

Bluetooth VoIP Gateway Solution for Non-RUIM Type CDMA Network



AddPac

AddPac Technology

Sales and Marketing

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Bluetooth VoIP Gateway Service Overview

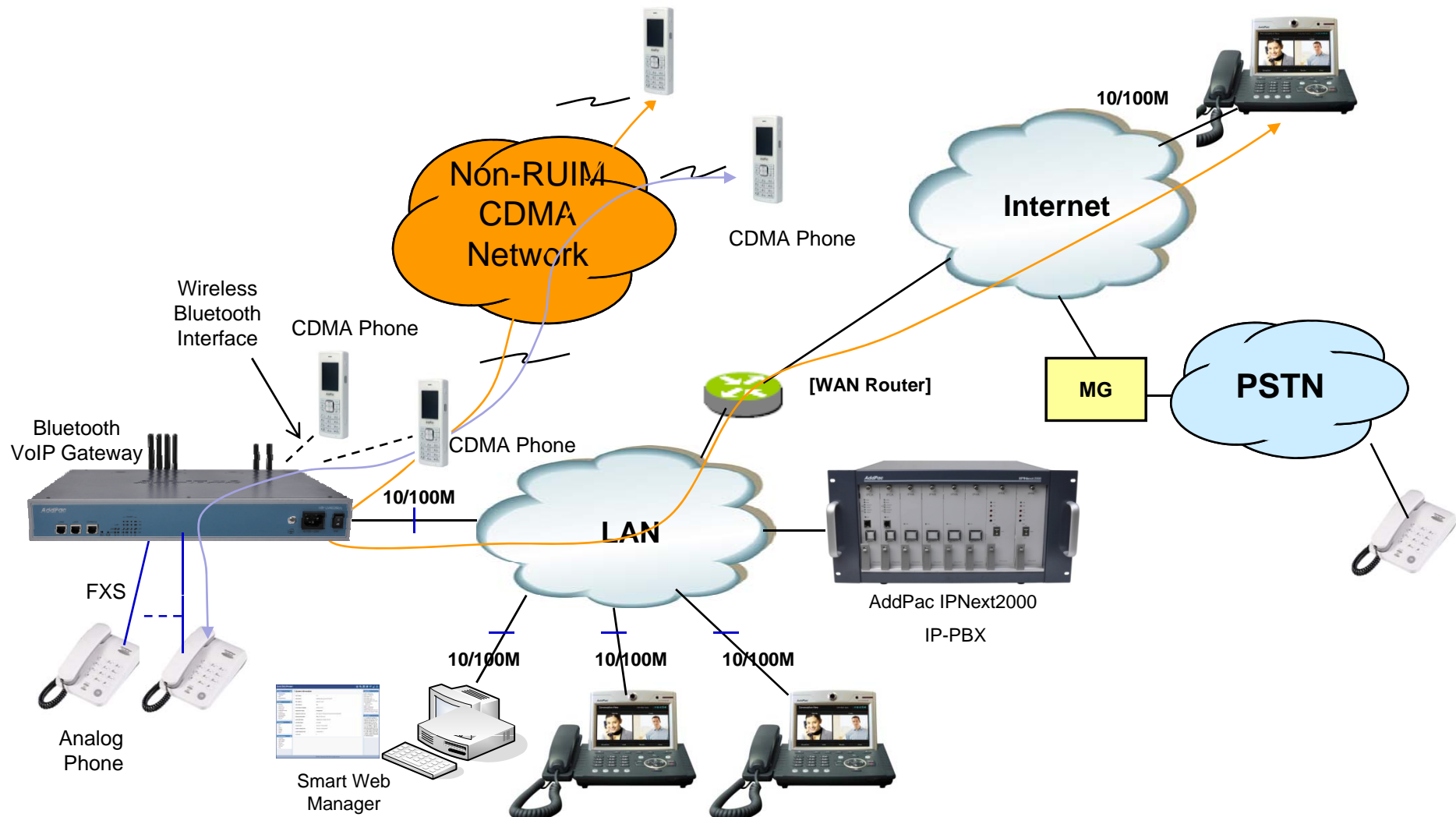
AddPac Bluetooth VoIP Gateway are a device that can support both mobile station gateway service (FXS->Bluetooth->cellular phone->2G or or 3G, Internet->Bluetooth->cellular phone->2G or 3G) and VoIP gateway service (FXS->Internet) simultaneously.

