

# IP Audio Conference Solution



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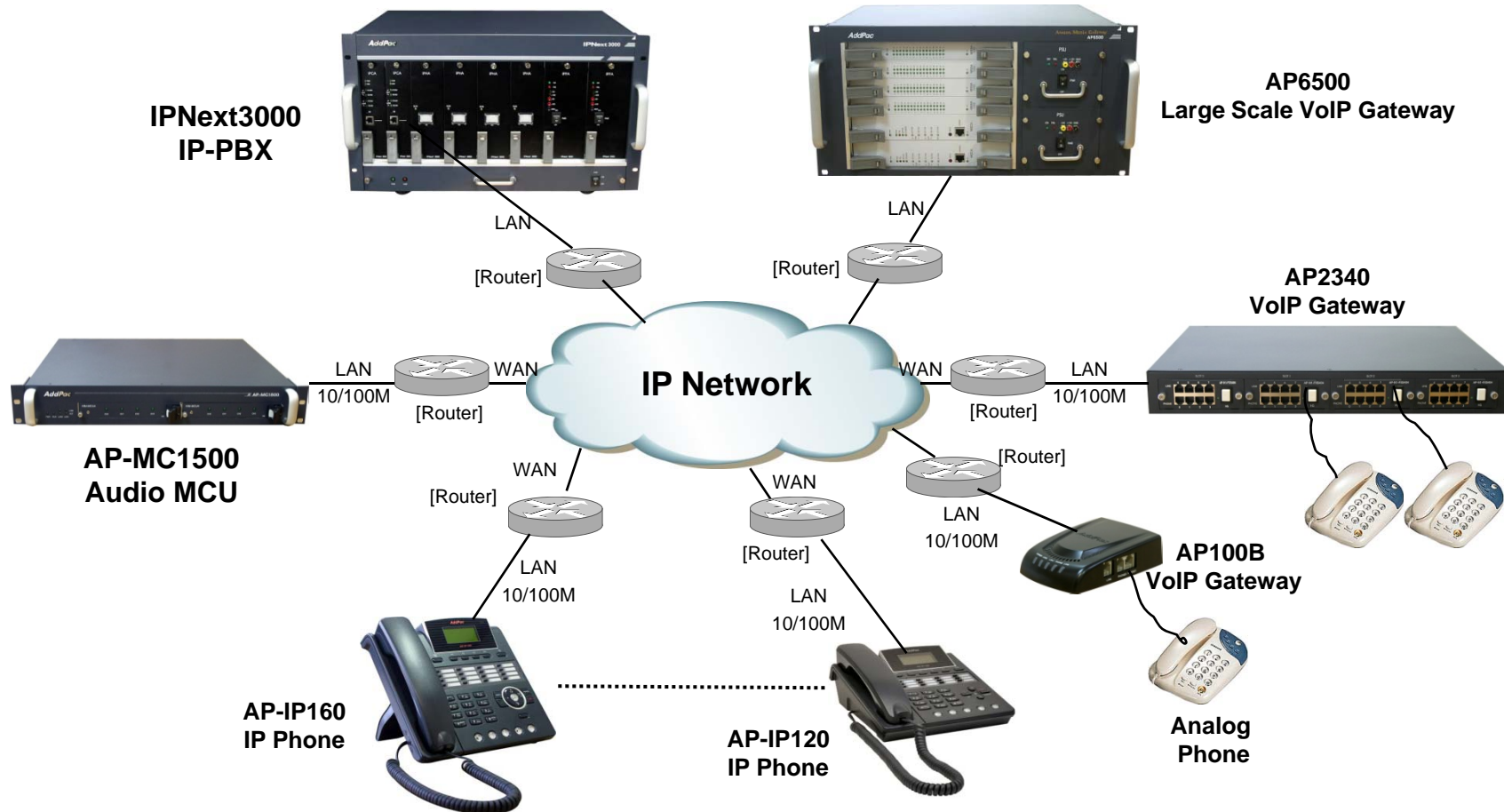
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  - IP-PBX : IPNext3000, IPNext2000, IPNext600, etc
  - VoIP Gateway : AP6800, AP6500, AP6200, etc
  - IP Phones : AP-IP300, AP-IP230, etc
  - Smart Multimedia Manager Program

