

- Protocol: SIP & MGCP
- Up to 48 FXO/S ports and Max 48 concurrent calls
- 500 routing and number manipulation rules
- Fax over IP using T.38 fax relay and automatic switching between voice/fax
- Dual-redundant Ethernet ports
- Optional dual AC power supplies
- Class I lightning protection



VG Series Gateway

The VG4X series is a cost-effective, high-performance VoIP gateway with up to 48 FXS and FXO ports, targeting multi-tenant, large contact center and enterprise telephone communication applications, in which reliability and easy maintenance are critical. Powered by innovative VoIP technology from VOPTech, the VG4X allows users to apply it as an N-to-1 system capable of connecting analog phone, fax and POS machine, IP telephony, and PSTN.

Comprehensive Feature Set

As an intelligent gateway running on embedded Linux operating system, the VG4X supports an advanced feature set such as call forward, call transfer, 3-way calling, caller ID, DND, color ringback, call forking, automatic routing, Digit map and much more, to provide a complete and highly reliable VoIP solution applicable to most scenarios. Carrier-class

Carrier-class Reliability

VG4X supports high availability configuration including SIP registration failover, load balance as well as PSTN failover, with reliable 1+1 redundancy of Ethernet ports and power supplies (optional), ensuring no loss of service and minimizing the communications downtime.

Investment Protection

is a significant part of VOPTech VoIP product development focus, providing better returns for the customers who invest in VoIP products by maintaining compatibility with newest VoIP technologies via software upgrading, avoiding repeated investments.

Technical Data

Key Features

- ◆ SIP/MGCP protocols
- ◆ 500 routing and number manipulation rules
- ◆ Fax over IP using T.38 fax relay and automatic switching between voice/fax
- ◆ Dual redundant Ethernet ports
- ◆ Dual AC power supplies available
- ◆ PSTN failover
- ◆ Auto provisioning
- ◆ Remote access via third-party Network Management System (TR-069, SNMP)
- ◆ Interoperability with popular SIP servers, such as Cisco CallManager, Broadsoft, Huawei IMS, and Asterisk/Elastix
- ◆ Class I lightning protection

Protocols

- ◆ **Call Control**
SIP/UDP and SIP/TCP (RFC3261), IMS (3GPP), MGCP (RFC3435)
- ◆ **Network**
Telnet, SSH, HTTP, HTTPS, DHCP/PPPoE client, Radius, DNS (A/SRV record), STUN

Media processing

- ◆ **Caller ID**
Bellcore Type 1&2, ETSI, BT, NTT, and DTMF-based CID
- ◆ **Codec**
G.711 (a/μ), G.729a, G.723.1, GSM, iLBC
- ◆ **DTMF**
In-band audio, RFC2833, SIP-INFO
- ◆ **Hook-flash**
Local processing, RFC2833, SIP-INFO
- ◆ **Fax over IP**
Auto-switch to T.38 from G.711 Fax pass-through, Fax data pump V.21/V.27ter/V.29 for T.38 compliant Fax Relay up to 9.6 kbps
- ◆ **Disconnect modes**
Polarity reversal, Busy tone detection, Loop current
- ◆ **Voice Quality Enhancement**
Echo cancellation (G.168-2004), Jitter buffer, Silence suppression (VAD, CNG), PLC
- ◆ **QoS**
DiffServ, TOS, 802.1P/Q VLAN tagging

Voice

- ◆ **Caller Transfer**
Blind transfer, Consultative transfer
- ◆ **Call Forward**
Call forward all, Call forward no answer, Call forward busy
- ◆ **Call Setting**
Routing based on the caller or callee number, Digit map, 3-way calling, Speed dialing, Do not disturb, Call forking, Color ringback tone, Hunt group, Ring cadence, Message Waiting Indicator (MWI)

Security

- ◆ **Protocol**
HTTPS/SSH/TLS/SRTP
- ◆ **Access list**
IP addresses allowed to access HTTP/HTTPS/Telnet/SSH service
- ◆ **VoIP**
SIP-allowed IP addresses
- ◆ **Encryption**
Encrypted password/PIN
- ◆ **VLAN**
Auto discovery via DHCP, Manual configuration

High Availability

- ◆ **Redundancy**
Primary-Standby, Active-Standby, Load balancing
- ◆ **Failover**
PSTN failover upon power or network failure

Provisioning, Administration and Maintenance

- ◆ **Device Management**
TR-069 management (TR-069, TR-104, and TR-106), SNMP
- ◆ **Auto Provisioning**
Download configuration file via TFTP/FTP/ HTTP/HTTPS, Obtaining ACS address via DHCP option 66 or redirection
- ◆ **Log Management**
8-leave logs, Syslog
- ◆ **Data Capture**
Port capture, Packet capture
- ◆ **Status and Statistic**
Call status and history, Device status monitoring and statistics collection
- ◆ **Upgrade**
Firmware upgrade via Web GUI

Hardware

- ◆ **CPU** 1Ghz
- ◆ **Voice DSP Module** 200 MHz, 2 to 6 modules
- ◆ **RAM** 128MB, DDR3
- ◆ **Flash** 32MB
- ◆ **Single/Dual AC power supplies**
100 to 240 VAC, 50/60 Hz, 1.2A maximum
- ◆ **Single/Dual DC power supplies**
-36 to -72 VDC, 2 A
- ◆ **Mounting Rack**
- ◆ **Operating**
Temperature: 32 to 104° F (0 to 40° C), Humidity: 10 to 90% RH (non-condensing)