This Bluetooth VoIP Gateway provides high-performance Analog or IP to Mobile Station(cellular phone) gateway solution including IP-routing services for call termination service provider, and medium size enterprise. 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.

Bluetooth VoIP gateway combining IP-PBX is now suggesting a new model for a main voice communication solution. In order to be a part of advanced VoIP communications naturally in the future, making an excellent choice of choosing Bluetooth VoIP gateway is essential.

In some mobile operator, they use unique Non-RUIM CDMA, 3G or LTE frequency band often. In this case, this bluetooth technology based VoIP gateway can be another choice instead of 3G or 4G mobile chip built-in VoIP gateway system.

Bluetooth VoIP Gateway Service Diagram (Non-RUIM Type CDMA Network)






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Bluetooth VoIP Gateway Series

Bluetooth VoIP Gateway Comparison Table

Model	AP-LMS1001		AP-LMS1500	AP-LMS2500
				
Available Modules	Type	VoIP	AP-N1-LMS4 (4ch bluetooth module) AP-N1-3G4 AP-N1-FXS8 AP-N1-FXO8 AP-N1-FXS4O4	AP-N1-LMS4 (4ch bluetooth module) AP-N1-3G4 AP-N1-FXS8 AP-N1-FXO8 AP-N1-FXS4O4 AP-N1-E1
	A	None		
	B	1FXS		
	C	1FXO		
Bluetooth Channel	1 Channel		Up to 8 Ch.	Up to 16 Ch.
Module Slot	N/A		Two(2) Module Slots for 4ch Bluetooth module	Four(4) Module Slots for 4ch Bluetooth module
LAN Port	2		2	2
Console	N/A		1	1
Power	External Power Adaptor		Single PSU	Single PSU



AP-LMS1001

1-Port Bluetooth VoIP Gateway

Main Features

AP-LMS1001 1-Port Bluetooth VoIP Gateway

- Analog Interface (FXS)/VoIP Interface(LAN) Both Support
- Mobile Phone Interworking Solution via Bluetooth Technology
- H.323/SIP Dual Concurrent Stack Embedded
- High Performance RISC & Programmable DSP Architecture
- Two(2) 10/100Mbps Fast Ethernet (IP Share, etc)
- High Performance LAN-to-LAN Routing Capability
- G.711/G.726/G.723/G.729, T.38 Fax , VAD, etc
- Powerful Network Protocols (PPPoE, DHCP, Static Routing, etc)
- Firmware Upgradeable Architecture
- Smart Web Manager for LMS Gateway
- Smart NMS for Large Scale Deployment
- Advanced Voice QoS Mechanism
- Light and Compact Design with External Power Supply

