AP-GSS1000
128Ch GSM SIM Server
High Performance GSM SIM Server Solution

AddPac Technology
2014, Sales and Marketing

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Product Overview
AP-GSS1000 GSM SIM Server

- Quad(4) Module Slots for 32ch SIM Bank Module
  (Up to 32x4=128ch SIM Slot, CPU Module)
- High Performance RISC Microprocessor Architecture
- Remote SIM solution for Centralized Management
- Hot-Swap Service for SIM Bank Module
- Powerful Real-time Response Service using Embedded RTOS
- Powerful Network Protocols (PPPoE, DHCP, Static Routing, etc)
- Two(2)10/100Mbps Fast Ethernet
- One(1) RS-232C Port for Command Line Interface
- Firmware Upgradeable Architecture
- Embedded Smart Web Manager for GSM SIM Server
- High Density and Compact Size Design
- Internal Power Supply
Product Highlights
AP-GSS1000 GSM SIM Server

- Powerful GSM SIM Server
- Up to 128ch SIM Server
- Rack Mountable Chassis with SIM Bank Module
- Quad(4) Module Slots for SIM Bank Module, 32ch SIM Bank Module, Hot-Swap, Port LED
- Centralized Remote SIM solution
- High Performance RISC CPU
- Broadband IP Networking with Two(2) 10/100Mbps Fast Ethernet
- APOS™ Technology Firmware Upgradeable Architecture
- Smart Web based Management
- Powerful Network Protocol Support
- Advanced SIM Server Mechanism
- Cascading Architecture

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APOS Technology
AP-GSS1000 GSM SIM Server

Multimedia Conferencing, and more... Our Customer Application

Video  Audio  Voice  Data

EMS  OSD

APOS Internetworking Technology
AddPac GSM SIM Server Hardware Platform

Broadband IP Networking

• APOS : AddPac Internetworking Operating System
• OSD : On- Screen Display
• EMS : Element Management System

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Hardware Specification
AP-GSS1000 GSM SIM Server

- RISC Microprocessor Computing Power
- Quad(4) SIM Bank Module Slots
- 32ch GSM SIM Slot Module (AP-N1-SIM32)
  - 32ch SIM Card Slot
  - SIM Slot Status Port LED
  - Hot-Swap Button
- Network Interface
  - Two(2) 10/100Mbps Fast Ethernet (RJ45)
- RS232C Console Interface for CLI
- Run LED, LAN LED, Port LEDs
- Internal Power Supply
## AP-GSS1000 GSM SIM Server

<table>
<thead>
<tr>
<th></th>
<th>Basic Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voice Interface</td>
<td>Quad(4) Module Slots for AP-N1-SIM32 GSM SIM Slot Module</td>
</tr>
<tr>
<td></td>
<td>AP-N1-SIM32 : 32channel GSM SIM Slot Module, Hot-Swap, Port Status LED</td>
</tr>
<tr>
<td>Ethernet Interface</td>
<td>2-Ports 10/100Mbps Fast Ethernet Interface(RJ-45)</td>
</tr>
<tr>
<td>Flash Memory</td>
<td>512Mbyte NAND Flash Memory</td>
</tr>
<tr>
<td>Base Memory</td>
<td>128Mbyte High-speed DDR2</td>
</tr>
<tr>
<td>Power Requirement</td>
<td>Power Supply / VAC 110~220V, 50/60Hz, 5V 8A, Power Supply</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>0°C ~ 45°C (32 °F ~ 122°F)</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-40°C ~ 85°C (-40°C ~ 185°F)</td>
</tr>
<tr>
<td>Relative Humidity</td>
<td>5% ~ 95% (Non-condensing)</td>
</tr>
<tr>
<td>Dimensions</td>
<td>H x W x D (55mm x 440mm x 313mm)</td>
</tr>
<tr>
<td>Weight(kg)</td>
<td>4.7kg</td>
</tr>
</tbody>
</table>

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Hardware Specification
AP-GSS1000 GSM SIM Server

Front Side View

- LAN0 Port
- LAN1 Port
- Console Port
- Power Inlet (110~220V)
- Power Switch

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Back Side View

- 32ch SIM Slot Module
- Hot-Swap Button
SIM Bank Module Specification

AP-GSS1000 GSM SIM Server

SIM Bank Module

AP-N1-SIM32  32ch GSM SIM Slot Module

SIM Status LED: Dual Color LED
Hot-Swap Button
SIM Bank Module Specification
AP-GSS1000 GSM SIM Server

