## AP2620 SIP VoIP Gateway + SIP Audio Broadcasting Terminal

High Performance SIP Audio Broadcasting Terminal





AddPac Technology

Sales and Marketing

www.addpac.com

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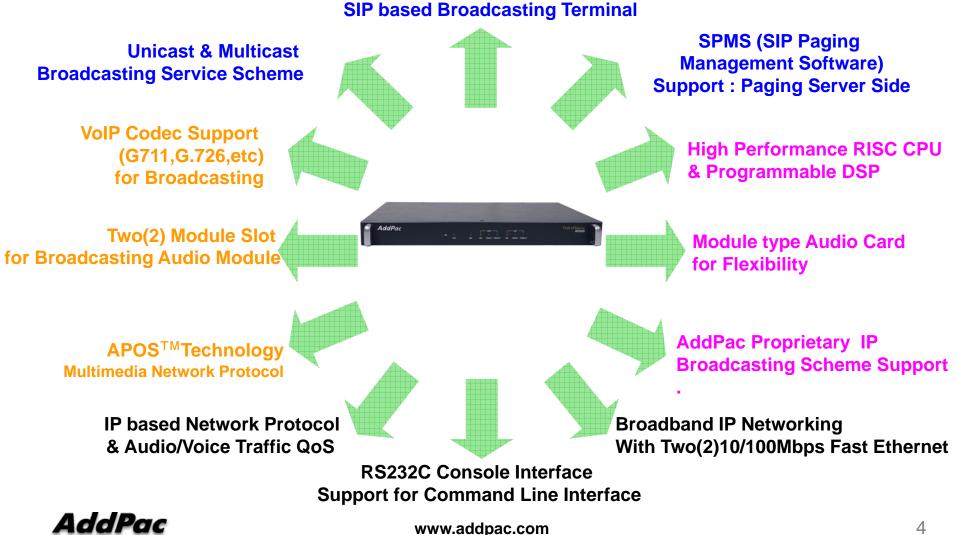
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### **Product** Overview

- High Performance VoIP Gateway Solution
- SIP Protocol based Audio Broadcasting Terminal Solution
- RTP (Real-time Transport Protocol) Support for Media Transmission
- IP based Audio Broadcasting Terminal Solution (AddPac Proprietary Protocol)
- Hardware Architecture for Audio Broadcasting Terminal Service
- Two(20 Module Slot for VoIP Gateway + Audio Encoding & Decoding Service
- Remote Broadcasting Service at terminal side
- VoIP Codec Support (G.711, G.726, etc)
- Unicast and Multicast Broadcasting Scheme
- SPMS (SIP Paging Management Software) Support (Paging Server Side)
- Various Audio Broadcasting Module Support
- Firmware Upgradeable Architecture
- Broadcasting Solution with Outstanding Network Service Capability



## **Product Highlights**



AP2620 SIP Audio Broadcasting Terminal

- RISC Microprocessor Computing Power
- High-end Programmable DSP Hardware Architecture
- Two(2) Module Slot for Audio Broadcasting Codec Module
- VoIP Audio Encoding/Decoding Service
- Two(2) 10/100Mbps Fast Ethernet Interface
- Option Module : AP-AUDIO2
  - Two(2) 3.5mm Audio Input/Output Interface
- Option Module : AP-AUD1S3
  - One(1) 3.5mm Audio Input/Output Interface
  - Three(3) FXS VoIP Interface