Hardware Specification

AP-LMS1001 1-Port Bluetooth VoIP Gateway

RISC
CPU

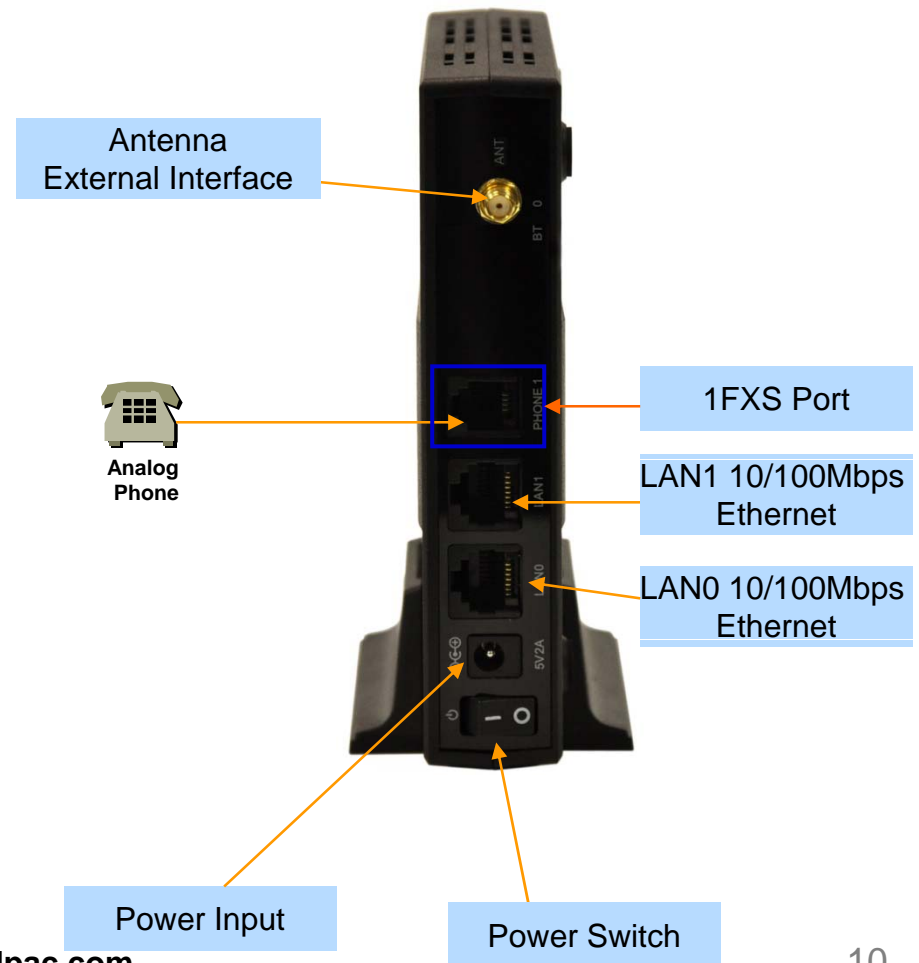
High-end
DSP

- RISC Microprocessor Computing Power
- 1-Port Bluetooth VoIP Gateway
- 1-Port Antenna Interface
- VoIP Gateway Interface
 - AP-LMS1001 Model A: Basic Configuration
 - AP-LMS1001 Model B: One(1) FXS Port
 - AP-LMS1001 Model C: One(1) FXO Port
- Network Interface for VoIP Direct Interface
 - Two(2) 10/100Mbps Fast Ethernet (RJ45)
- Run LED, LAN LED, Port LEDs
- External Power Supply

Hardware Specification

AP-LMS1001 1-Port Bluetooth VoIP Gateway

Network interface Configurations





AP-LMS1500 Multi-Port(8ch) Bluetooth VoIP Gateway

Main Features

AP-LMS1500 Multi-Port Bluetooth VoIP Gateway

- Two(2) Module Slots for 4-Port Bluetooth Module, 3G WCDMA, 8FXS/8FXO Analog Interface (Up to 16-Port Bluetooth Channel)
- Analog Interface (FXS)/VoIP Interface(LAN) Both Support
- Mobile Phone Interworking Solution via Bluetooth Technology
- H.323/SIP Dual Concurrent Stack Embedded
- High Performance RISC & Programmable DSP Architecture
- Two(2) 10/100Mbps Fast Ethernet (IP Share, etc)
- High Performance LAN-to-LAN Routing Capability
- G.711/G.726/G.723/G.729, T.38 Fax , VAD, etc
- Powerful Network Protocols (PPPoE, DHCP, Static Routing, etc)
- Firmware Upgradeable Architecture
- Smart Web Manager for LMS VoIP Gateway
- Smart NMS for Large Scale Deployment
- Advanced Voice QoS Mechanism
- Light and Compact Design with Internal Power Supply

