The GXW4500 series are E1/T1 Digital VoIP Gateways that allow digital PSTN and ISDN trunks to be integrated with VoIP networks. By connecting the GXW4500 series with a VoIP network and a traditional PBX or E1/T1 provider, businesses can drastically increase the amount of PSTN/ISDN trunks integrated with their VoIP network. The GXW4500 series offers three models that provide 1, 2 or 4 E1/T1/J1 spans and support 30, 60 or 120 concurrent calls to cater to the VoIP needs of large and medium sized enterprises.

- **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 Fax-over-IP**
- **Supports multi-language voice promtps**
- **Supports up to 120 concurrent calls**
### Interfaces

**E1/T1/J1 Interface**  
1/2/4 RJ45 ports, supporting up to 30/60/120 simultaneous VoIP calls

**Network Interfaces**  
Dual self-adaptive Gigabit ports (switched or routed)

**Peripheral Ports**  
(2) USB 3.0, (1) SD card interface

**LED Indicators**  
LAN, WAN, E1/T1/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 & 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**  

**Fax over IP**  
T.38 compliant Group 3 Fax Relay up to 14.4kbps and auto-switch to G.711 for Fax Pass-through, 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 & 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)  
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

**Upgrade**  
Firmware upgrade via TFTP / HTTP / HTTPS or local HTTP upload

**Device Management**  
Syslog, HTTPS, Web browser, voice prompt, backup and restore, port capture and packet capture

**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®

**Status and statistic**  
Call status and history, device status monitoring and ISDN status monitoring

### Security

**Media Encryption**  
SRTP, TLS, HTTPS, SSH, 802.1X

**User-defined ports**  
SIP port, RTP port, HTTP/HTTPS port

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

### Physical

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

**Physical & Dimensions**  
GXW4501: Unit Weight: 2,350g; Package Weight: 3130g  
GXW4502: Unit Weight: 2360g; Package Weight: 3140g  
GXW4504: Unit Weight: 2380g; Package Weight: 3160g

**Unit Dimensions:** 485mm(L) x 191mm(W) x 46.2mm (H)

**Temperature and Humidity**  
Operating: 32 – 113ºF / 0 ~ 45ºC, Humidity 10 - 90% (non-condensing)  
Storage: 14 - 140ºF / -10 ~ 60ºC, Humidity 10 - 90% (non-condensing)

**Mounting**  
Rack mount & Desktop

### Additional Features

**Multi-Language Support**  
Web UI: English, Simplified Chinese, Traditional Chinese, Spanish, French, Portuguese, German, Russian, Italian, Polish, Czech;  
Customizable 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

**Compliance**  
FCC  
47 C.F.R FCC Part 15 Class B  
47 C.F.R FCC Part 68 (TIA-968-B Section 5.2.4 (T1+ISDN))

**CE**  
EN 55032,EN 55035,EN 61000-3-2,EN 61000-3-3,EN 60950-1,TBR 4 (E1+ISDN),TBR 12 (E1),TBR 13 (E1+ISDN)

**RCM**  
AS/NZS CISPR 32,AS/NZS 61000.3.2,AS/NZS 61000.3.3,AS/NZS 60950.1,AS/ACIF S016(E1),AS/ACIF S038(E1+ISDN)

**Other**  
ITU K.21 (Enhanced Levels); UL 60950-1 (Power adapter)