

Copper IAD Gateway with WiFi GW-521EW



The GW-521EW is a FXS gateway works as a bridging between local PSTN and IP network for voice and FAX services. The GW-521EW gateway provides two FXS ports connecting to local PSTN. IT is an interface to access PSTN with IP-PBX solution. A 10/100Base-TX interface connects local Ethernet network with IP phone and H.323 Gatekeeper or call manager. The data and voice service are working in a local Ethernet network and VoIP-based IAD (Internet Access Device), which is designed to interoperate with end-to-end fiber from major vendors to meet the worldwide market requirements of triple-play services. It is Class 1 laser product complying with EN 60825-1. The integrated Ethernet switch features automatic crossover-correction and auto-negotiation for easy connection to user's PCs or LAN environment. The GW521EW model also features a built-in 802.11g WLAN which brings relief to those troublesome wirings. Two lines of telephony service are provided using VoIP technology with SIP and MGCP signaling protocol.

Electrical Interface

Connector	RJ45
Data rate	10Mbps, 100Mbps
Duplex mode	Half / Full duplex
Cable	10Base-T Cat.3, 4, 5, UTP, 100Base-TX Cat.5, 5e or higher
Standard	IEEE 802.3, IEEE 802.3u
Indications	LED (FX Link, TX SPD, TX Link/Act)
Power Input	12VDC
Power Consumption	< 5W
Dimension	190 x 376 x 124mm (D x W x H)
Weight	360g
Temperature	0 ~ 50°C (Operating), -25 ~ 70°C (Storage)
Humidity	10 ~ 90% non-condensing
Certification	CE, FCC, RoHS
MTBF	75,000 hrs (25°C)

Features

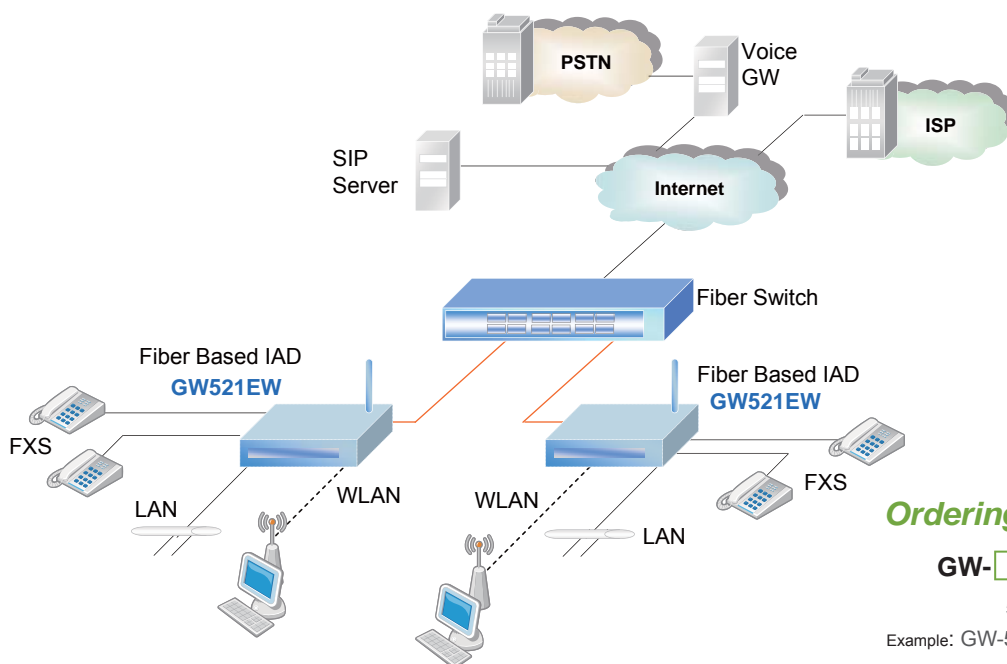
Voice Features

- G.711 a/μ-law, G.723.1, G.726, G.729A/B
- DTMF Detection and Generation
- Silence Suppression & Detection
- Comfort Noise Generation (CNG)
- Voice Activity Detection (VAD)
- Echo Cancellation (G.165/G.168)
- Adaptive (Dynamic) Jitter Buffer
- Call Progress Tone Generation
- Programmable Gain Control
- Inbuilt Local Mixer

SIP Call Features

- Peer to Peer Call
- Call Hold / Retrieve
- Call Waiting
- Call Pick Up
- Call Park / Retrieve (SIP Server Required)
- Call Forward - unconditional, busy, no answer
- Call Transfer - attended, unattended
- Do Not Disturb
- Speed Dialing
- Repeat Dialing