Hardware Specification

AP-LMS1500 Multi-Port Bluetooth VoIP Gateway

RISC
CPU

High-end
DSP

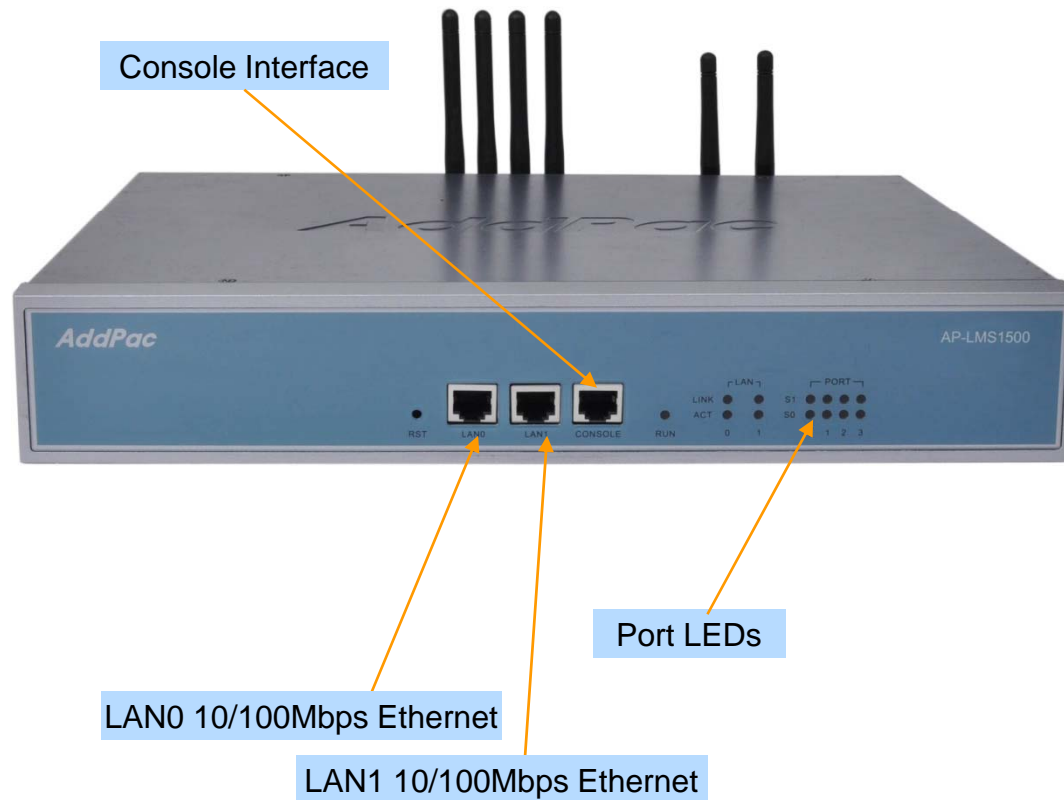
- RISC Microprocessor Computing Power
- Two(2) Module Slot for Bluetooth, 3G, Analog Interface
- 4-Port Bluetooth Module(AP-N1-LMS4)
 - Four(4) Bluetooth Antenna Interface
 - Hot-Swap
- VoIP Interface Module
 - 8-Port FXS Module (AP-N1-FXS8)
 - 8-Port FXO Module (AP-N1-FXO8)
 - Hot-Swap
- Network Interface
 - Two(2) 10/100Mbps Fast Ethernet (RJ45)
- RS232C Console Interface for CLI
- Run LED, LAN LED, Port LEDs
- Internal Power Supply