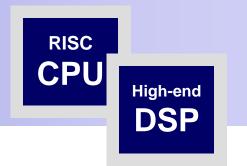
**RISC** 

CPU

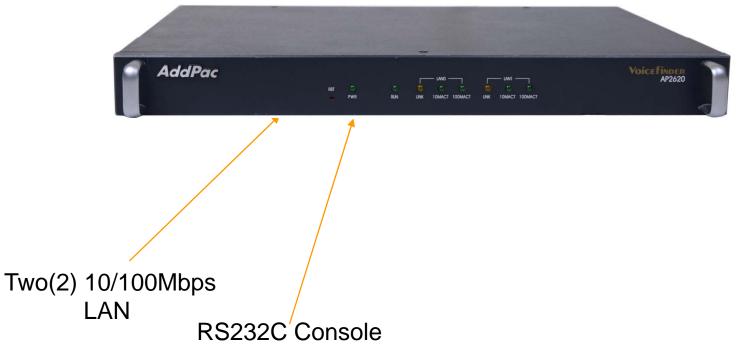
**High-end** 

DSP

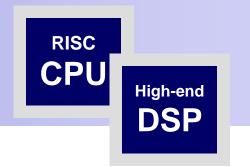
AP2620 SIP Audio Broadcasting Terminal



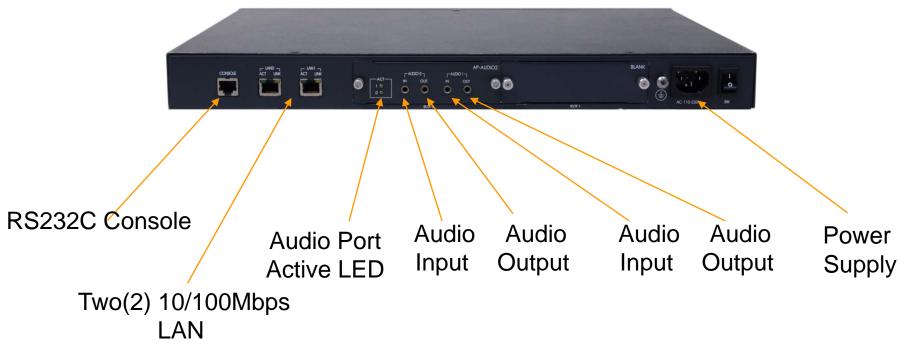
### AP2620 Front Side



AP2620 SIP Audio Broadcasting Terminal



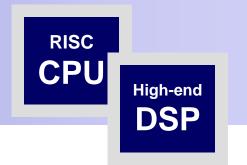
### AP2620 Back Side



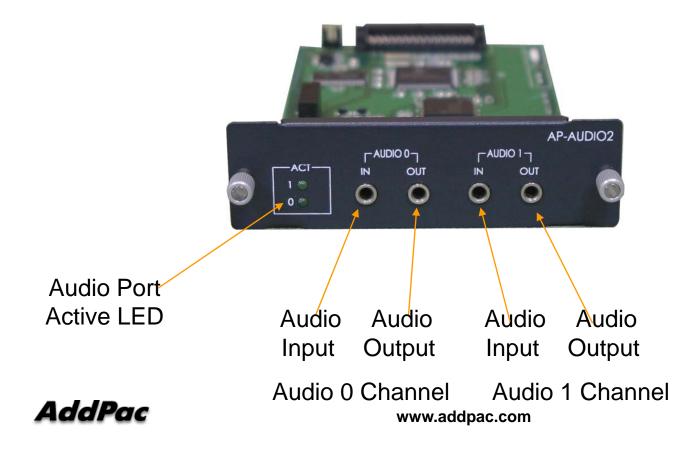


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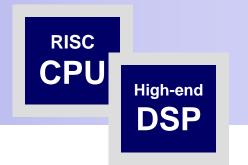
AP2620 SIP Audio Broadcasting Terminal



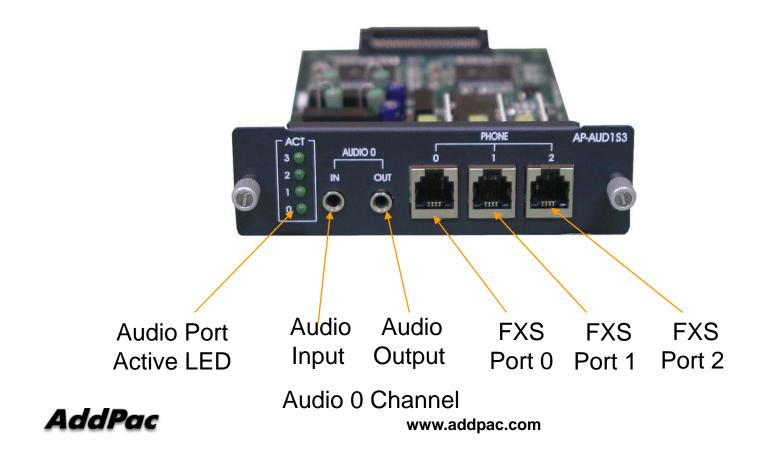
### AP-AUDIO2 Board



AP2620 SIP Audio Broadcasting Terminal



### AP-AUD1S3 Board



AP2620 SIP Audio Broadcasting Terminal



### **AP2620 Audio Module**

Audio Module Type	Audio Module Features				
AP-AUDIO2	Two(2)-Channel Audio In/Out Port				
	Audio Encoding/Decoding Service				
	Audio IN : MIC IN Audio OUT :Line OUT 3.5mm Stereo JACK				
	G.711, G.726, G.729A, G.723.1 Audio Codec				

