GUI based Installation wizard for rapid deployment. For high volume deployments the Auto Exec tool is perfect for auto configuration and firmware updates across multiple gateways.

## Local Survivability

In the event of a WAN failure, IP phones behind the gateway can continue to call each other, be routed to a backup switch or connect directly to the PSTN.

## Open, Non-Proprietary Interfaces

The Vega 400G supports the following signaling schemes: SIP & T.38 Fax, ETSI, VN4, ISDN, NI1, NI2, AT&T 5ESS, DMS100, ISO QSIG Basic Call and QSIG Feature Transparency, CAS R2MFC CAS Private Wire

## Hardware Failover

In the event of hardware failure, 4 T1/E1 failover ports provide seamless connectivity through to another Vega 100G, 200G, or 400G allowing your calls to continue

## Service Provider Applications

- Customer premises gateway for SIP trunking
- Survivability for IP phones Enterprise Applications
- PSTN trunking for IP-PBXs
- Low-density PSTN gateway
- Enterprise VoIP networking
- Enterprise IP telephony 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
- VoIP channel capacity:
  - Up to 120 calls
- 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

Primary Rate ISDN (User configurable NT/TE):

- T1
  - NI1/NI2
  - AT&T 5ESS
  - CAS (RBS)
  - DMS100
  - ISO QSIG
  - CAS Private Wire
- E1
  - Euro-ISDN
  - ISO QSIG
  - VN4
  - CAS R2MFC
  - CAS Private Wire

### LAN Interface

- 2x RJ-45, 1000BaseT / 100BaseTx / 10BaseT, 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

### Operations, Maintenance & Billing

- HTTP(S) web server
- SNMP v1, v2c and partial v3 (USM authentication)
- TFTP/FTP support
- TR-069
- RADIUS accounting & login
- Remote firmware upgrade
- VT100 – RS232/Telnet/SSH
- Auto configuration upgrade

### Routing & Numbering

- Direct Dialing In (DDI)
- 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
- Silence suppression
- Type of Service (ToS)
- Differentiated Services (DiffServ)
- Comfort noise generation
- 802.1p/Q VLAN tagging
- QoS statistics reporting
- Echo cancellation (G.168 up to 128ms tail)

### Redundancy/Survivability

- Hardware failover using port bypass
- Local Survivability - Business Continuity during WAN/SIP outage

## 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
  - CSA 60950-1
  - AS/NZS 62368.1:2018
- Telecom
  - TBR4
  - FCC Part 68
  - CS-03 – Part VI

### Environmental

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

### LED Indicators

- Power
- ISDN: NT/TE & link up
- LAN: Speed/activity

### Dimensions

- 437mm (W) x 153mm (D) x 43.5mm (H)
- Weight: 1.97kgs (4.35lbs)
- Rackmount ears supplied

### Power Supply

- Internal
  - 400G: PSU 100..240 VAC, 47.63 Hz, 1.0.5 A
  - 400GD\*: PSU 100..240 VAC, 47.63 Hz, 1.0.5 A (x2)
- Power consumption: 24W max.

\*400GD is a variant of the 400G featuring dual redundant power supplies. For more information please contact Sangoma.