

Get Connected with



Synway E1/T1 VoIP Media Gateway

Safe Bridge Between IP & TDM & Mobile Networks



Synway Information Engineering Co., Ltd.

SMG3000-B1L/B2L

Mini Size E1/T1 VoIP Gateway

- Support 1/2 E1(T1 Optional) in Mini Size
- Support SIP and SS7/ISDN/R2/CAS and More
- Superior Voice Quality and Reliability in Full Load
- Only 30mm*190mm *120mm(High*Wide*Deep)

The Synway SMG3000-B1L/B2L, 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 and SS7 packets, and adopt the equivalent hardware architecture like Synway's Telco' grade SMG3000 series, with dedicated DSP chipsets for processing IP/TDM signaling and optimizing voice quality. Compared with rival products, SMG2000L features high reliability and unmatched cost, and delivers a perfect alternative option for enterprises, operators and system integrators.



VoIP



ISDN



IP2Tel
Tel2IP
Route



Redundancy



NAT



Cloud



VLAN



Live call
Bargain



VPN



QoS

Key Features and Benefits

● Flexible Scalability

From 30 to 60 simultaneous SIP sessions with multimedia transcoding provides high performance in a small footprint to help lower ownership cost and operational cost; a broad range of gateway toolkits help gateway's maintenance and software upgrading for Web UI, gateway services and firmware.

● Flexible and efficient Gateway Solution

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 performance; Support SS7 signaling, call routing, call automated failover from IP to TDM for outbound routing.

● Any-to-Any Signaling and Transcoding

Provide any-to-any network connectivity through its ability to interwork multiple protocols to deliver services. It can provide interworking between SS1, R2, ISDN, SS7, SIP formats and any-to-any media transcoding for popular voice codecs, T.38 and G.711 fax interworking, RTP, INBAND and SIPINFO.

● User-Friendly Management & Toolkits

The Web graphical user interface (WebUI) is a real-time web toolkits to configure and monitor and perform real-time monitoring and maintenance. Flexible SIP and Protocols configuration help to configure SIP, SIP trunking, SIP Mediation, PCM, SS7 and ISDN, Routing and more.

● Combined All Features on A Single Platform

Integrated multimedia gateway features facilitate TDM and IP interworking to provide service delivery flexibility and automated failover between domains.

● Integrated Transcoding 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, and support a range of Codecs, including G.723, G.729, G.711, iLBC, SIPINFO, RFC2833, RF3261, INBOUND and more.

Technical Specification:		
Features \ Model	SMG3000-B1L	SMG3000-B2L
Sessions	30	60
Routing Features	Call routing and translation (from PCM to IP or reversely)	
IP Interfaces	Dual redundant 2 *100 Base-T Ethernet for VoIP payload and signaling	
IP protocols	TCP/UDP, HTTP, ARP/RARP, DNS, NTP, TFTP, TELNET, STUN, etc.	
Coder support	G.711A,G.711U, G.729 A/B,G723,G722, GSM, iLBC, RFC 2833,RF 3261,SIPINFO,INBOUND	
Power Supply	Single	
TDM Signaling Protocols	ISDN PRI/MF R2/SS7 ISUP/SS7 MTP1~3/SS7 SIGTRAN/SS7 TCAP	
Power Requirements	12V DC	
Mounting	Desktop	
Compatibility	Interoperable with most IP-PBX and UC Platform, and field-proven by SMB and Carriers Worldwide	
Dimensions H*W*D(mm)	30*190*120	
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	
Routing	Call Routing and translation (PCM↔IP)	
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.	
EMC/EMI	Compliant with most international standards. For compliance documents, please contact Synway's sales representatives.	
OAM&P	Network Time Protocol(NTP) Web User interface (WebUI) supports configuration via browser SNMP MIBs	
Dedicated DSP-Empowered Capability	Telecom-style DSP algorithm has been optimized for over decades, assuring seamless compliance with any network environment. Plentiful DSP resources are allocated for signaling, media processing, bandwidth optimization, Telco redundancy	
Highly Adjustable For Diverse SoftSwitch	Homegrown core technologies to assure seamless compliance with diverse softswitch platform Including Mitel, Avaya, Broadsoft, Yate, OpenSIP, Asterisk, VECTRA, VSC, SIPPULSE, Tropico, FreeSwitch and more other softswitch	

SMG3000-B1/B2/B4

Hi-Availability E1/T1 PRI/SS7/SIGTRAN VoIP Gateway

- Support 1/2/4 E1(T1 Optional)in 1U Space
- Support SIP and SS7/ISDN/R2 and More
- Telco-grade Redundancy & Dual Power Supply

With a more efficient manner to interconnect and deliver large-scalability services, The Synway SMG3000 enables service providers and carriers to maximize value of their networks and services. The SMG3000 converts digital PSTN message into IP formats and connects and secures sessions across IP and mixed network boundaries to support the seamless delivery of services.

