# SMG4004/4008

Synway VoIP Gateway

Wireless VoIP Gateway

### **Brief Introduction:**

Built on decades of IP, multimedia processing and wireless technologies, Synway's GSM/CDMA wireless gateway, as a part of the Synway gateway family, is used for reliably bridging GSM/CDMA network with the VoIP network. With push-pull SIM card sockets for easily installing the SIM cards, it adopts advanced built-in VoIP processors and GSM/CDMA modules, and enables ISPs and VoIP solution providers to deliver highly available and versatile wireless-to-IP systems, effortlessly and cost-efficiently.



### Key Features and Benefits:

### Complete Protocols Range

Support standard Sip protocols, and could be used worldwide; Support both 2G/3G/4G wireless network, 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 2~32 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

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### **Functional Description**

### • Basic Features:

GSM: 850/900/1800/1900MHz

CDMA: 800MHz

UMTS: 850/900/1900/2100MHz 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: 8/4-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 Tracet 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





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### **Technical Specification**

### Product Models

SMG4004-4G: GSM:850/900/1800/1900MHZ

SMG4004-4C: CDMA:800MHz SMG4004-4W: GSM:900/1800MHz UMTS:900/2100MHz

SMG4004-4WA: GSM:850/900/1800/1900MHz

UMTS:850/1900MHz

SMG4004-4WT: GSM:850/900/1800/1900MHz,

UMTS:850/2100MHz

SMG4008-8G: GSM:850/900/1800/1900MHZ

SMG4008-8C: CDMA:800MHz SMG4008-8W: GSM:900/1800MHz UMTS:900/2100MHz

SMG4008-8WA: GSM:850/900/1800/1900MHz

UMTS:850/1900MHz

SMG4008-8WT: GSM:850/900/1800/1900MHz

UMTS:850/2100MHz

#### Dimensions

260×153×30mm

### Weight

Net: 1.2kg Gross: 1.8kg

### Environment

Operating temperature: 0°C —55°C Storage temperature: -20°C —85°C Humidity: 8%— 90% non-condensing

Storage humidity: 8%— 90% non-condensing

### LAN

Amount: 2 (10/100 BASE-TX (RJ-45)) Self-adaptive bandwidth supported Auto MDI/MDIX supported

### Console Port

Amount: 1 RJ-45 (RS-232) Baud rate: 115200bps Data bits: 8 bits Stop bit: 1 bit Parity unsupported Flow control unsupported

### Power Requirements

Input voltage: DC 12V ± 10%

Input current: ≥3A

### Signaling Protocol:

SIP V2.0 RFC3261

#### Network Protocol

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

### Audio Encoding & Decoding

G.711A 64 kbps G.711U 64 kbps G.729 A/B 8 kbps G.723 5.3/6.3 kbps G.722 64 kbps AMR 4.75 kpbs iLBC 13.3/15.2 kbps

### Sampling Rate

8kHz

### Wireless Feature

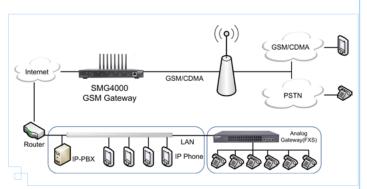
Frequency band:

GSM: 850/900/1800/1900MHz

CDMA: 800Mhz

UMTS: 850/900/1900/2100Mhz SMS CODEC: ASCII/UCS2

### Typical Application:









### **Connect Synway**







# www.synway.net

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, highperformance and cost effective voice communications products.

Synway Information Engineering Co., Ltd. (Headquarter) 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

**Technical Support** 

Tel: (86) 571 86692545 Tel: (86) 571 88864579

Mobile: (86) 18905817070 (24\*7) Email:techsupport@synway.net