

# 24-48 Port Analog VolP Gateways



» Max. FXS Ports: 48» Max. Concurrent Calls: 48

» Dimensions: (1U) 44 H x 440 W x 300 D

MODELS	FXS	FXO
CX-GW1U24FXS	24	0
CX-GW1U48FXS	48	0

#### **Features**

- » SIP/MGCP protocols
- 500 routing and number manipulation rules
- >> Fax over IP using T.38 & G.711 pass-through
- » Hot-swappable RJ21 interface card with per line LED
- » Dual redundant gigabit Ethernet ports
- » Dual AC/DC power supplies available
- » Auto provisioning
- Management with the ComXchange Gateway Provisioning Module
- » Interoperability with popular SIP servers, such as Cisco CallManager/CUCM, Broadsoft, Microsoft Skype for Business (Lync), and Asterisk/Elastix
- » Class I lightning protection

The ClearlyIP 24-48 Port VoIP Gateway series is a cost-effective, high-performance VoIP gateway with up to 48 FXS 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 ClearlyIP, the 24-48 port analog VoIP gateway allows users to apply it as an N-to-1 system capable of connecting analog phones, fax and POS machine, IP telephony, and PSTN.

# **Comprehensive Feature Set**

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

# **Carrier-class Reliability**

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

## **Investment Protection**

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



#### **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**

- » Call 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:
  - > T.38, G.711 pass-through
  - > T.38 compliant Group 3 Fax Relay
  - Maximum fax rate of 33,600 bps (pass-through)
- » Disconnect Modes: Polarity reversal, Busy tone detection, Loop current
- » Voice-quality Enhancement: Echo cancellation (G.168-2004), Jitter buffer, Silence suppression (VAD, CNG), PLC

#### **VOICE**

- » Call Transfer: Blind transfer, Consultative transfer
- Call Forward: Call forward all, Call forward no answer, Call forward busy
- » Call Recording Storage: Remote recording server for storage
- Call Settings: Routing based on the caller or callee number, Digit Map, 3-way Calling, Speed Dialing, Do Not Disturb, Call Forking, Color Ringback Tones, Hunt Group, Ring Cadence, Message Waiting Indicator (MWI)

## **SECURITY**

- » User-defined Ports: SIP port, RTP port, HTTP/HTTPS port to access the Web GUI
- Encryption: Encrypted password/PIN
- » Intrusion Prevention: Ping blocking
- » Access List: IP addresses allowed to access HTTP/HTTPS/ Telnet/SSH service
- » VoIP: SIP-allowed IP Address

## **QOS**

» QoS: DiffServ、TOS、802.1P/Q VLAN

## **HIGH AVAILABILITY**

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

## PROVISIONING, ADMINISTRATION & MAINTENANCE

- Device Management: Management with the ComXchange Gateway Provisioning Module.
- » Auto Provisioning: Uses the ComXchange Web GUI to create a config file that is uploaded via TFTP/FTP/ HTTP/HTTPS.
- » Log Management: 8-level 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 the ComXchange Web GUI

#### **HARDWARE**

CPU	1 GHz
Voice DSP Module	200 MHz, 3 to 6 Modules
RAM	128 MB, DDR3
Flash	32 MB
Interface Card	ClearlyIP 24 Port RJ21 FXS Card
H+W+D	44×440×300 mm
Weight (Net)	3 kg Maximum
Single/Dual AC Power	100 to 240 VAC, 50/60 Hz, 1.2A Maximum
Single/Dual DC Power	-36 to -72 VDC, 2.5A
Power Consumption	60 W
Mounting	Rack
Operating	Temperature: 0 to 40°C Humidity: 10 to 90% RH (non-condensing)
Storage	Temperature: -40 to 70°C Humidity: 5 to 90% RH (non-condensing)



CX-GW1U24FXS



CX-GW1U48FXS



ClearlyIP 24 Port RJ21 FXS Card

( € F© RoHS