

SMG1000

FXO/FXS VoIP Gateway

Synway
VoIP Gateway

- Compact 1U 32 Ports (SIP)
- FXS/FXO Configurable
- FoIP Supported(T.30 to T.38)



Introduction:

With a simple and economical way to help legacy telephone, fax machine and PBXs interconnect with IP network, Synway SMG1000 analog media gateway enables call center and multi-branch enterprises to process powerful, versatile and efficient VoIP solutions for unparalleled cost advantage.

SMG1000 Analog Gateways allow for a well-planned, phased migration to an IP network, making the gateways an easy solution for enterprises looking to enhance their legacy PBX equipment with new VoIP access and applications. Connected between a PBX or an Analog and a LAN, the SMG1000 Gateways convert analog PSTN messages into a format suitable for transmission over standard IP networks.



Key Features	Values
Voice over Internet Protocol (VoIP)	Supports SIP per RFC 3261. Uses Real-time Transport Protocol/Real-Time Control Protocol (RTP/RTCP) for delivery of voice over the LAN or WAN
IP security	Supports HTTPS for web interface
Enhanced voice processing	Supports a variety of compression algorithms, including G.711 A-law and μ -law, G.729AB
T.38 Fax over Internet Protocol (FoIP)	Transcode fax from T.30 fax protocol (supporting V.17) to T.38 for transmission over a packet network
Hot swap	Allows gateway units to be added or removed without affecting other gateway units
Web server interface	Each gateway unit is delivered with a web server interface, allowing configuration and software upgrades via a web browser

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Key Features:

- Functional Description

Designed for voicemail and unified messaging applications, SMG analog Gateways have a 10/100 Base-T Ethernet connection for connecting legacy PBX to a LAN. The analog loop start functionality supports integration via in-band signaling (DTMF or FSK) or serial protocols. The SMG1000 Gateways provide a simple, cost-effective transition to voice and data convergence for enterprises with PBXs. Connected externally, they offer an IP solution that works with current legacy equipment. They support SIP-based applications as well as T.38 for fax transmissions over IP (FoIP).

- Configurations

The SMG1000 Gateways can be used to connect IP telephones to a legacy PBX, integrate network-hosted applications with the PBX, extend the PBX to branch offices, and integrate various voice and call processing capabilities in an enterprise LAN or WAN environment.

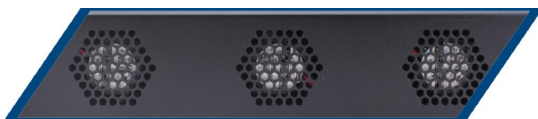
- Call Routing

The SMG1000 Gateways route calls from the switched network to a VoIP destination on the IP network or conversely, The SMG1000 Gateways support the following call routing options:

- TDM to IP or IP to TDM
 - IP load balancing
 - IP fault tolerance
- Compatible with general FXO/FXS lines, and a variety of popular PBX manufacturers (Digital PSTN lines compliance would be available)

Protects investment in legacy telecommunications equipment and allows a controlled migration to IP technology

- Developed and tested in Synway PBX lab and optimized for use in an Enterprise environment Ideally suited for Enterprise Unified Messaging applications
- Support for IP load balancing and IP fault tolerance Allows the ability for inbound (TDM-to-IP) calls to round-robin between available media servers
- Supports configuration via serial, telnet, and a web browser including context-sensitive help Easy to install, configure, debug, and maintain



Telecom-grade Cooling System
With three built-in ultra-silent fans, independent thermal pipeline to ensure high thermal efficiency



Multiple Interface
Interconnect to various network interfaces (RJ11/RJ21/RJ45) for option



Modular Structure
In-house modular FXO/FXS interface for any configuration



EMC Design
Minimize heating and EMC via regular hexagon cooling hole

Technical Specification

- **Model**

SMG1004B-4S	4FXS
SMG1004B-2S2O	2FXS+2FXO
SMG1004B-4O	4FXO
SMG1008B-8S	8FXS
SMG1008B-4S4O	4FXS+4FXO
SMG1008B-8O	8FXO
SMG1016B4-16S	16FXS
SMG1016B4-8S8O	8FXS+8FXO
SMG1016B4-16O	16FXO
SMG1032B4-32S	32FXS
SMG1032B4-24S8O	24FXS+8FXO
SMG1032B4-16S16O	16FXS+16FXO
SMG1032B4-32O	32FXO
- **PBX Interface**

Number of ports: 2-32 FXO/FXS configurable
Connectors: 2-32 shielded female RJ-11 jacks
*Use multiple gateway units for higher port counts
- **Network Interface**

Network Interface: 10/100 Base-T Ethernet LAN port
Connector: 2 shielded female RJ-45 jack for LAN
- **VoIP Protocols**

SIP per RFC 3261
RTP/RTCP for delivery of voice
- **FoIP Protocol**

T.38 FoIP transcode fax from T.30 fax protocol (supporting V.17) modulation schemes, to T.38 for transmission over a packet network
- **Voice Support**

G.711 μ -Law and A-Law, G.723.1, G.729AB
Silence suppression with comfort noise
G.168 automatic echo cancellation
Call Progress Analysis (CPA), including Positive Voice Detection, Positive Answering Machine Detection (PAMD), DTMF detection, and fax tone detection
- **Quality of Service**

Type of Service (ToS)
IP precedence
- **Configuration and Management**

Web UI for instant management and status monitoring
Telnet
- **Call Routing**

From IP to PSTN or from PSTN to IP
User configuration list of VoIP endpoints
IP load balancing
IP fault tolerance
- **IP Security**

HTTPS for web interface
- **Power Requirements**

Line voltage 100 VAC to 240 VAC
Frequency 47 Hz to 63 Hz
- **Physical Dimensions**

High: 1.72 in (44 mm)
Wide: 17.32in (440 mm)
Deep: 10.51in (267 mm)
Weight Approximately 8.8 lbs. (about 4kg)
- **Environment**

Operating temperature range
0 to +55 °C, 8-90% relative humidity non-condensing
Storage temperature range
-20 to +85 °C, 8-90% relative humidity non-condensing
- **Approvals and Compliance**

For information about RoHS compliance and other approvals, please contact Synway directly.
- **EMC/EMI**

Compliant with most international standards. For compliance documents, please contact Synway's sales representatives.
- **Safety**

Compliant with most international standards, please ask Synway or its sales representatives worldwide. Synway would comply all new safety standard to for different regions around the world while needed.
- **Telecom Approvals**

(Partially approved)Compliant with most international standards, please ask Synway or its sales representatives worldwide.
- **Reliability/Warranty**

Estimated MTBF Five Years

www.synway.net

Connect Synway



As a major manufacturer and supplier of communication products and solutions, Synway specializes in providing superior Multimedia Gateway, Integrated Multimedia Switch, Telephony Hardware in use for Telecom communications. Since 1995, over 3,000 service providers, software developers and system integrators have deployed Synway's offerings to deliver a broad range of TDM and VoIP-based applications worldwide, including Unified Communications, SIP Trunking, Call Center, Mobile VAS, Faxing, Conferencing, Call Recording as well as Asterisk-based Open Source Applications. With dedicated teammates and well-known premium services, Synway makes consistent efforts to deliver partners with a variety of customizable, high-performance and cost effective voice communications products.

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