# IP Audio Conference Service Diagram

## Multipoint audio Service (Audio/Voice, and more...)





# AP-MC1500 IP based Audio MCU

# IP based Audio MCU

AP-MC1500 IP based Audio MCU

## Main Features

- IP based Hardware Audio Mixing Solution
- Support Various Conference System Model
  - Add-Hoc, Meet-Me, Dial Out
- Two(2) Module Slots for Audio MCU Module, Network Interface Modules
  - HIM-AMCU128, HIM-AMU64, etc
- Scalability and Flexibility
- G.711, G.726, G.729, G.723,1, etc
- High-performance Audio Mixing Service
- SIP and H.323 VoIP Signaling Support
- Smart Multimedia Manager Software for Management
- Firmware Upgradeable Architecture
- Audio Solution with Outstanding Network Service Capability

# IP based Audio MCU

AP-MC1500 IP based Audio MCU

## Hardware Specification

- High Performance RISC Microprocessor Computing Power
- Built-in High-end Programmable DSP Hardware Architecture
- Two(2) Module Slots for Audio MCU Module, Network Interface Module
- Main Chassis
  - Network Interface
    - Two(2) 10/100Mbps Fast Ethernet
    - One(1) RS-232C Console (RJ45)



# IP based Audio MCU

AP-MC1500 IP based Audio MCU

## Hardware Specification

- 128ch MCU Module (HIM-AMCU128)
  - High quality Audio Mixing
  - 128Channel Audio Mixing
  - Compact PCI Style Hot-Swap Function
  - High-End Programmable DSPs
  - Parallel DSP Processing for High Quality Audio Mixing
  - Concurrent Different Audio Codec Support
- 64ch MCU Module (HIM-AMCU64)
  - High quality Audio Mixing
  - 64 Channel Audio Mixing
  - Compact PCI Style Hot-Swap Function
  - High-End Programmable DSPs
  - Parallel DSP Processing for High Quality Audio Mixing
  - Concurrent Different Audio Codec Support
  - Cascade Support



# IP based Audio MCU

AP-MC1500 IP based Audio MCU

## Hardware Specification



Audio MCU Module (128ch, 64ch)



Reset

RS232C  
Console  
Port


LAN0 10/100Mbps Interface  
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LAN1 10/100Mbps Interface

Power Switch

Power Inlet








# IPNext3000 IP-PBX



# IPNext IP-PBX Comparison Table

Model		IPNext3000	IPNext2000	IPNext600
<b>Service Features</b>				
Registration User Number		3000	2000	500
Concurrent Call User Number		800	500	100
IPv4/IPv6 Dual Stack Support		Support	Support	Support
VoIP Signaling	Internal	SIP	SIP	SIP
	External	H.323/SIP	H.323/SIP	H.323/SIP
Powerful IVR, UMS, Media Service, User Presence Service		Support	Support	Support
RTP Proxy Service (IPv6, Private IP)		Support	Support	Support
LAN Port		2	2	2
System Duplication		Support(built-in)	Support(built-in)	Support(Built-In)

# Main Features

## IPNext3000 Next Generation IP-PBX

- Advanced IP-PBX Solution
- IPv4/IPv6 based Dual Network Protocol Support
- Internal/External RTP Proxy Function Support
  - External RTP Proxy Server for Private Address : AP-RS2000
- Internal/External Presence Function Support with Smart Messenger
  - External Presence Server : AP-PS2000
- Powerful Management and User Friendly Features
- Fault Tolerant and Scalability Architecture
- Firmware Upgradeable Architecture
- Dual System Redundancy Architecture
  - Two(2) 3.5 Inch Hard Disk (RAID 1) / System
  - Two(2) Gigabit Ethernet Interface / System
- Dual Redundancy Power Module
- Smart Multimedia Manager Software

