



16 / 24 Analog Lines High Density VoIP Gateway



The Soundwin S1600 / S2400 Series VoIP Gateway is fully SIP and /H.323 standard compliant high density gateway that provides a total solution for integrating voice-data network and PSTN. By simple installation, this revolutionary compact voice over IP (VoIP) gateway could be configured as 16/24 channels high density FXS/FXO VoIP Gateway which provides voice connectivity over the IP network and to the Public Switched Telephone Network (PSTN). The Soundwin Gateway is equipped NAT router function that provides Internet access using only one IP address. Besides, it provides high voice quality and optimized packet voice streaming over managed and public (Internet) IP networks.

VoIP Key Features

- Both support SIP and H.323 protocols: SIP Registration and Digest Authentication and H.323 Gatekeeper Registration.
- Single Number / Account for multiple ports.
- Caller ID Delivery and Detection: FXS support DTMF&FSK Caller ID generation; FXO supports DTMF&FSK Caller ID detection. **(Optional)**
- Smart VoIP call Dialing Book: VoIP call Book could provide any application VoIP call to any type destination (Domain name / IP address, PSTN or PBX) or hunting number setting.
- AC termination Impedance : 600/900 OHM and complex impedance
- Answer Supervision for Polarity Reversal Detection and Voice detection
- NAT traversal: This feature allow gateway to operate behind any NAT/Firewall device. There is no need to change any configuration of NAT/Firewall like setting virtual server.
- Smart-QoS Guaranteed: This bandwidth management feature provide good voice quality when user place a VoIP call and access internet at the same time. The gateway will automatically start to reserve bandwidth for voice traffic when VoIP call proceeds.
- Call Hunting Facility: This function helps gateway to use the lines effectively. This facility automatically transfers your incoming call to a free line. Subscribers need not indicate numerous numbers of each port of gateway.
- Voice channels status display: This function display each port status like as onhook, offhook, calling number callee's number, talk duration, codec.
- Pulse Dial support: Support pulse dialing generation and detection. **(Optional)**
- Flash Detection and Generation Program: FXO support Flash Generation and FXS support Flash Detection.

• **Telephony Specification:**

- ☒ Voice Codec: G.711(A-law / μ -law), G.729 AB, G.723 (6.3 Kbps / 5.3Kbps)
- ☒ FAX support : T.30 / T.38
- ☒ Echo Cancellation: G.165/G168
- ☒ FXO Caller ID detection : DTMF and FSK (**Optional**)
- ☒ FXO hang up detection / anti-seized : Tone Learning Automatically / Manual Tone Learning (**Optional**)
- ☒ Answer supervision: Support Battery Reverse Detection and Voice Detection.
- ☒ FXO answer delay time: Support delay 0 – 8000 ms to answer.
- ☒ Adjustable AC Termination Impedance : 600 / 900 OHM and complex Impedance
- ☒ Failsafe Mechanism (FXS relay to FXO) : Power failed by pass support / Internet Failed by pass (**Optional**)
- ☒ 12K Hz and 16K Hz Metering (**Customized**)

• **IP Specifications:**

- ☒ H.323 v2/v3/v4 and SIP (RFC 3261) , SDP (RFC 2327), Symmetric RTP, STUN (RFC3489), ENUM (RFC 2916), RTP Payload for DTMF Digits (RFC2833), Outbound Proxy Support.
- ☒ LAN :Support Virtual Server, DHCP Server
- ☒ WAN: Support PPPoE client, DHCP client, Fix IP Address, DDNS client
- ☒ Network Address Translation: Providing build-in NAT router function.
- ☒ Smart QoS: Guarantee the voice bandwidth
- ☒ IP TOS (IP Precedence) / DiffServ

• **Call Features**

- ☒ Voice channels status display
- ☒ Direct Dialing Mode : peer to peer call (support IP Address Call or Domain Name Call)
- ☒ Register Call Mode : register to SIP Proxy Server or H.323 Gatekeeper
- ☒ Adjustable volume : - 9 db ~ 9 db
- ☒ Silence Compression
- ☒ Auto Dial for speed
- ☒ Dynamic Jitter Buffer
- ☒ Hot-Line Support

• **Configuration & Management**

- ☒ Web-based Graphical User Interface
- ☒ RS232 for configuration
- ☒ Remote management over the IP Network
- ☒ FTP firmware upgrade
- ☒ Backup and Restore Configuration file
- ☒ Front LCD Panel for System Status and Management
- ☒ Syslog support

• **General Specification**

- ☒ Standard 50 pin RJ-21 Telco connectors
- ☒ AC power : AC100V-240V, DC12V/1.5A,50/60 Hz
- ☒ Temperature: 0°C ~ 40°C (Operation)

- ☒ Humidity: up to 90% non-condensing
- ☒ Emission: FCC Part 15 Class B, CE Mark
- ☒ Dimension : 440 x 250 x 45 mm
- ☒ Weight: 3500 g

S1600/S2400 Series VoIP Gateway Catalogue

	S1600	S1608	S1616	S2400	S2412	S2424
Ethernet Interface	1 WAN + 1 LAN					
RS232 Console	1 RS232 console for configuration					
LCD Panel	Front LCD Panel for System Status and Management					
Telephony Interface	Standard 50-pin Telco connector					
FXS/FXO	16 FXS	8 FXS + 8 FXO	16 FXO	24 FXS	12 FXS + 12 FXO	24 FXO
Modules Combination	1 SB800 + 1 SM800	1 SB804 + 1 SM804	1 SB808 + 1 SM808	1 SB800 + 2 SM800	1 SB804 + 2 SM804	1 SB808 + 2 SM808
H.323 v2/v3/v4	✓	✓	✓	✓	✓	✓
SIP(RFC3261)	✓	✓	✓	✓	✓	✓
Smart-Qos	✓	✓	✓	✓	✓	✓
NAT Traversal	✓	✓	✓	✓	✓	✓
Echo Cancellation	✓	✓	✓	✓	✓	✓
G.711 a /μ law						
G.723, G729AB	✓	✓	✓	✓	✓	✓
T.38/T.30	✓	✓	✓	✓	✓	✓

S1600/S2400 Series VoIP Modules Card Catalogue

Modules Card	Description and Function
SB800	Mother Board with 8 FXS Interface
SB804	Mother Board with 4 FXS + 4 FXO Interface
SB808	Mother Board with 8 FXO Interface
SM800	8 FXS Interface Module
SM804	4 FXS + 4 FXO Interface Module
SM808	8 FXO Interface Module

Soundwin Network, Inc. - Headquarters
10F-4, No. 295, Sec. 2, Guangfu Rd.,
Hsinchu City, Taiwan

Tel: +886-3-5733113
Fax: +886-3-5736131
E-mail : sales@soundwin.com
Web site: <http://www.soundwin.com>