

Grandstream GXW4501 E1/T1/J1 Digital VoIP Gateway



Product Name: Grandstream GXW4501 E1/T1/J1 Digital VoIP Gateway

Manufacturer: Grandstream

Model Number: GXW4501

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The Grandstream GXW4501 is a Digital VoIP Gateway with 1 RJ45 ports and 30 concurrent calls. By connecting the GXW4501 with a VoIP network and a traditional PBX or E1/T1/J1 provider, businesses can drastically increase the amount of PSTN/ISDN trunks integrated with their VoIP network.

Grandstream GXW4501 Key Features

- Dual Gigabit autosensing RJ45 network ports with integrated NAT router
- TLS and SRTP security encryption technology to protect calls and accounts
- Automated provisioning by HTTP/TFTP with XML config files
- Software configurable E1/T1/ J1 ports, support PRI, SS7, MFC R2
- Supports a wide range of voice codecs, including G.722, G.729, iLBC, and more
- Supports T.38 Fax for creating Faxover-IP
- Supports multilanguage voice prompts
- Supports 30 concurrent calls

The GXW4501 supports PRI, SS7 and MFC R2 digital signalling protocols and nearly all major voice codecs including Opus, G.722, G.711, G.729, G.723, iLBC, G.726, GSM-FR, etc. This digital VoIP gateway includes dual Gigabit network ports with a configurable integrated NAT router, two USB 3.0 ports, and one SD card interface. By adding echo cancellation, jitter buffer, T.38 fax support, TLS and SRTP security encryption as well as automated provisioning by HTTP/TFTP with XML config files, the GXW4501 is able to cater to the VoIP needs of large and medium enterprises.

Grandstream GXW4501 Technical Specifications

Interfaces

- T1/E1/J1 Interface: 1 RJ45 ports, supporting up to 30 simultaneous VoIP calls
- Network Interfaces: Dual self-adaptive Gigabit ports (switched or routed)
- Peripheral Ports: 2 x USB 3.0, (1) SD card interface
- LED Indicators: LAN, WAN, T1/E1/J1
- LCD Display: 128x32 dot matrix graphic LCD with DOWN and OK buttons
- Reset Switch: Yes, long press for factory reset and short press for reboot

Voice and Video Capabilities

- Voice-over-Packet Capabilities: LEC with NLP Packetized Voice Protocol Unit, 128ms-tail-length carrier grade Line Echo Cancellation, Dynamic Jitter Buffer, Modem detection & auto-switch to G.711
- Voice and Fax Codecs: G.711 A-law/U-law, G.722, G.723.1 5.3K/6.3K, G.726, G.729A/B, iLBC, AAL2-G.726-32
- Fax over IP: T.38 compliant Group 3 Fax Relay up to 14.4kbps and auto-switch to G.711 for Fax Passthrough, Fax data pump V.17, V.21, V.27ter, V.29 for T.38 fax relay
- Voice-quality Enhancement: Echo cancellation (G.168-2004), Jitter buffer, Silence suppression (VAD, CNG), PLC
- QoS: Layer 2 QoS (802.1Q, 802.1p) and Layer 3 (ToS, DiffServ, MPLS) QoS

Signaling and Control

- DTMF Methods: In-band audio, RFC2833, and SIP INFO
- Digital Signaling: SIP (RFC 3261) over UDP/TCP/TLS, PRI, SS7, MFC R2, RBS (pending)

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PRI switch types: Euro ISDN, nation, Q.SIG CAS: MFC R2 (Argentina, Brazil, China, Czech Republic, Colombia, Ecuador, Indonesia, ITU, Mexico, Philippines, Venezuela) SS7: ITU, ANSI, China

½ Upgrade: Firmware upgrade via TFTP / HTTP / HTTPS or local HTTP upload

½ Device Management: Syslog, HTTPS, Web browser, voice prompt, TR-069 management, backup and restore, port capture and packet capture

½ Network Protocols: TCP/UDP/IP, RTP/RTCP, ICMP, ARP, DNS, DDNS, DHCP, NTP, TFTP, SSH, HTTP/HTTPS, PPPoE, STUN, SRTP, TLS, LDAP, PPP, Frame Relay (pending), IPv6, OpenVPN®

½ Status and statistic: Call status and history, device status monitoring and ISDN status monitoring

Security

½ Media Encryption: SRTP, TLS, HTTPS, SSH, 802.1X

½ User-defined ports: SIP port, RTP port, HTTP/HTTPS port

½ Advanced Defense: Fail2ban, alert events, Whitelist, Blacklist, strong password based access control

Physical

½ Universal Power Supply: Input: 100 ~ 240VAC, 50/60Hz; Output: DC+12V, 2A

½ Physical & Dimensions: - Unit Weight: 2350g - Package Weight: 3130g - Unit Dimensions: 485mm(L) x 191mm(W) x 46.2mm (H)

½ Temperature and Humidity: Operating: 32 - 113°F / 0 ~ 45°C, Humidity 10 - 90% (non-condensing) Storage: 14 - 140°F / -10 ~ 60°C, Humidity 10 - 90% (non-condensing)

½ Mounting: Rack mount & Desktop

Additional Features

½ Multi-Language Support: Web UI: English, Simplified Chinese, Traditional Chinese, Spanish, French, Portuguese, German, Russian, Italian, Polish, Czech; Customisable IVR/voice prompts: English, Chinese, British English, German, Spanish, Greek, French, Italian, Dutch, Polish, Portuguese, Russian, Swedish, Turkish, Hebrew, Arabic; Customizable language pack to support any other languages

½ Compliance: FCC: Part 15 (CFR 47) Class B, Part 68 CE: EN55022 Class B, EN55024, EN61000-3-2, EN61000-3-3, EN60950-1, TBR21, RoHS RCM: AS/NZS CISPR 22, AS/NZS CISPR 24, AS/NZS 60950, AS/ACIF S002 ITU-T K.21 (Basic Level); UL 60950 (power adapter) T1: TIA-968-B Section 5.2.4 E1: TBR4/TBR12/TBR13, E1: AS/ACIF

Please Enquire