Hardware Specification

AP-LMS1500 Multi-Port Bluetooth VoIP Gateway

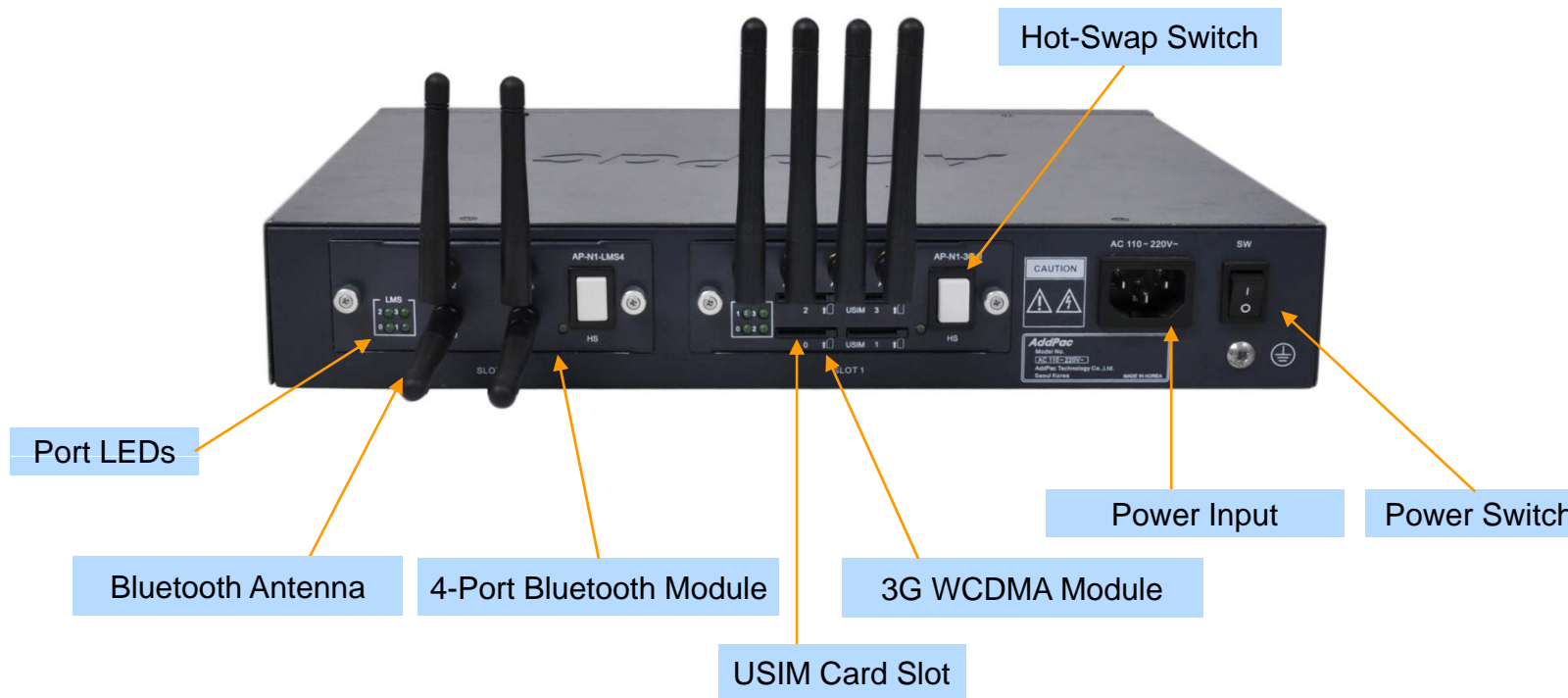
Front Side View



Hardware Specification

AP-LMS1500 Multi-Port Bluetooth VoIP Gateway

Back Side View (8-Port Bluetooth + 8-Port 3G WCDMA)



Hardware Specification

AP-LMS1500 Multi-Port Bluetooth VoIP Gateway

4-Port Bluetooth Module (AP-N1-LMS4)



Bluetooth
Port LEDs

Bluetooth Antenna

Hot-Swap Button



AP-LMS2500 Multi-Port(16ch) Bluetooth VoIP Gateway

Main Features

AP-LMS2500 Multi-Port Bluetooth VoIP Gateway

- Four(4) Module Slots for 4-Port Bluetooth Module, 3G WCDMA, 8FXS/8FXO Analog Interface (Up to 16-Port Bluetooth Channel)
- Analog Interface (FXS)/VoIP Interface(LAN) Both Support
- Mobile Phone Interworking Solution via Bluetooth Technology
- H.323/SIP Dual Concurrent Stack Embedded
- High Performance RISC & Programmable DSP Architecture
- Two(2) 10/100Mbps Fast Ethernet (IP Share, etc)
- High Performance LAN-to-LAN Routing Capability
- G.711/G.726/G.723/G.729, T.38 Fax , VAD, etc
- Powerful Network Protocols (PPPoE, DHCP, Static Routing, etc)
- Firmware Upgradeable Architecture
- Smart Web Manager for LMS VoIP Gateway
- Smart NMS for Large Scale Deployment
- Advanced Voice QoS Mechanism

