

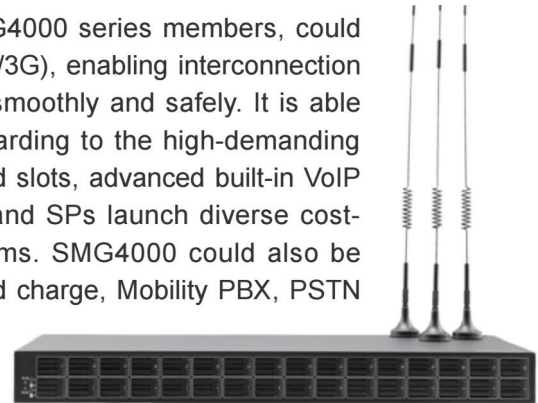
# SMG4016/4032

## Wireless VoIP Gateway

Synway  
VoIP Gateway

### Brief Introduction:

Synway SMG4016/4032 Wireless Gateway, the latest SMG4000 series members, could be compliant with a variety of wireless/mobile protocols (2G/3G), enabling interconnection between GSM/CDMA/WCDMA network and VoIP network smoothly and safely. It is able to bridge wireless network with IP networks efficiently, regarding to the high-demanding user requirements. GSM4000 adapts self-propelled SIM card slots, advanced built-in VoIP processors and wireless modules, and helps enterprises and SPs launch diverse cost-efficient and flexible Wireless-to-IP communication systems. SMG4000 could also be applied into a range of systems, including remote billing and charge, Mobility PBX, PSTN backup lines, VoIP localization, SMS platform and more.



### Key Features and Benefits:

- **DSP-based Algorithm**

DSP-enabled voice optimization to assure crystal voice quality and maximize bandwidth efficiency; High-speed response and connectivity in the extreme network environments, with better run efficiency; Telco-grade reliability and continuous high performance in fully loaded capacity and in the long run;

- **High security**

High security and privacy for users via automatic-exchange of different SIM cards and Networks. In specific environments, SMG4016/SMG4032 could use and activate multiple SIM cards circularly, improve system security, make full use of bandwidth, and increase ROI.

- **Complete Protocols Range**

Support standard SIP protocols, and could be used worldwide; Support both 2G/3G wireless network (in different versions), including both GSM/CDMA/LTE and More

- **High Voice Optimization Capability**

Adopt Synway's homegrown voice optimization technologies to ensure crystal clear communication, including DSP-based 128mc echo cancellation

- **High Flexibility and Scalability**

Could be configured from 16 or 32 Ports of Wireless-to-IP transmission, and support a diversity of wireless networks in a single system

- **User-friendly GUI**

Easy-to-use service Web based UI configuration and management tools could help accelerate service deployment and simplify platform management

- **High Interoperability with Terminals**

Compliant with all brands of terminal mobile devices and a complete range of SIP trunking worldwide, support auto-provision in complex network environment

- **Telco-Grade Reliability**

Adopts telco-grade standards and components to design and manufacture, and certified and approved by most telecom operators worldwide

## Functional Description

- **Basic Features:**

GSM (850/900/1800/1900MHz) supported respectively by different models  
Multiple voice encoding formats supported  
SMS CODEC: ASCII/UCS2  
Open and programmable API  
PIN management  
Call time restriction: SIM Card/Single Call  
Operator locking  
BCCH management  
Call hold  
Call transfer

- **Voice**

Silence suppression and detection  
CNG (Comfort Noise Generator) support  
VAD (Voice Activity Detection) support  
Echo cancellation (G.168), up to 128ms  
Self-adaptive dynamic buffering  
Call progress tone generation  
AGC (Automatic Gain Control) support

- **Protocol**

SIP V2.0 RFC3261  
SDP RFC2327  
Session Timer RFC4028  
RTP/RTCP RFC3551  
SIP registration  
SIP trunk (Point-to-Point)  
SIP trunk group  
Ringback (Immediate/normal)  
SIP/GSM release cause configurable  
DNS SRV/A query  
Out-of-stack agent  
DTMF mode: Signal/RFC2833  
NAT traversal  
Dynamic NAT, Static NAT, STUN

- **Physical Interface**

SIM Card Socket: 64/128-port  
Ethernet interface: RJ45, 2 ETH, 10/100M Base  
CONSOLE: RJ45, RS232, 115200bps  
Antenna interface: SMA  
Status indicator: PWR, RUN, ALM, Channel state, Signal strength, ACT per network, LINK status.  
Reset button

- **Network Protocol**

IP v4, UDP/TCP, PPPoE, DHCP  
FTP/TFTP ARP, RARP, NTP  
HTTP, Telnet

- **Management**

Configuration management based on WEB  
Configuration backup/restore  
Interface in Chinese/English  
Firmware upgrade via HTTP/TFTP  
Password modification for WEB sign-in  
Factory settings restore  
CDR and tracking information output  
Syslog  
Ping and Tracert tests based on WEB  
Transport Protocol Count: TCP, UDP, RTP  
VoIP Call Count  
PSTN Count: ASR, ACD, PDD  
Voice loopback test  
IVR Customizable  
System Log  
Centralized cloud-platform integrated management