The SMG3000 connects IP and hybrid networks via telephony and E1(T1 or STM-1)/Ethernet links in a compact 1U form factor appliance. It also transforms media and signaling to support efficient and reliable voice, fax and multimedia sessions for mobile, fixed and cloud-based applications. The convergence of IP multimedia and TDM gateway functionality in a single chassis in the SMG offers significant reductions in investment and operational cost when compared to less integrated alternatives.

SMG3000R inbuilt call classification/analytics is vital for hi-density OBD applications, including predictive dialing, dialer, telemarketing and more. It helps minimize dialing cost and maximize value of dialing (human and network) resources. With call classification, OBD applications could improve dialing efficiency by up to 60% and deliver high satisfaction for both agents and subscribers.



VoIP



SS7



IP2Tel
Tel2IP
Route



Redundancy



NAT



Cloud



VLAN



Radius



VPN



QoS

Key Features and Benefits

- Build-in SS7, SIGTRAN, SIP, R2 & More Protocols

Complimentary standardized SS7 Packets(Up to 64 SS7 links, ISUP, MTP1~3, TCAP), SIGTRAN and SIP for any carrier networks worldwide; Field-proven by over 50 largest operators from European, China, USA, India, Brazil, South America.

- Dedicated DSP-Empowered Capability

Telecom-style DSP algorithm has been optimized for over decades, assuring seamless compliance with any network environment. Plentiful DSP resources are allocated for signaling, media processing, bandwidth optimization, Telco redundancy.

- Robust Telco-Grade Architecture

Dual power supply, 1U compact structure, industrial heating sink system, dual 1,000M Ethernet interfaces, and Telco' grade hardware architecture ensures 200,000Hr MTBF and 0-defective rate in long lifecycle.

- Highly Adjustable For Diverse SoftSwitch

Homegrown core technologies to assure seamless compliance with diverse softswitch platform, including Mitel, Avaya, Broadsoft, Yate, OpenSIP, Asterisk, VECTRA, VSC, SIPPULSE, Tropicico, FreeSwitch and more other softswitch;

- 99.9999% Availability in Full Load

Support 1~4E1 (30~120Chs) per unit, with higher system responsiveness capability in extreme network for better operational results; High performance and stability in cases of unstable (low) bandwidth and high capacity.

- User-friendly WEB Management

With complete understanding about SPs and operator's headaches, SMG3000 adopts the simplest and straightforward configuration to achieve SPs and Operators' most sophisticated objectives. Over 10000 units of SMG3000 can run together.

Key Features and Benefits

- Improve Dialing Efficiency

In general database of OBD systems, unused numbers accounts for 10~ 30%, suspended numbers for 5~ 20%, shutdown number for 5~10%. It means around 20~ 60% dialing numbers are invalid. With call classification function, dialing systems (predictive dialer) could filter out all invalid numbers for best dialing results.

- Reduce Operational Expenditure (OPEX) by 20%

Unsuccessful dialing incurs higher operational costs while labor cost for telemarketing is specifically considered. According to analytical statistics from surveys, OPEX could be reduced by 20% or more if successful dialing ratio increases by 60%.

- Hi-Accuracy Call Classification

With call classification functionality, over 99.999% (in some scenarios) of called number states could be accurately detected by analyzing telephone alert tones. Only in much noise conditions over the network, call classification may default.

- Minimize Your Hardware Cost

High voice quality and instant call connection, improving system efficiency and profitability; Synway SS7 VoIP Gateway could reduce hardware cost by 70%.

- High Interoperability

Advanced voice processing and SS7 signaling ability to ensure superb VoIP communications experiences. SS7 packets are customizable and compliant with diverse softswitch.

Technical Specification:

Models	SMG3000-B1	SMG3000-B2	SMG3000-B4
Sessions	30	60	120
Segmentation	Enterprise		
Telephony ports	1	2	4
Interface	RJ45	RJ45	RJ45
Power Supply	Dual		
Power Requirements	AC Power Supply Range 100 – 240 VAC The power supply will operate at frequencies between 47Hz and 63Hz		
Coder support	G.711A,G.711U, G.729 A/B,G723,G722, GSM, iLBC, RFC 2833, RF 3261, SIPINFO, INBOUND		
IP protocols	TCP/UDP, HTTP, ARP/RARP, DNS, NTP, TFTP, TELNET, STUN, etc.		
SIP Protocol	Supported SIP standards: IETF RFC 3261 (SIP: Session Initiation Protocol); IETF RFC 2327 (SDP–Session Description Protocol); IETF RFC 3550 and 3551 (RTP/RTCP); IETF RFC 2833 (DTMF)		
TDM Signaling Protocols	ISDN PRI/MF R2/SS7 ISUP/SS7 MTP1~3/SS7 SIGTRAN/SS7 TCAP		
Dimensions H*W*D(mm)	44*440*267		
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		
Routing	Call Routing and translation (PCM↔IP)		
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.		
EMC/EMI	Compliant with most international standards. For compliance documents, please contact Synway’s sales representatives.		
OAM&P	Network Time Protocol(NTP) Web User interface (WebUI) supports configuration via browser SNMP MIBs		