# Hardware Specification

IPNext3000 Next Generation IP-PBX

RISC  
CPU

- 64bit High-End Microprocessor Computing Power
- Main Chassis
  - Dual Redundancy CPU Boards for System Fault Tolerant
    - Two(2) 10/100Mbps Gigabit Ethernet
    - One(1) RS-232C Console (RJ45)
    - Two(2) 3.5 Inch Hard Disk Interface Slot (RAID 1)
  - Dual Redundancy Power Supply Module
  - Hot-Swap Features

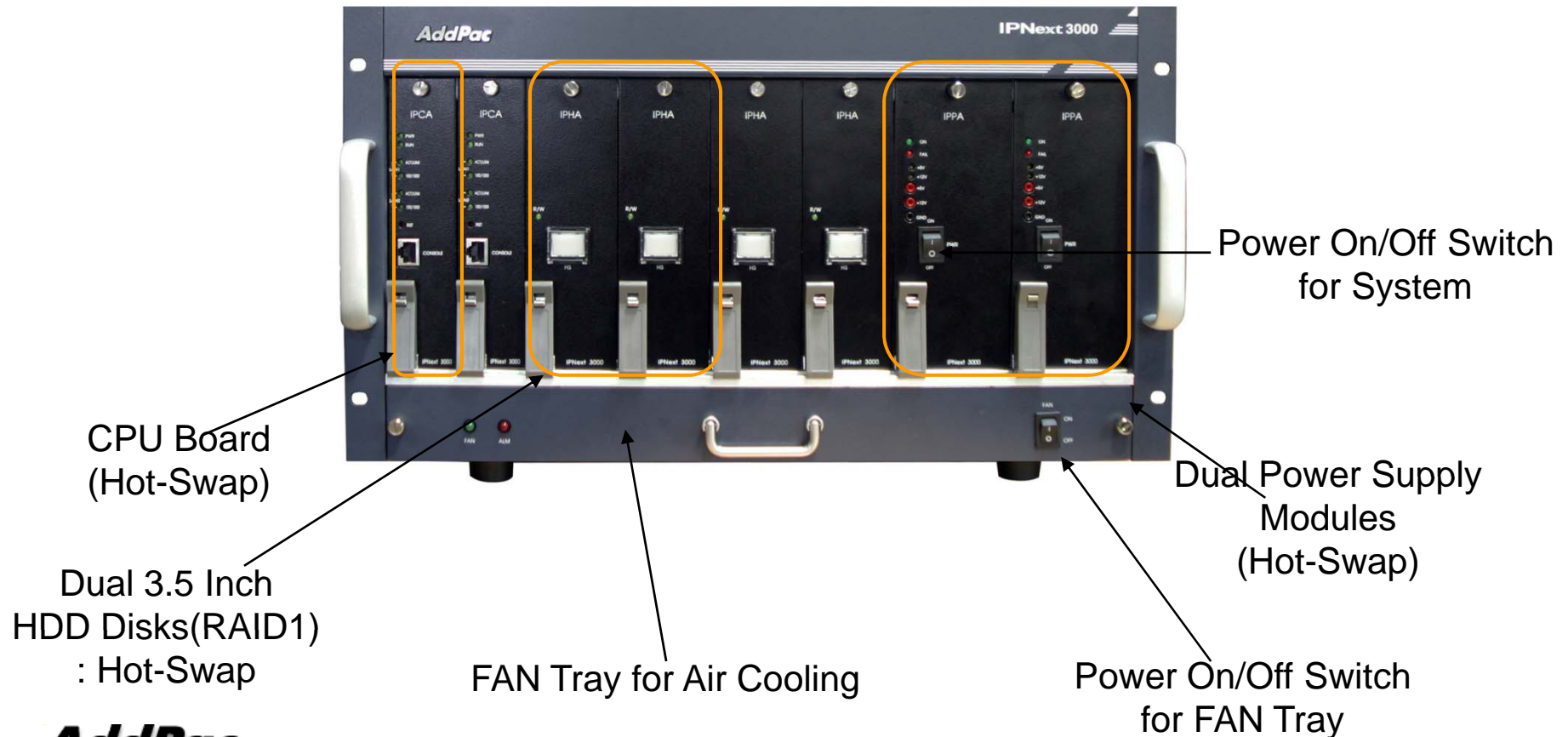


# Hardware Specification

IPNext3000 Next Generation IP-PBX

RISC  
CPU

## IPNext3000 Front Side



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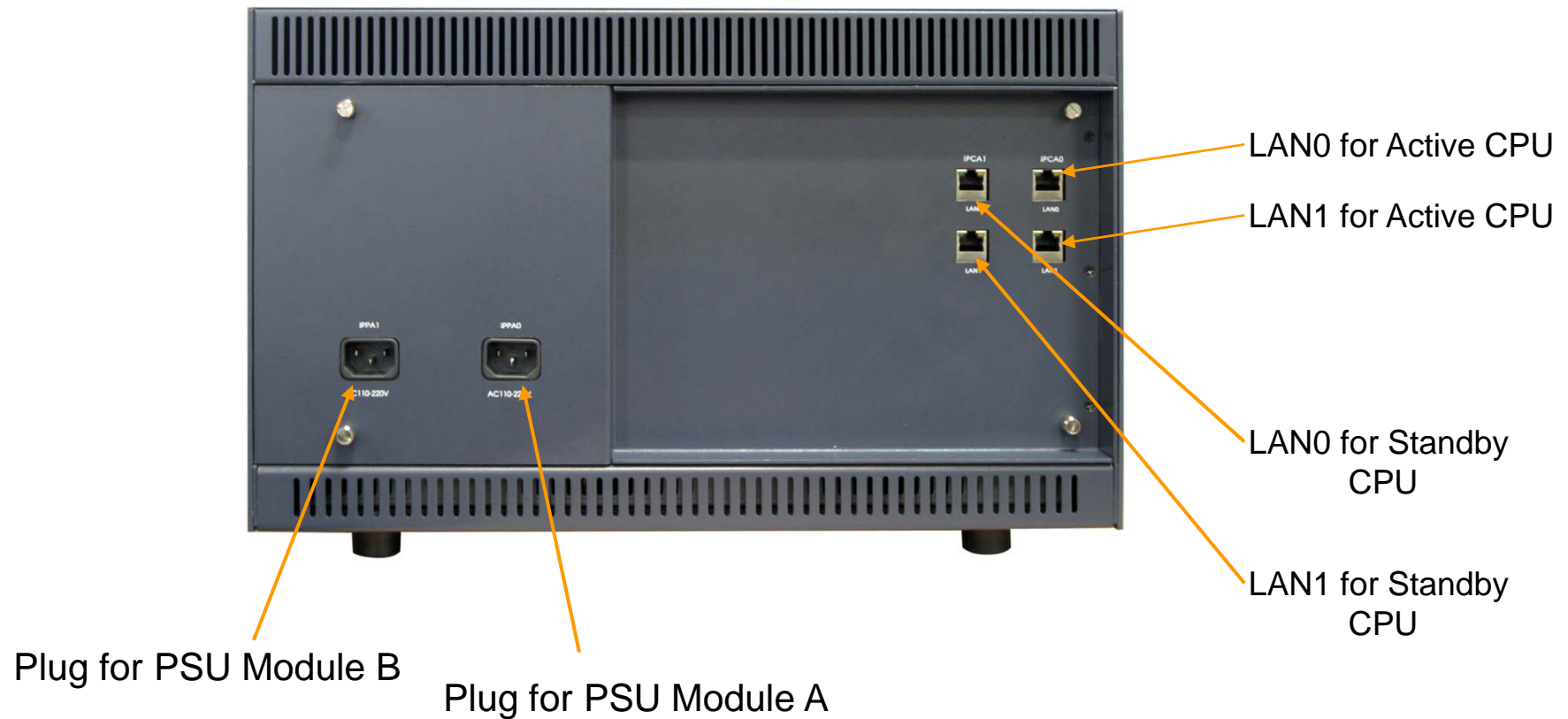
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# Hardware Specification