Hardware Specification

AP-LMS2500 Multi-Port Bluetooth VoIP Gateway

RISC
CPU

High-end
DSP

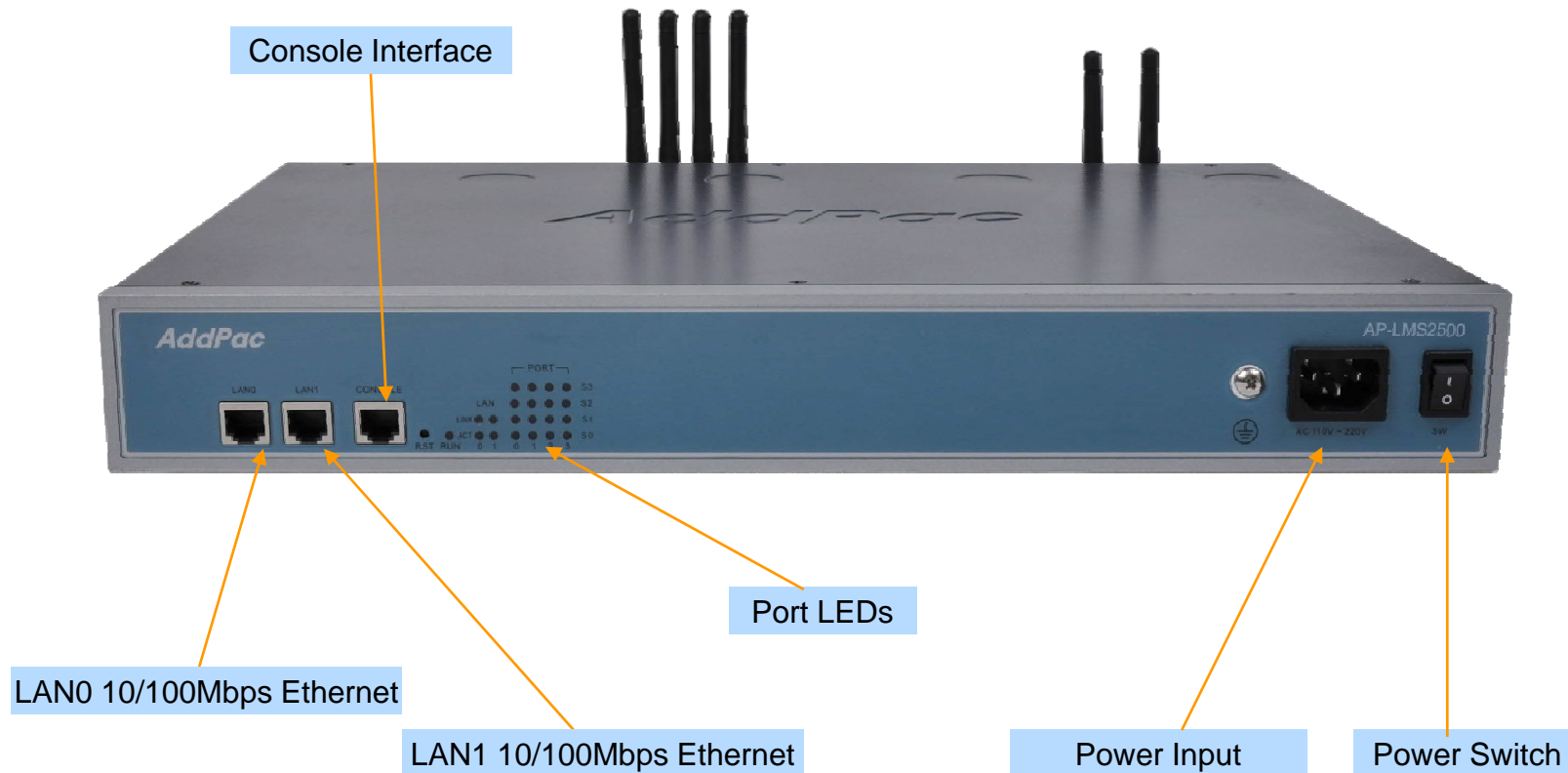
- RISC Microprocessor Computing Power
- Four(4) Module Slot for Bluetooth, 3G, Analog Interface
- 4-Port Bluetooth Module(AP-N1-LMS4)
 - Four(4) Bluetooth Antenna Interface
 - Hot-Swap
- VoIP Interface Module
 - 8-Port FXS Module (AP-N1-FXS8)
 - 8-Port FXO Module (AP-N1-FXO8)
 - Digital E1/T1 Module (AP-N1-E1)
 - Hot-Swap
- Network Interface
 - Two(2) 10/100Mbps Fast Ethernet (RJ45)
- RS232C Console Interface for CLI
- Run LED, LAN LED, Port LEDs
- Internal Power Supply