AP2620 SIP Audio Broadcasting Terminal



### **AP2620 Audio Module**

Audio Module Type	Audio Module Features
AP-AUD1S3	One(1)-Channel Audio In/Out Port
	Audio Encoding/Decoding Service
	Audio IN : MIC IN Audio OUT :Line OUT 3.5mm Stereo JACK
	Three(3) FXS Port Interface (RJ11 x 3)
	G.711, G.726, G.729A, G.723.1 Audio Codec



### **AP-AUDIO2** Module

#### AP2620 SIP Audio Broadcasting Terminal





Headphone

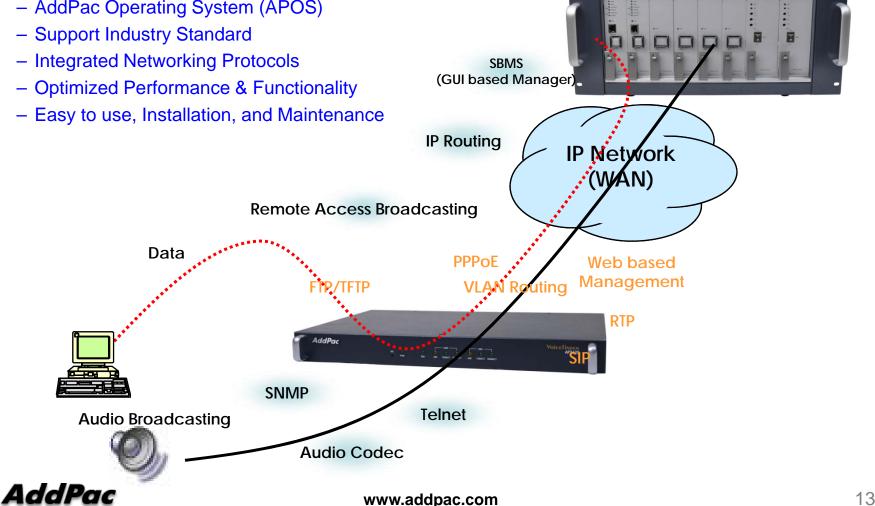


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#### APOS Internetworking Software

- AddPac Operating System (APOS)
- Support Industry Standard
- Integrated Networking Protocols
- Optimized Performance & Functionality
- Easy to use, Installation, and Maintenance



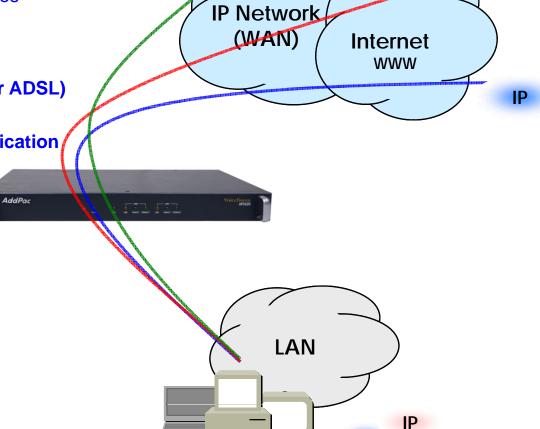
AP2620 SIP Audio Broadcasting Terminal

#### • IP Routing Protocols

- Multi-protocol Internetworking Services
- Static & Default IP routing

#### WAN Protocols

- Point-to-Point Protocol (PPPoE for ADSL)
- IEEE 802.3 Ethernet
- PPTP support for secure communication



IP

IP

AP2620 SIP Audio Broadcasting Terminal

#### Network Managements

- Standard SNMP Agent (MIB v2) Support
- Remote Management using Console, Telnet
- Web based Management using HTTP Server Interface

#### • Security Functions

- Standard & Extended IP Access List
- Enable/Disable for Specific Network Protocols
- Multi-level User Account Management
- Auto-disconnect for Telnet/Console Sessions
- PPP User Authentication Supports (PAP & CHAP)

#### • Operation & Managements

- System Performance Analysis for Process, CPU, Connection Interface
- Debugging, System Auditing, and Diagnostics Support
- System Booting and Auto-rebooting with Watchdog Feature
- System Managements with Data Logging
- IP Traffic Statistics with Accounting



AP2620 SIP Audio Broadcasting Terminal

#### Network Protocols

- DHCP Server & Relay Functions
- Network Address Translation (NAT) Function
- Port Address Translation (PAT) Function
- Transparent Bridging (IEEE Standard) Function
  - Spanning Tree Bridging Protocol Support
  - Remote Bridging Support
  - Concurrent Routing and Bridging Support
- Cisco Style Command Line Interface (CLI)
- Network time Protocol (NTP) Support

