



» FXS Ports: 2

» Max. Concurrent Calls: 2

>> Dimensions: 30 x 150 x 109 mm (1U)

# **FEATURES**

- » IMS/SIP/MGCP protocols
- >> 2 FXS Ports
- >> TLS/SRTP
- >> L2TP/OpenVPN client
- 500 routing and number-manipulation rules
- Sonfigurable SIP ports and IP-address whitelist
- High-speed fax with maximum rate of 33,600 bps by T.38 or G.711 pass-through
- >> Polarity-reversal/busy-tone detection
- >> High availability & PSTN failover
- Auto provisioning with Config File Management
- » Remote access via the ComXchange Provisioning Module
- Interoperability with popular SIP servers, such as Cisco Unified CallManager (CUCM), Broadsoft, Microsoft Skype for Business (Lync), Huawei IMS, Asterisk, FreePBX, and ComXchange
- » Class I lightning protection

Developed for low-port-count applications, small businesses, SOHO, and residential IP-telephony applications, the ClearlyIP 2 Port FXS G2 analog VoIP gateway is integrated VoIP devices that provide reliable and cost-efficient access methods for deploying converged communication solutions for network operators and enterprises.

The ClearlyIP 2 Port FXS G2 analog VoIP gateway is designed as a compact unit with 2 FXS ports, 1 WAN port, and 1 PC port (both are 10/100/1000Mbps Ethernet ports), which allows users to apply it as an All-in-One system capable of providing versatile solutions by connecting analog phone, fax and POS machine, IP telephony and PSTN.

## COMPREHENSIVE FEATURE SET WITH INTELLIGENT ENGINE

As an intelligent gateway running on embedded Linux operating system, the ClearlyIP 2 Port FXS G2 analog VoIP gateway is compatible with many highlighted features such as call forward, call transfer, 3-way conference, caller ID, DND, color ringback, forking, automatic routing, digitmap, PSTN failover, and much more to provide a complete and highly reliable VoIP solution applicable to nearly every application scenarios.

## **HIGH RELIABILITY**

The hardware design of the ClearlyIP 2 Port FXS G2 analog VoIP gateway, from architecture to component selection, takes full consideration of improving their reliability. In addition, with high availability featuring primary-standby, active-standby and load balance as well as PSTN failover designed to handle the failure of the SIP proxy servers, power supply and network, the users are provided with carrier class reliability with minimized potential downtime.

#### ROBUST PROTECTION AGAINST INTRUSIONS

The ClearlyIP 2 Port FXS G2 analog VoIP gateway provides rich set of features to support perimeter protection against malicious intrusions, such as brute force logins and SIP attacks, ensuring a high level of security in your IP telephony environment.



# **SPECIFICATIONS**

#### **PROTOCOLS**

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

#### MEDIA PROCESSING

- » Caller ID: Bellcore/Telcordia, ETSI, BT, DTMF
- » Codec: G.711 (a/μ), G.729a, G.722, G.722.2
- » 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 (T.38)
- » Disconnect Modes: Polarity reversal, Busy tone detection, Loop current
- » QoS: DiffServ, TOS, 802.1P/Q VLAN tagging
- » 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**

- » Protocol: HTTPS, SSH, TLS, SRTP
- » Encryption: Encrypted password/PIN
- » Intrusion Prevention: Brute force login protection, Access list, Firewall, SIP-allowed IP addresses, Alarm and notification
- » VLAN: Auto discovery via DHCP, Manual configuration
- » VPN Client: L2TP, OpenVPN

#### **HIGH AVAILABILITY**

- » Redundancy: Primary-Standby, Active-Standby, Load balancing
- » PSTN Failover: Power failure, Network failure

# PROVISIONING, ADMINISTRATION & MAINTENANCE

- Device Management: Management with the ComXchange Gateway Provisioning Module, TR-069 management (TR-069, TR-104 and TR-106), SNMP.
- » Auto Provisioning: Supports config file management
- » 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 Web GUI or Config File

## **HARDWARE**

- » CPU: Dual core, 880 MHz
- » RAM: 128 MB» Flash: 16 MB
- » Size (H×W×D): 30×150×109 mm (1U)
- Net Weight: 0.3 kgPower: 12VDC/1.5A
- » Power Consumption: 6 W
- » Mounting: Desktop
- **» Operating Temperature:** 0 to 40°C,
- >> Operating Humidity: 10% to 90% RH (non-condensing)
- » Storage Temperature: -40 to 70°C,
- » Storage Humidity: 5% to 90% RH (non-condensing)



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