Hardware Specification

AP-LMS2500 Multi-Port Bluetooth VoIP Gateway

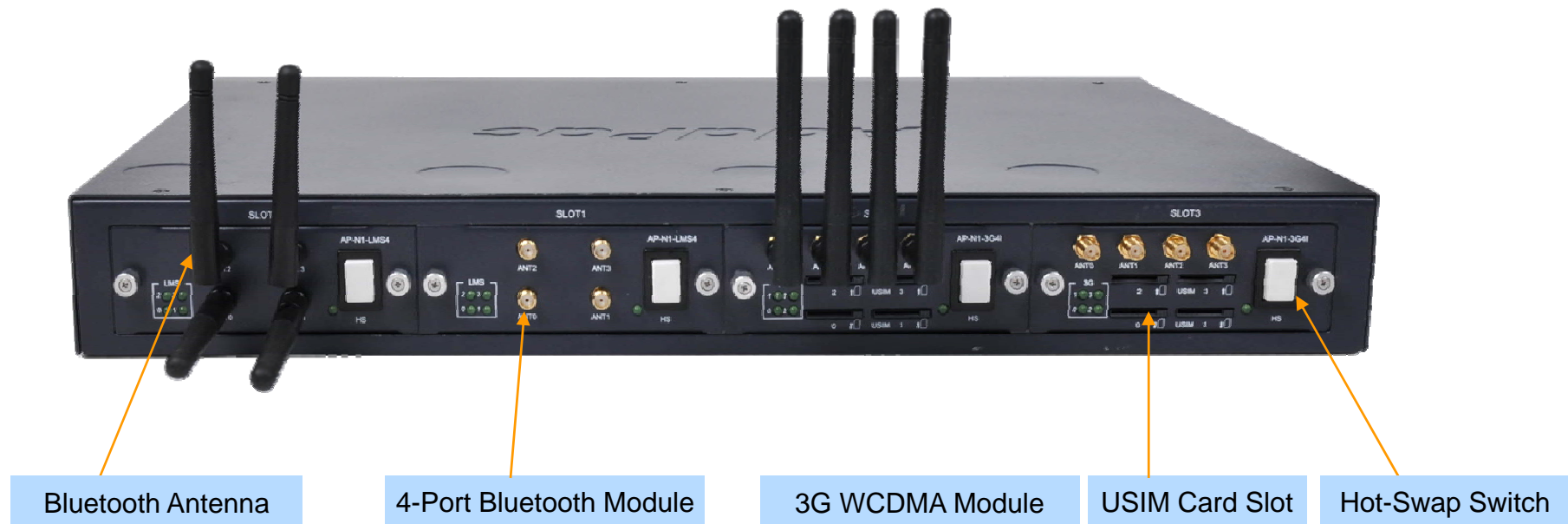
Front Side View



Hardware Specification

AP-LMS2500 Multi-Port Bluetooth VoIP Gateway

Back Side View (8-Port Bluetooth + 8-Port 3G WCDMA)



Hardware Specification

AP-LMS1500 Multi-Port Bluetooth VoIP Gateway

4-Port Bluetooth Module (AP-N1-LMS4)



Bluetooth
Port LEDs

Bluetooth Antenna

Hot-Swap Button



Smart Web Manager for Bluetooth VoIP Gateway Series

Smart Web Manager : Main Page Layout

Main Menu
For easy system setup, provide the various menu and category

Tool Bar
Provide frequently used tools like as System Update, Configuration Backup, Initialization, Restart, Telnet

Information
Display the current system version and status summary

Workspace
Workspace for detailed action

Description
Display the help message if you move mouse over main menu

The screenshot shows the Smart Web Manager interface with the following components:

- Main Menu (Left):** A vertical sidebar with categories: System (Network Setup, Language, NTP, Backup/Restore), Basic (Protocol, Server SIP, Server H.323, Tel Number, FXS/FXO/E1 Group, E1 Trunk, DTMF/CODEC, Dial Plan/Prefix, Static Route, Hot Line), Advanced (Gain, Fax, Service, Filtering, Security, SNMP), and Miscellaneous (Call Status, System Status, Alarm Status, Call Log, System Log, Test Call, Ping).
- Tool Bar (Top Right):** A horizontal bar containing icons for system update, configuration backup, initialization, restart, and telnet.
- System Information (Center):** A table displaying system details:

HW Version	2.0
SW Version	ap1800k_web_g2_v8_47T.bin 8.47
MAC Address	0002.a511.2245
VoIP Protocol	SIP
Voice Interface Module	S(4)O(4) : E1(2)
Registration Status	Unregistered
Supported Codec List	g711alaw g711ulaw g7231r53 g7231r63 g726r32 g729
Network Information	Static 172.16.50.114
WAN LINK Status	100Mbps FULL Duplex Link UP
LAN LINK Status	Link Down
Current Time	Thu Oct 1 13:06:23 2009
System Startup Time	Thu Oct 1 12:56:46 2009
System Running Time	0 days 00:09:37
Total Calls	0
- Information (Right):** A box showing system details: AddPac Tehonology, Model: AP1800K_G2, HW Version: 2.0, SW Version: 8.47, Smart Web Version: 0.3, Smart Web Build: Oct 1 2009, Voice Interface S(4)O(4) : E1(2), Protocol: SIP, Status: Unregistered, CurrentCalls: 0 Call, Network: Static 172.16.50.114, Mac Address: 0002.a511.2245.
- Description (Right):** A box providing help text: WAN 포트에 대한 설정입니다. Static IP의 경우 고정 IP 주소로 사업자로부터 할당 받은 주소 정보를 입력합니다. DHCP와 PPPoE의 경우 유동 IP로 장비의 주소가 변경될 수 있습니다. DHCP 및 PPPoE는 사용자 환경에 맞도록 설정하십시오. MAC 주소 변경은 필요시 장비에 설정된 주소를 사용하지 않고 사용자가 설정한 주소를 사용하는 방안으로 반드시 필요한 경우에 한하여 사용하여야 합니다.