## **VoIP Service Features**

- SIP Protocol Service
  - Gateway-based / Endpoint-based registration support
  - Secondary proxy-server assignment function
  - SIP signaling port change function
  - SIP proxy server assignment according to the domain name
  - T.38 real-time fax relay support
  - DTMF relay support with RFC2833 / OPTION message
  - Re-INVITE support



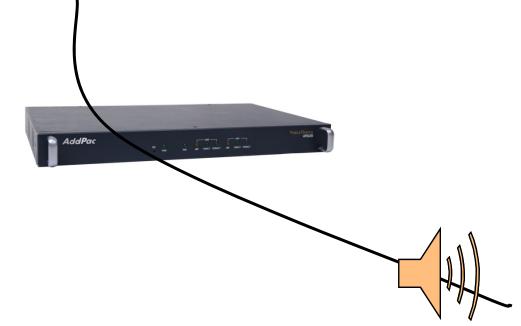
## **VoIP Service Features**

AP2620 SIP Audio Broadcasting Terminal

- Voice Codec
  - G.711 A-Law, G.711 U-Law
  - G.726 r16, G.726 r32
  - G.729A
  - G.723.1 r63, G.723.1 r53
  - VAD (Voice Activity Detection) function support
  - DTMF relay support (H.323, SIP, MGCP common) based on RFC2833

#### • RTP Protocols

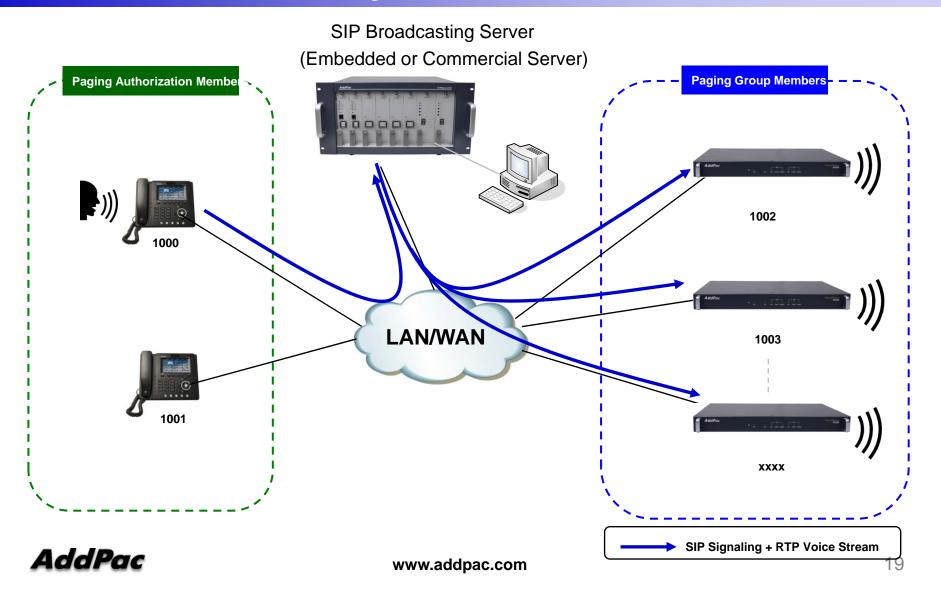
- Redundant RTP packet transmission in case of severe packet loss
- Dynamic jitter buffer management and RPT packet jitter and loss compensation with heuristic & DSP error concealment
- Static jitter buffer setting support
- Voice frame per RTP packet number control for each codec



