

# Modular High Density VoIP Gateway

By Modular hardware design 065-9850/065-9854/065-9858 Series makes any combination of the telephone interface. The Signamax 065-9850/065-9854/065-9858 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 modular installation, this revolutionary compact voice over IP (VoIP) gateway could be easily configured as 9850/9860/9870 channels high density FXS/FXO VoIP Gateway which provides voice connectivity over the IP network and to the Public Switched Telephone Network (PSTN).

## SPECIFICATIONS

### TELEPHONY SPECIFICATION

Voice Codec: G.711 (A-law / $\mu$ -law), G.729 AB, G.723 (6.3 Kbps / 5.3 Kbps), FAX support : T.30 / T.38  
 Echo Cancellation: G.165/G.168  
 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 bypass support / Internet failed bypass / Registered failed bypass / Unconditional bypass 12 KHz and 16 KHz 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 – 9 db  
 Silence Compression / VAD  
 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 client support

### GENERAL SPECIFICATION

Standard 50 pin RJ-21 Telco connectors  
 AC power: AC100 – 240V, DC12V/1.5A, 50/60 Hz  
 Temperature: 0° – 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: 3,500 g

## VOIP KEY FEATURES

- Modular design to accommodate various types of telephony interfaces
- Both support SIP and H.323 protocols: SIP Registration and Digest Authentication; 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. Need not 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
- FXO answer Mode: FXO provides Ringing Answer, Connection Answer and Non Answer for configuration

## Modular High Density VoIP Gateway

PART NO.	DESCRIPTION
065-9850	Signamax Modular VoIP Gateway Chassis 1xWAN, 1xLAN, 8xFXs, 1xRS-232, Standard 50pin telco Connector
065-9854	Signamax Modular VoIP Gateway Chassis 1xWAN, 1xLAN, 4xFXs 4xFXo, 1xRS-232, Standard 50pin telco Connector
065-9858	Signamax Modular VoIP Gateway Chassis 1xWAN, 1xLAN, 8xFXo, 1xRS-232, Standard 50pin telco Connector
<b>Modules</b>	
065-9860	Module 8x FXs Ports for Modular Chassis 065-985x
065-9861	Module 4x FXs / 4x FXo Ports for Modular Chassis 065-985x
065-9862	Module 8x FXo Ports for Modular Chassis 065-985x