GSM SIM Server Service Diagram

32ch x 4Slot = 128ch Service Diagram

AP-N1-SIM32
FPGA
Remote SIM
32ch SIM Card Module

AP-N1-SIM32
FPGA

RISC CPU
Memory
MAC RJ45

GSM Gateway
AP-GS916

Internet

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Network Protocols

AP-GSS1000 GSM SIM Server

Basic Network Protocols
- ARP, IPv4, TCP, UDP, ICMP, SCTP, IGMP, MLD

Routing Protocol
- IPv4 : Static

Service Protocol
- FTP, Telnet, TFTP, DHCP Server/Relay, SNMP Server
- CDP (Cisco Discovery Protocol)
- DNS Resolver, DDNS(nsupdate)
- Bridge
- Syslog

IPv4 Address Configuration
- Fixed (Static)
- DHCP
- PPPoE

Miscellaneous
- Cisco Style CLI
- Standard & Extended IPv4 Access List
- Multi-level User Account Management
- IP accounting
- STUN Client

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Network Management
AP-GSS1000 GSM SIM Server

- SNMP
  - Standard Simple Network Management Protocol (SNMP) Agent support
  - MIB v1 and v2 Support
- Web-based Management
  - Smart Web Manager
- Watch-dog Function
  - Hardware, Software watch-dog services
- Remote Management
  - Telnet
  - Rlogin
- Auto Upgrade Service
  - HTTP server based APOS image and configuration file auto-upgrade support
- Batch Job Function
  - Text based script downloading

- Interoperable with Smart NMS Service
  - AddPac Smart Network Management System
Security Management
AP-GSS1000 GSM SIM Server

- IP packet filtering
- IP access list
- User authentication function
  - Password Authentication Protocol (PAP)
  - Challenge Handshake Authentication Protocol (CHAP)
- Enable/Disable specific protocols
- Auto-square connect of Telnet session
- Account Management function for multi-level user
- SNMP/TELNET/FTP/HTTP/TFTP port assignment function
- SNMP/TELNET/FTP access list management
- Boot mode security checking function
Smart Web Manager for SIM Server
AP-GSS1000 GSM SIM Server

Welcome to AddPac SIM Server
User: Admin
Last login on April 17 11:12:01M
(172.16.3.3)

Unread Alarm Message 3
- 2012-04-12 05:00pm admin login failed.
- 2012-04-12 05:00pm DDoS attack from...
- 2012-04-12 09:00pm DDoS attack from...

SIM Server Array

<table>
<thead>
<tr>
<th>SIM Server</th>
<th>Total</th>
<th>Inserted</th>
<th>Registered</th>
<th>Unregistered</th>
<th>Blocked</th>
</tr>
</thead>
<tbody>
<tr>
<td>AP-GSS5000</td>
<td>256</td>
<td>256</td>
<td>21</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>AP-GSS5000</td>
<td>256</td>
<td>256</td>
<td>21</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>AP-GSS5000</td>
<td>256</td>
<td>256</td>
<td>21</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

SIM Client

<table>
<thead>
<tr>
<th>Gateway</th>
<th>Configured</th>
<th>Registered</th>
<th>Unregistered</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>10</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ports</th>
<th>Total</th>
<th>In Service</th>
<th>Out of service</th>
</tr>
</thead>
<tbody>
<tr>
<td>512</td>
<td>500</td>
<td>12</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gateway</th>
<th>Total</th>
<th>OK</th>
<th>Not OK</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1</td>
<td>32</td>
<td>30</td>
<td>2</td>
</tr>
<tr>
<td>#2</td>
<td>32</td>
<td>30</td>
<td>2</td>
</tr>
<tr>
<td>#3</td>
<td>32</td>
<td>30</td>
<td>2</td>
</tr>
<tr>
<td>#4</td>
<td>32</td>
<td>30</td>
<td>2</td>
</tr>
<tr>
<td>#5</td>
<td>32</td>
<td>30</td>
<td>2</td>
</tr>
<tr>
<td>#6</td>
<td>32</td>
<td>30</td>
<td>2</td>
</tr>
<tr>
<td>#7</td>
<td>32</td>
<td>30</td>
<td>2</td>
</tr>
<tr>
<td>#8</td>
<td>32</td>
<td>30</td>
<td>2</td>
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</table>

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Ordering Information

- AP-GSS1000 GSM SIM Server Hardware
  - AP-GSS1000 GSM Gateway Main Body
  - Quad(4) Module Slots
  - High-end Programmable RISC Microprocessor
  - 2-port 10/100Mbps Fast Ethernet(RJ45)
  - 1-Port RS232C Console Interface(RJ45)
  - Option Module : AP-N1-SIM32 GSM SIM Bank Module
    - Including Network Cable, Antenna, etc.

- Built-in APOS Internetworking Software for AP-GSS1000
- Including 1 Year Hardware Warranty
- Product Documents
  - Install and Operation Guide (PDF)

- Pricing
  - AddPac Technology Regional Sales Manager
  - Authorized Sales and Marketing Representatives
  - Please Contact www.addpac.com
Thank you!

AddPac Technology Co., Ltd.
Sales and Marketing

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