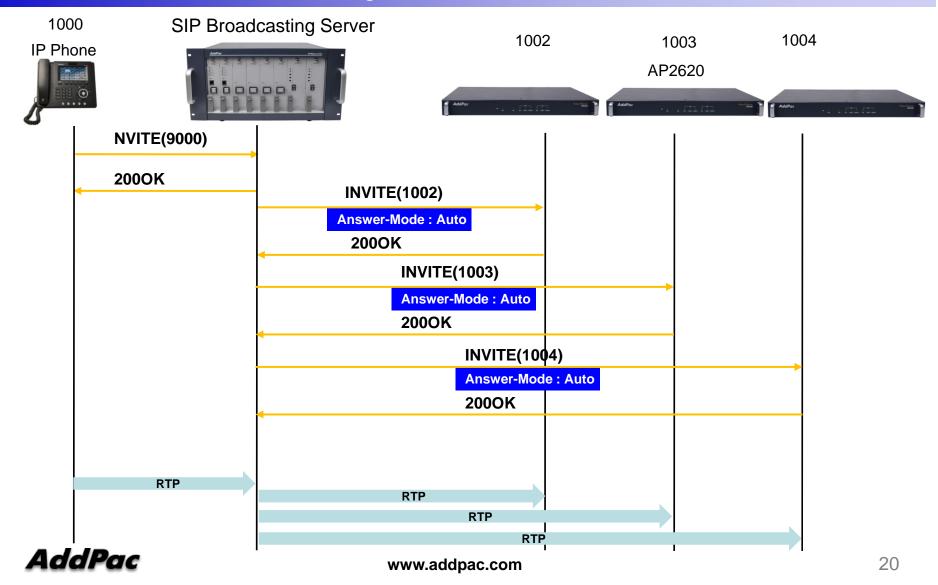


**IP Broadcasting** 

## SIP Broadcasting Network Diagram



## Paging Group Signaling Flow



### WSMM Configuration for Paging Group (WSMM : Web based Smart Multimedia Manager)



## Extension – Paging Group

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	6 🖉 👔	· · · · · ·	1005	🏝 User Extension	Linda L. wis	2015-07-28 12:40:12						
System Admin	7 🖉 🗊		1006	🏝 User Extension	George Gale	2015-07-28 12:40:17						
Servers	8 🎽 🖞		1007	å User Extension	Isa del Invin	2015-07-28 12:40:21						
	9 🎤 🗊		1008	a User Extension	Villiam Watson	2015-07-28 12:40:25						
Advanced	10 📝 🧃	· · · · ·	1009	🏝 User Extension	Sarah Scott	2015-07-28 12:40:30						
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## Paging Group Configuration

#### Smart Multimedia Manager Ŀ Extensions 🜃 Status 🛛 🔂 Add an Extension 🗶 📑 Paging Group Extensions Paging Extension Directory Add a Paging Group This is paging extension number to make the Partitions 🖌 Add 🛛 💥 Cancel Advanced Options paging by dialing digits. Routing Access Lists Terminal Profiles Extension 9000 (2~12 digits) Check Extension Extension number is valid. Description Terminals Name \* A paging group has members Trunks Paging Group of user extensions who will Play Announcement G.711U ~ Audio Codec receive broadcasting 6 announcement with auto PBX Services Announcement × 🌖 Closing Notification × 🌖 answering by speaker phone. Play beep at start Beep Sound 3 This is half-duplex one-way System Admin broadcasting. Only authorized \$ Play Announcement Repeat Count 1 rs can make a naging by dialing the paging extension. Servers ÷ Extension Retry Count 2 Paging Group Members Name Extension #A #A Extension Display Name Multicast Y Related Links Advanced 🔶 sec Retry Interval 3 Name Extension a Thomas Taylor 1002 Off User Extension Off 1003 å Ashley Allen 1000 å Victoria Valdez Close on Caller Drop Call Monitoring V Announcement and Tones 1004 Off 🚵 Mary Moore 1001 å Olivia Ortiz Partitions **Play Announcement** O 🔒 Summary Group Members 1007 🕹 Linda Lewis 1005 Off å Isabel Irwin If enabled, group members will hear 🔕 🍰 George Gale 1006 Off 0 造 William Watson 1008 Getting Started co announcement at broadcasting. The arah Scott 1009 announcement can be selected among 1010 hicolas Nelson **Group Members** Clustering Guide co announcement files and can be uploaded 1011 🔓 Emma Evans These members can receive broadcasting Partitioning Guide co at Announcements and Tones menu. 1012 announcement. Specify Phone Number: 0 Linked in facebook Extensions Authorized Members Display Nam Multicast You Tube Search: Extension A 45 Name Extension 1000 Off Extension ashley Allen Name Authorization O 1002 . 🚵 Mary Moore 1001 Off a Thomas Taylor Members å Victoria Valdez 1003 1111102 - 📶 🚨 Olivia Ortiz 1004 1005 Authorization Members 造 Linda Lewis 1006 Only these authorized member can start this å George Gale paging by dialing the paging extension digits. Advanced Options Copyright @ AddPac 1999-2015 All Rights Reserved Aaarac www.addpac.com

## **Ordering Information**

#### • AP2620 SIP Broadcasting Terminal Hardware

- AP2620 Main Body
- RISC Microprocessor with High-end Programmable DSP Architecture
- Option : AP-AUDIO2 Module , AP-AUD1S3 Module
- Including Network Cable Set & Power Supply, etc.
- Built-in APOS Internetworking Software for AP2620
- 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!

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