IPNext3000 Next Generation IP-PBX

RISC  
CPU

## IPNext3000 Back Side





# IPNext2000 IP-PBX



# Main Features

## IPNext2000 Next Generation IP-PBX System

- SIP Application Server, Proxy, Registrar and Location Server
- Multiple ITSP Trunk with SIP & H.323 Accounts Support
- Dual System Redundancy Architecture
  - Two(2) Gigabit Ethernet Interface / System
- High Performance RISC Architecture
- Powerful Network Protocols (PPPoE, DHCP, Static Routing, etc)
- IPv4/IPv6 Dual Stack
- RTP Proxy Function Embedded for Private IP and IPv6 Address Interworking
- User Presence Service Features for Smart Multimedia Messenger and Smart IP Phone
- IVR Scenario Editor, Voice Mail, Media Service (Coloring), Conference
- Firmware Upgradeable Architecture
- Smart Multimedia Manager for IP-PBX Management
- Smart Messenger Service (click to dial) for Unified Communication
- Smart NMS for Large Scale Deployment
- Advanced Voice QoS Mechanism
- Dual Redundancy Power Module

# Hardware Specification

IPNext2000 Next Generation IP-PBX System

RISC  
CPU

- 64bit High-End Microprocessor Computing Power
- Main Chassis
  - Dual Redundancy CPU Boards for System Fault Tolerant
    - Two(2) 10/100/1000Mbps Gigabit Ethernet
    - One(1) RS-232C Console (RJ45)
    - Two(2) 3.5 Inch Hard Disk Interface Slot (RAID 1)
  - Dual Redundancy Power Supply Module
  - Hot-Swap Features