Smart Web Manager : SIP Server (Example)

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SIP (Session Initiation Protocol)

Use SIP Server Yes No

Primary SIP Server Server address (IP or Domain Name) and Port (default 5060)

Secondary SIP Server Server address (IP or Domain Name) and Port (default 5060)

Local Domain name (SIP userpart of authentication)

SIP Signaling Port (default 5060, between 1 to 65535)

Register Expiration (in seconds, default 60, between 10 to 86400)

Session Re-Fresh INVITE UPDATE

Session Expire Time (in seconds, default 1800, between 30 to 86400, 0 = disable)

Apply

SIP Server
Primary & Secondary server,
Local domain name,
SIP Signaling Port (**reboot necessary**)
Timer
* register expire
* session refresh
* session expire

Information
AddPac Technology
Model : GS1002_G2
H/W Version : 2.0
S/W Version : 8.00d
Smart Web Version : 0.4
Smart Web Build : Mar 24 2010
Voice Interface
G(2)S(2)
Protocol : SIP
Status : Unregistered
CurrentCalls : 0 Call
Network : Static 172.16.9.16
Mac Address : 0002.a400.0000
Unread Message:
P0:0(0)
P0:1(0)

Description
Configure the settings for SIP.
Contact your service provider
for the settings

Smart Web Manager : FXS Extension (Example)

Port Information
voice port type & physical port

Port	P0	P1	P2	P3
SLOT0	GSM	GSM	FXS	FXS

FXS Extension Configuration

Index	Port	Numbers	Preference	HuntStop	Select
0	0/2	1234	0	0	<input type="checkbox"/>

FXS Extension
Configure phone-number for using inter-office Preference (0 : highest)

Information
AddPac Technology
Model : GS1002_G2
H/W Version : 2.0
S/W Version : 8.00d
Smart Web Version : 0.4
Smart Web Build : Mar 24 2010
Voice Interface
G(2)S(2)
Protocol : SIP
Status : Unregistered
CurrentCalls: 0 Call
Network : Static 172.16.9.16
Mac Address: 0002.a400.0000
Unread Message:
P0:0(0)
P0:1(0)

Description
Set up for using FXS port to extension number (forwarding No)

Smart Web Manager : Call Status (Example)

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System

- Network Setup
- Language
- NAT
- DTMF

Call Status

Port Status (Analog)

Slot	Port	Port Group			
		0()	1()	2()	3()
SLOT 0	Status	I	I	I	I
	Select	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="button" value="Unblock"/> <input type="button" value="Block"/>				

Connection State : (Connected) (Disconnected || Blocked)

Call State : (Idle) (Ring || Dial) (Called) (Calling) (Blocked)

Call Status

Port	Direction	Established Time	Calling Number	Called Number	CODEC	Src/Dest. IP

Information

AddPac Technology
 Model : GS1002_G2
 H/W Version : 2.0
 S/W Version : 8.00d
 Smart Web Version : 0.4
 Smart Web Build : Mar 24 2010
 Voice Interface
 G(2)S(2)
 Protocol : SIP
 Status : Unregistered
 CurrentCalls : 0 Call
 Network : Static 172.16.9.16
 Mac Address : 0002.a400.0000
 Unread Message:
 P0:0(0)
 P0:1(0)

Description

Verify port status and retrieve the present call information

Miscellaneous

- Security
- SNMP
- WEB Callback
- GSM Callback
- Call Status**
- System Status
- Alarm Status
- GSM Status
- Call Log
- System Log
- Ping
- BTS Selection
- GSM BTS Info

Analog Port
 Real-time display about analog port status (occupation, call status). Provide a specific port blocking function

Active Call Status
 Real-time display about current active call status (calling party addr, called party addr. Codec, etc)



Thank you!

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