- Three-way Calling
- MWI (RFC-3842)
- Hot Line and Warm Line



Ordering Information

GW-□□□□□ Optional card

521EW

Example: GW-521EW

VoIP Router

SIP Method Support
Telephony

Protocol: SIP (RFC3261) / MGCP (RFC2705)

Voice: 2FXS, Ethernet: 1WAN 4LAN, Wi-Fi IEEE802.11b/g, TR069 / 104, SIP over TLS

ACK, BYE, CANCEL, INFO, INVITE, MESSAGE, NOTIFY, OPTION, PING, PRACK, PUBLICSH, REFER, REGISTER, SUBSCRIBE, UPDATE

- In-Band DTMF, Out-of-Band DTMF Relay (RFC2833 or SIP INFO)
- DTMF / PULSE Dial Support
- Caller ID Generation / Detection: DTMF,FSK-Bellcore Type 1 & 2, FSK-ETSI Type 1 & 2, FSK: Calling Name, Number, Date and Time, vMWI
- Polarity Reversal Detection (FXO) and Generation (FXS)
- T.30 FAX Bypass to G.711, T.38 Real Time FAX Relay
- Failsafe mechanism: Network, Service, Power Failure, (FXS relay to FXO)
- Life Line Support (OB-201L, OB-110)
- Recordable Greeting Message (FXO)
- Emergency Number Table (FXO)
- Modem over IP Up to V.34
- PSTN Call Tone Detection (FXO) and Generation (FXS)
- ROH Tone (Receiver Off-Hook Tone @ 480 Hz)
- Loop Current Suppression

Wireless

- 802.11 b/g Access Point and Client mode (WISP), Wi-Fi compliant
- 802.1x, WEP, WPA TKIP and WPA2 AES/Mixed mode for PSK and TLS (Radius)
- Wireless Auto-channel selection
- WDS supported with WEP, TKIP and AES encryption
- Wireless access control by MAC address (deny or accept)
- Support Ad-hoc and infrastructure mode
- Support MAC Clone (single Ether device) and NAT2.5 (Multiple Ether clients)
- Support site survey scan and manual connect
- Support WPA/WPA2 TLS client
- Support universal repeater mode

IP Network

- WAN: Static IP, PPPoE, DHCP, PPTP
- Network Protocol Support: IP, TCP, UDP, TFTP, FTP, RTP, RTCP, ARP, RARP, ICMP, NTP, SNTP, NMP v1/v2, HTTP, HTTPS, DNS, DNS SRV, Telnet, DHCP Server, DHCP Client, STUN Client, UPnP, IGMP
- NAT Functions : Support up to 255 Clients, Port Forwarding (Virtual Servers), DMZ, Port Triggering
- QoS Support: WAN: DiffServ, IP Precedence, Priority Queue, Rate Control, 802.1Q (VLAN Tagging), 802.1p (Priority Tag), LAN: Rate Limit

Network Security

- DDNS Support: Dyndns.org (Dynamic and Custom), TZO, Peanut Hull, 3322.org
- PPTP VPN Client, Port Filtering, IP Filtering, MAC Filtering, Virtual Server, URL Filter
- DIGEST Authentication, MD5 Encryption, DoS Protection

Management

- Web Based Configuration
- Telnet
- IVR
- Reset to Default Button
- Auto-provisioning (HTTP / HTTPS / TFTP)
- FTP / TFTP / HTTP Remote Software Upgrade
- Configuration Backup and Restore
- TR-069/104 (Option)

SIP Call
Management

- Support Outbound Proxy
- Register up to three SIP servers
- SIP Registration Failover Mechanism
- Group Hunting
- Privacy Mechanism / Private Extensions to SIP
- Session Timers (Update / Re-invite)
- DNS SRV Support
- Call Types: Voice / Modem / FAX
- Call Routing by Prefix Number
- User Programmable Dial Plan Support
- Toll-Free Support (FXO)
- Automatic Calling Number Manipulation (VoIP & FXO)
- CDR Client
- Phone Book Manager Client
- Manual Peer Table (for P2P calls)
- E.164 Numbering, ENUM support
- Symmetric RTP
- By port registration
- By device registration (share account)
- Mixed mode (Hunt number for inbound, by port number for outbound)
- Invite with Challenge
- Register by SIP Server IP Address or Domain Name
- Support RFC3986 SIP URI format

SIP Account
ManagementMGCP CALL
MANAGEMENT
(OPTION)

IETF MGCP V.1.0, RFC 2705