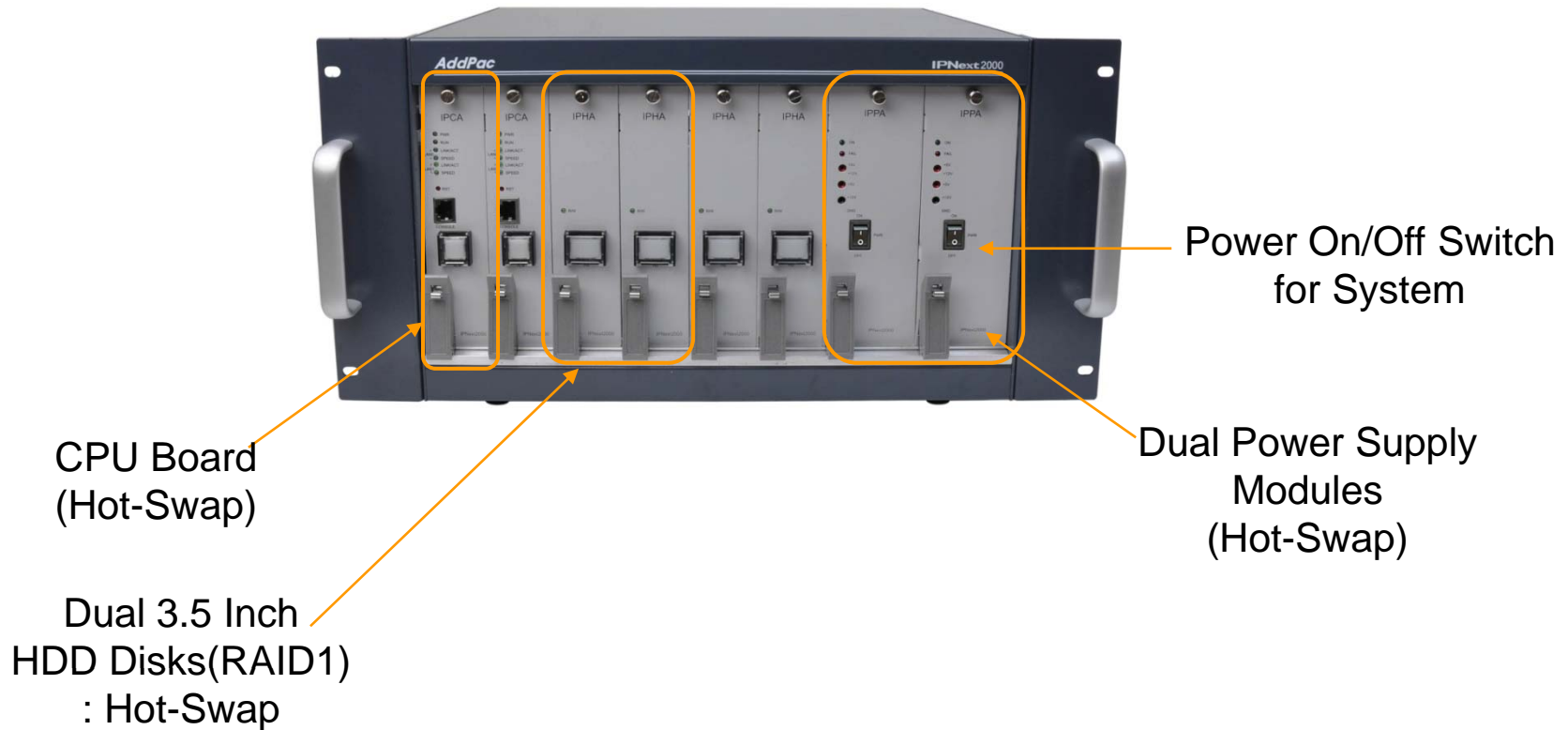


# Hardware Specification

IPNext2000 Next Generation IP-PBX System



## IPNext2000 Front Side



CPU Board  
(Hot-Swap)

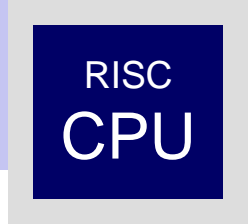
Dual 3.5 Inch  
HDD Disks(RAID1)  
: Hot-Swap

