High Performance 4-Port GSM Gateway

VoiceFinder AP-GS1004

Product Highlights

- **Powerful RISC microprocessor and DSP**
- **One(1) 10/100 Mbps Fast Ethernet interfaces**
- **Four(4) GSM Module (Antenna, SIM cards) Interface**
- **One(1) Antenna Interface , internal 4channel Antenna Combiner**
- **Four(4) FXS Voice Interface (Model B)**
- **Front panel LEDs that allow you to check the GSM, VoIP and LAN ports in real-time**
- **VoIP Signaling stacks supporting SIP and H.323 concurrently**
- **Multi-protocol routing for LAN and WAN access**
- **Voice Processing**
  - **VAD, DTMF,CNG,G.168, T.38 G3 Fax Relay**
  - **Voice Compression Algorithms: G.723, 729A, G.726, and 711**
- **SNMP MIB V2 for network administration**
- **Smart, easy Web-based management**
- **Enterprise VoIP Plug & Play Management System (VPMS) management**
- **Standard & extended access list for security**
- **Essential scalability features such as DHCP server & relay, NAT/PAT, IEEE transparent bridging, and debugging/ diagnostics**
- **Remote firmware upgrade using FTP & TFTP**
- **Cisco-style Command Line Interface (CLI) for expert settings**
- **Power On/Off switches for reliability**
- **Scalability, authenticity, and reliability ensured due to the installed APOS internetworking software**

AP-GS1004 4-Port GSM Gateway

VoiceFinder AP-GS1004 four(4)-channel GSM Gateway provides high-performance Analog or IP to GSM gateway solution for small enterprise, and other public offices. This product uses the state-of-art technology voice compressed algorithm and unique QoS algorithm of AddPac to maintain the maximum voice quality under fast internet line and slow internet line as well. This product is designed based on high performance RISC CPU + DSP structure; supports upgraded speed, the best quality product, offers various user-friendly functions, manufactured at low cost and this product gives high performance for its price.

AddPac AP-GS1004 is a device that can support both GSM gateway service (FXS to GSM or Internet to GSM) and VoIP gateway service (FXS to Internet) simultaneously. It also supports SIP, H.323 Multiple VoIP signaling protocol, various voice codec support(G.711, G.726, G.729, G723.1), four(4) channel GSM interface (one(1) antenna, SIM cards), one(1) fast ethernet ports, four(4) FXS interface ports, 1-port RS232C console and state-of-art technologies and services. VoiceFinder AP-GS1004 GSM VoIP Gateway supports one(1) 10/100 Base-T fast Ethernet Interface ports and provides stabilized leased line environment, ADSL environment, cable modem environment, fixed IP Address, supports all flow IP environment so that it can be selected in accordance with user environments. So it supports the GSM Gateway solution for SOHO in economical and effective way under fast internet access environment.

Designed on programmable high performance RISC Integrated DSP Technology, AP-GS1004 is capable of adopting new capabilities and improvement by downloading firmware from website or with its auto-upgrade option as the customers' needs grow. Moreover, operators can download the latest protocol or service improvements as well as update firmware by checking the version and activating the auto-upgrade via AP-NMS (Network Management System) or AP-VPMS(VoIP Plug &Play Management System) system of AddPac Technologies.

AP-GS1004 Applications
- **GSM gateways for SOHO**
- **FXS to GSM Interworking Service**
- IP to GSM Interworking Service

Hardware Specification
- RISC Microprocessor (CPU) + Voice DSP Processor
- Memory
  - System memory 4Mbyte Flash Memory
  - Main memory   32Mbyte SDRAM
- GSM Interface
  - Four(4) Channel GSM Module
  - One(1) Antenna Interface
  - Four(4) SIM Card Interface
- PSTN Interface
  - Four(4) FXS Interface(RJ11)
- Ethernet Interface
  - 10/100Mbps   1-port Ethernet (RJ45)
- Console Port
  - RS-232C   1-port Console (RJ45)

Power & Operational environment
- Power Supply   VAC   110~220V, 50/60Hz, 12V 3.4A External Power Adaptor
- Temperature   0°C ~+45°C (operating)
- Temperature -40°C ~+85°C (storage)
- Humidity   5%~95%

Dimensions
- H x W x D : 44mm x 265mm x 165mm
- Weight : 0.78 (Kg)

IP Routing Protocol
- Static and IEEE802.1Q VLAN Routing

WAN Protocol
- Broadband IP Network
- PPPoE
- Standard Compliant WAN Network Protocol