SMG3008/3016/3064

Hi-Availability E1/T1 PRI/SS7/SIGTRAN VoIP Gateway

- Support 8/16/63 E1(T1 Optional)in 1U Space
- Support SIP and SS7/ISDN/R2 and More
- Telco-grade Redundancy & Dual Power Supply

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Key Features and Benefits

- **Build-in SS7, SIGTRAN, SIP, R2 & More Protocols**
Complimentary standardized SS7 Packets(Up to 64 SS7 links, ISUP, MTP1~3, TCAP), SIGTRAN and SIP for any carrier networks worldwide; Field-proven by over 50 largest operators from European, China, USA, India, Brazil, South America.
- **Dedicated DSP-Empowered Capability**
Telecom-style DSP algorithm has been optimized for over decades, assuring seamless compliance with any network environment. Plentiful DSP resources are allocated for signaling, media processing, bandwidth optimization, Telco redundancy.
- **Robust Telco-Grade Architecture**
Dual power supply, 1U compact structure, industrial heating sink system, dual 1,000M Ethernet interfaces, and Telco' grade hardware architecture ensures 200,000Hr MTBF and 0-defective rate in long lifecycle.
- **Highly Adjustable For Diverse SoftSwitch**
Homegrown core technologies to assure seamless compliance with diverse softswitch platform, including Mitel, Avaya, Broadsoft, Yate, OpenSIP, Asterisk, VECTRA, VSC, SIPPULSE, Tropic, FreeSwitch and more other softswitch;
- **99.9999% Availability in Full Load**
Support 8~64E1 (240~1,920Chs) per unit, with higher system responsiveness capability in extreme network for better operational results; High performance and stability in cases of unstable (low) bandwidth and high capacity.
- **User-friendly WEB Management**
With complete understanding about SPs and operator's headaches, SMG3000 adopts the simplest and straightforward configuration to achieve SPs and Operators' most sophisticated objectives. Over 10000 units of SMG3000 can run together.

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- High Interoperability

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Technical Specification:

Models	SMG3008	SMG3016	SMG3064 SMG3064R
Sessions	240	480	1890
Segmentation	Carrier-grade		
Telephony ports	8	16	63
Interface	RJ45	RJ45	Fiber Optical
Power Supply	Dual		
Power Requirements	AC Power Supply Range 100 – 240 VAC The power supply will operate at frequencies between 47Hz and 63Hz		
Coder support	G.711A,G.711U, G.729 A/B,G723,G722, GSM, iLBC, RFC 2833, RF 3261, SIPINFO, INBOUND		
IP protocols	TCP/UDP, HTTP, ARP/RARP, DNS, NTP, TFTP, TELNET, STUN, etc.		
SIP Protocol	Supported SIP standards: IETF RFC 3261 (SIP: Session Initiation Protocol); IETF RFC 2327 (SDP–Session Description Protocol); IETF RFC 3550 and 3551 (RTP/RTCP); IETF RFC 2833 (DTMF)		
TDM Signaling Protocols	ISDN PRI/MF R2/SS7 ISUP/SS7 MTP1~3/SS7 SIGTRAN/SS7 TCAP		
Dimensions H*W*D(mm)	44*440*267		44*440*690
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		
Routing	Call Routing and translation (PCM↔IP)		
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.		
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OAM&P	Network Time Protocol(NTP) Web User interface (WebUI) supports configuration via browser SNMP MIBs		



As a leading VoIP enabling-technologies provider in China, Synway has been partnered with applications & solution providers worldwide to deliver turkey solutions for enterprises and telecom carriers. Based on long-standing business network, Synway's appliances and equipments, with third-party compliant software platforms from mainstream application providers, have served 5,000 plus customers, including contact centers, financial institutes, public security, government agencies, service providers, hospitality and operators.

In ever-changeable environments, Synway's long-term goal would be of partnership with vendors of cloud-based unified communications, providing enterprises and SPs with a complete range of cloud-based applications, including Video and Audio Conferencing, Contact Center, IP-PBX, Unified Messaging, Social Media Services and more. For in-house IPR and better customer value, Synway provides strategic partners with customized OEM or ODM services to localize more efficiently. To achieve 0-defective rate, Synway has adopted ISO9001, CE, FCC, RoHS, 3C and more since 2001.

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