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 automaticexchange 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 Wirelessto-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) 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 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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Functional Description

Product Models

SMG40016-16G: GSM:850/900/1800/1900MHZ

SMG4016-4C: CDMA:800MHz SMG4016-16W: GSM:900/1800MHz UMTS:900/2100MHz

SMG4016-16WA: GSM:850/900/1800/1900MHz

UMTS:850/1900MHz

SMG40032-32G: GSM:850/900/1800/1900MHZ

SMG4032-32C: CDMA:800MHz SMG4032-32W: GSM:900/1800MHz UMTS:900/2100MHz

SMG4032-32WA: GSM:850/900/1800/1900MHz

UMTS:850/1900MHz

Dimensions

440×44×200mm

Weight

Net: 3.5kg

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

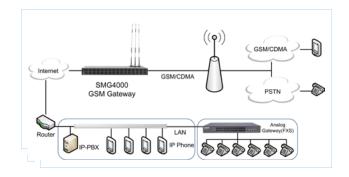
8kHz

Wireless Feature

Frequency band:

GSM: 850/900/1800/1900MHz 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.

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