GSM Service
- GSM two-stage dialing
- GSM Module Management : PIN, IMSI, Power, (No) Shutdown Setting, Up/Down Speed Display, Current Power Level Display
- GSM Inbound call black list & white list
- VoIP Inbound call black list and White List
- LCR (Least Cost Routing)-GSM Traffic Metering
- LCR (Least Cost Routing)-Scheduling
- LCR (Least Cost Routing)-Simulator
- GSM Messaging Service
- GSM SNMP : GSM Standard MIB
- Call Back Service at GSM Port Busy

Voice over IP Service
- H.323, SIP Dual Concurrent VoIP Signaling Protocol
- VAD, DTMF, CNG, G.168, T.38 FAX Relay
- Voice Codec : G.723, G.729, G.726. G.711, etc
- High Level VoIP Signaling Debugging Features
- Polarity Inversion Feature
- Various VoIP Features
- Interoperable with Diverse VoIP Gateways
- Interoperable with Diverse VoIP Gatekeeper, SIP Proxy, MGC

Operation & Management
- Performance Analyzing (Process, CPU, Interface)
- Configuration Backup and Restore for APOS Management
- Debugging and Diagnosis Features
- System Booting/Rebooting through Watch Dog
- Data Logging Features
- IP Traffic Statistics through Accounting
- Debugging/Diagnostic

Network Management
- Standard SNMP Agent (MIB v2) Support
- Console, Telnet, Web Based Management
- Remote Download via FTP/TFTP
- Remote Firmware Upgrade using FTP/TFTP

Traffic QoS Control
- Traffic QoS Control Feature For Services
- Voice, Data Prioritizing Control
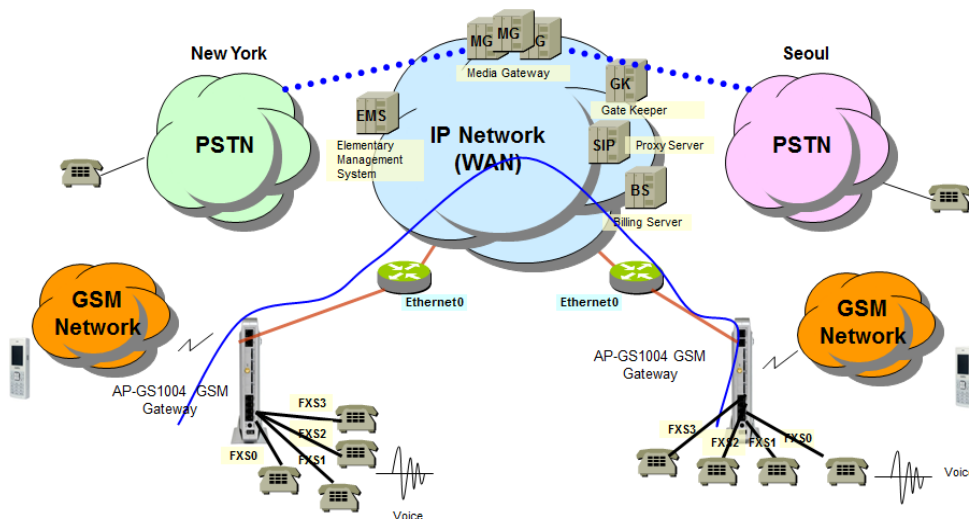- Various QoS Algorithm Support

Security Feature
- IP Packet Filtering / Access List
- Access Control and Data Protections
- Enable/Disable for Specific Protocols
- Multi-level User Account Management
- Auto-disconnect for Telnet/Console Sessions
- PPP User Authentication Support
- Password Authentication Protocol (PAP)
- Challenge Handshake Authentication Protocol (CHAP)

Other Features
- DHCP Server and Relay
- Network Address Translation (NAT)
- Port Address Translation (PAT)
- Transparent Bridging (IEEE Standard)
  - Spanning Tree Bridging Protocol
  - Concurrent Routing and Bridging
- NTP (Network Time Protocol)
- Cisco Style Command Line Interface
- Standard Compliant Network Protocol
- AddPac Proprietary IP Sharing
- MAC Address Filtering
- DNS Proxy

Network Configuration

Ordering Information

AP-GS1004:   Standard Configuration
- One(1) Fast Ethernet Port
- RISC CPU + DSP
- 4-Port GSM Interface (One Antenna, 4 SIM cards)
- Power ON/OFF Switch
- External Power Adaptor

VoIP Interface

Model A: - None

Model B   - 4-Port FXS Interface

- CAB-LAN   Ethernet Cable
- CAB-CON   RS-232C Console Cable
- CAB-ANT   Antenna Cable