SMG2000L Series VoIP Gateway

- Support 1/2 E1(T1 Optional)in Mini Size
- Support SIP and ISDN/R2/CAS and More
- Superior Voice Quality and Reliability in Full Load
- Only 30mm*190mm *120mm(High*Wide*Deep)

The Synway SMG2030L/2060L, with mini size for better space and shipment efficiency, are new members of Synway's VoIP gateway family that enables service providers and enterprises to maximize value of their networks and services. It converts digital E1/T1 PSTN message into IP formats and secures sessions across IP and mixed network boundaries to support the seamless delivery of services.

SMG2030L/2060L are unparalleledly cost effective and compliant with PRI ISDN, R2 packets, and adopt the equivalent hardware architecture like Telco' grade SMG3000 series, with dedicated DSP chipsets for processing IP/TDM signaling and optimizing voice quality. Compared to with rival products, SMG2000L features high reliability and unparalleled cost efficiency, and delivers a perfect alternative option for enterprises, operators and system integrators.

Key Features:

● Flexible and efficient VoIP Gateway Solution

With its scalable density and versatility, SMG2000L can help enable wireless and wireline service providers to add new Value Added Services (VAS) quickly, and provide a clear migration path to an all-IP network. It can scale up to 60 simultaneous IP sessions and at the same time provide media transcoding and impressive sessions per second.

SMG2000L support voice densities ranging from 30 to 60 channels, call routing, call translation and IP transcoding in a single mini chassis for gateway operations. The integrated gateway functionality not only provides interworking between IP and TDM domains, but also automated failover from IP to TDM for outbound routing. These features help service providers looking to improve network and routing resiliency and lower TCO. These capabilities make the SMG2000L an excellent option for mobile VAS, SIP trunking, contact center and emergency service deployments, as well as for retail, wholesale, business, and enhanced Voice over IP (VoIP) services.

● Any-to-Any Signaling and Multimedia Connectivity

SMG2000L provides any-to-any network connectivity through its ability to interwork multiple protocols used by telecommunications providers to deliver services to their retail, business and wholesale customers. It can provide interworking between ISDN, SIP formats.

SMG2000L also supports any-to-any media transcoding for popular voice codecs. T.38 and G.711 fax interworking and support for RTP, INBAND and SIPINFO method based tones and event handling complement the media transcoding capabilities to provide a high degree of flexibility to help deliver value added services economically.

● User-friendly management and configuration toolkits

The Web graphical user interface (WebUI) is a real-time web toolkit to configure, monitor SMG2000L. It allows operators to configure and perform real-time monitoring and maintenance. Flexible SIP and Protocols configuration enable services providers and enterprises to seamlessly connect in hybrid networks, Helping configure SIP, SIP trunking, SIP Mediation, PCMand ISDN, Routing and more; And a broad range of gateway toolkits also help gateway's maintenance and software upgrading for Web UI, gateway services and firmware.

Key Features	Values
Flexible SIP and Protocols configuration enable services providers and enterprises to seamlessly connect in hybrid networks	Help configure SIP, SIP trunking,SIP Mediation, PCM and ISDN, Routing and more; a broad range of gateway toolkits help gateway's maintenance and software upgrading for Web UI, gateway services and firmwar
30/60 simultaneous SIP sessions with multimedia transcoding, and 30/60 channels of ISDN signaling	Scalable IP and TDM connectivity solution provides high performance in a small footprint to help lower ownership cost and operational cost
Combined IP and TDM gateway features on a single platform	Integrated multimedia gateway features facilitate TDM and IP interworking to provide service delivery flexibility and automated failover between domains
Any-to-any signaling and media support	Support for ISDN, SIP signaling, and SIP interworking along with voice and transcoding provides a cost-effective platform to help service providers evolve from a TDM to an all-IP environment
SIP profiler and web based user configuration	Easy-to-use service configuration and management tools can help accelerate service deployment and simplify platform management
Integrated transcoding support for voice, tone and faxing	Eliminates the need to add separate hardware to support transcoding requirements helping to reduce CAPEX and number of platforms deployed
Carrier class solution	Carrier class design and features provide high availability, reliable throughput and enhanced service delivery

SMG2000L Series VoIP Gateway

Technical Specifications

- Product models

SMG2030L 1E1/T1 and 30 SIP channels
SMG2060L 2E1/T1 and 60 SIP channels

- Routing Features

Call routing and translation (from PCM to IP or reversely)

- IP Bearer Features

Coder support: G.711A,G.711U, G.729 A/B,G723,G722, GSM, iLBC, RFC 2833,RF 3261,SIPINFO,INBOUND
Compliant with TLS/SRTP, TCP/UDP, HTTP, ARP/RARP, DNS, NTP, TFTP, TELNET, STUN and more IP protocols
Echo cancellation: G.168 128 ms tail length
Voice activity detection and packet loss concealment
Comfort noise generation
T.38 real-time fax, T.38 – G.711 interworking
Digit transmission via RFC 2833 (SIP)
Hosted NAT

- OAM&P

Network Time Protocol (NTP)
Web User Interface (WebUI) supports configuration via browser
SNMP MIBs

- Power Requirements

Input voltage: DC 12V ± 10%
Input current: ≥3A

- Power Consumption

About 15W(Normal Conditions)

- 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

- Maintenance

Power supplies field installation

- Physical Dimensions

High: 1.18 in (30 mm)
Wide: 7.48in (190 mm)
Deep: 4.72in (120 mm)
Weight 1.43 lb (Approx. 0.65kg)

- Resiliency

Redundant power supply(Optional)
Smart IP probing
Automated failover (Ethernet and Fiber Optical links)
Failover via automatic protection switching

- I/O Interfaces — Rear I/O — T1/E1

Telephony
Fiber Optical 1~2 T1/E1 for timing (BITS clock),
T1 and E1
signaling and bearer traffic(T1 - 100 ohms and E1 - 120 ohms)
Clock Sync Stratum

- IP Interfaces

Dual redundant 2 *100 Base-T Ethernet for VoIP payload and signaling

- TDM Signaling Protocols

ISDN PRI
MF R2

- IP Protocols

Core SIP Specifications and Notable Extensions
RFC 3261 SIP Basic
RFC 3262 SIP PRACK
RFC 3265 SIP Subscribe/Notify

- Notable SIP Extensions

RFC 3398 ISUP/SIP Mapping
RFC 3711 SRTP (for SIP)
Tel URI – RFC 3966
IP and ISUP interworking and more

- QoS

Adaptive jitter buffer
Packet loss compensation
Configurable Type of Service (ToS) fields for packet prioritization and routing

- 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 standardfor 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 per Telcordia Method 1: With Dual Redundant AC or DC Power Supplies
Rear I/O Type 1 — T1/E1
NO PSTN Interface: 150,000 hours

About 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. www.synway.net

Synway Information Engineering Co., Ltd.
Synway R&D Building, No.3756, Rd. Nanhuan. Binjiang District, Hangzhou, P.R.China 310053
Tel: (86) 571 88860561; Fax: (86) 571 88850923; Email: info@synway.net