Power On/Off Switch  
for System

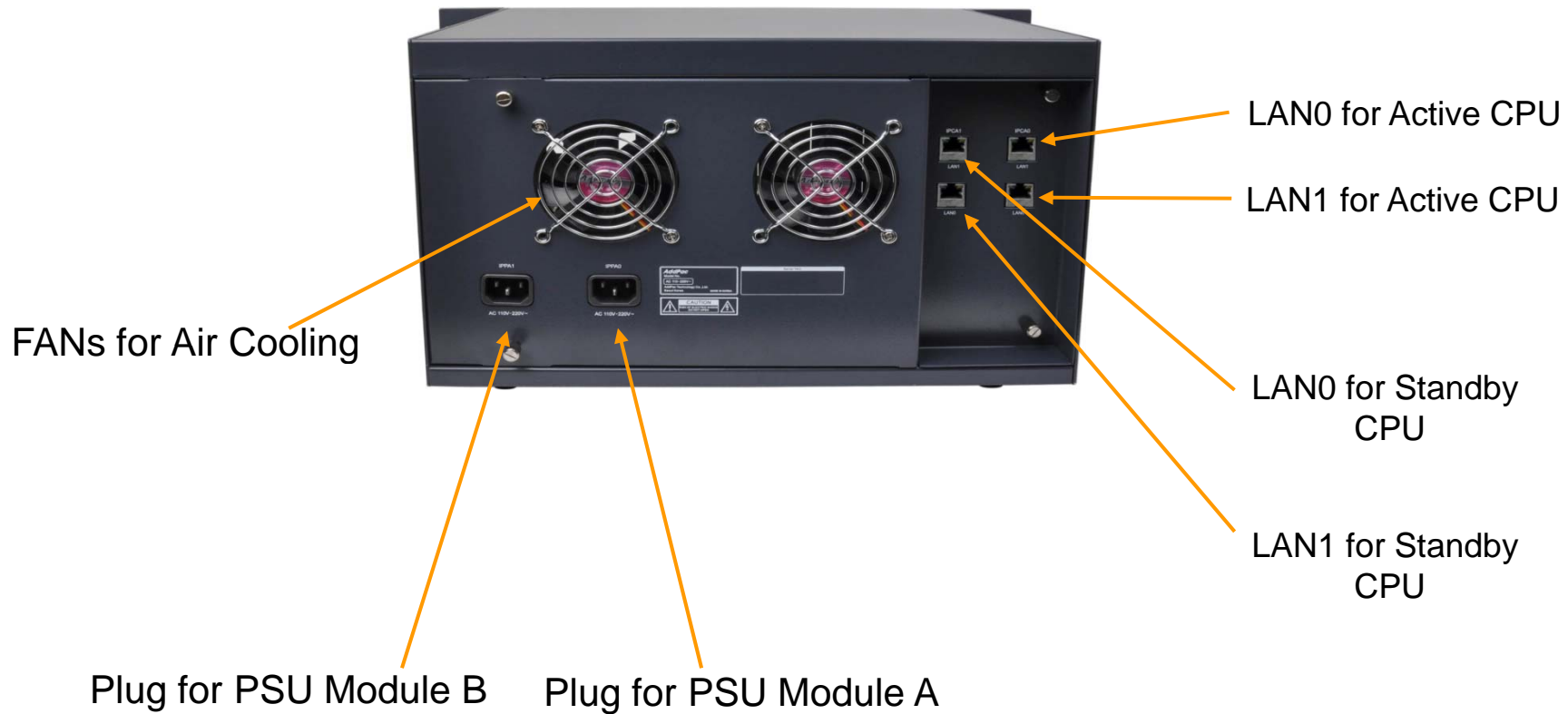
Dual Power Supply  
Modules  
(Hot-Swap)


# Hardware Specification

IPNext2000 Next Generation IP-PBX System



## IPNext2000 Back Side





# IPNext600 IP-PBX

# Main Features

## IPNext600 Next Generation IP-PBX System

- SIP Application Server, Proxy, Registrar and Location Server
- Multiple ITSP Trunk with SIP & H.323 Accounts Support
- Dual System Redundancy Architecture
  - Two(2) Fast Ethernet Interface / System
- High Performance RISC Architecture
- Powerful Network Protocols (PPPoE, DHCP, Static Routing, etc)
- IPv4/IPv6 Dual Stack
- RTP Proxy Function Embedded for Private IP and IPv6 Address Interworking
- User Presence Service Features for Smart Multimedia Messenger and Smart IP Phone
- IVR Scenario Editor, Voice Mail, Media Service (Coloring), Conference
- Firmware Upgradeable Architecture
- Smart Multimedia Manager for IP-PBX Management
- Smart Messenger Service (click to dial) for Unified Communication
- VPMS (VoIP Plug&Play Management System) & Smart NMS for Large Scale Deployment
- Advanced Voice QoS Mechanism
- Dual Redundancy Power Module

# Hardware Specification

IPNext600 Next Generation IP-PBX System

A square logo with a dark blue background and white text. The text reads "RISC" on the top line and "CPU" on the bottom line. The logo is set against a light blue background that is part of a larger header bar.

RISC  
CPU

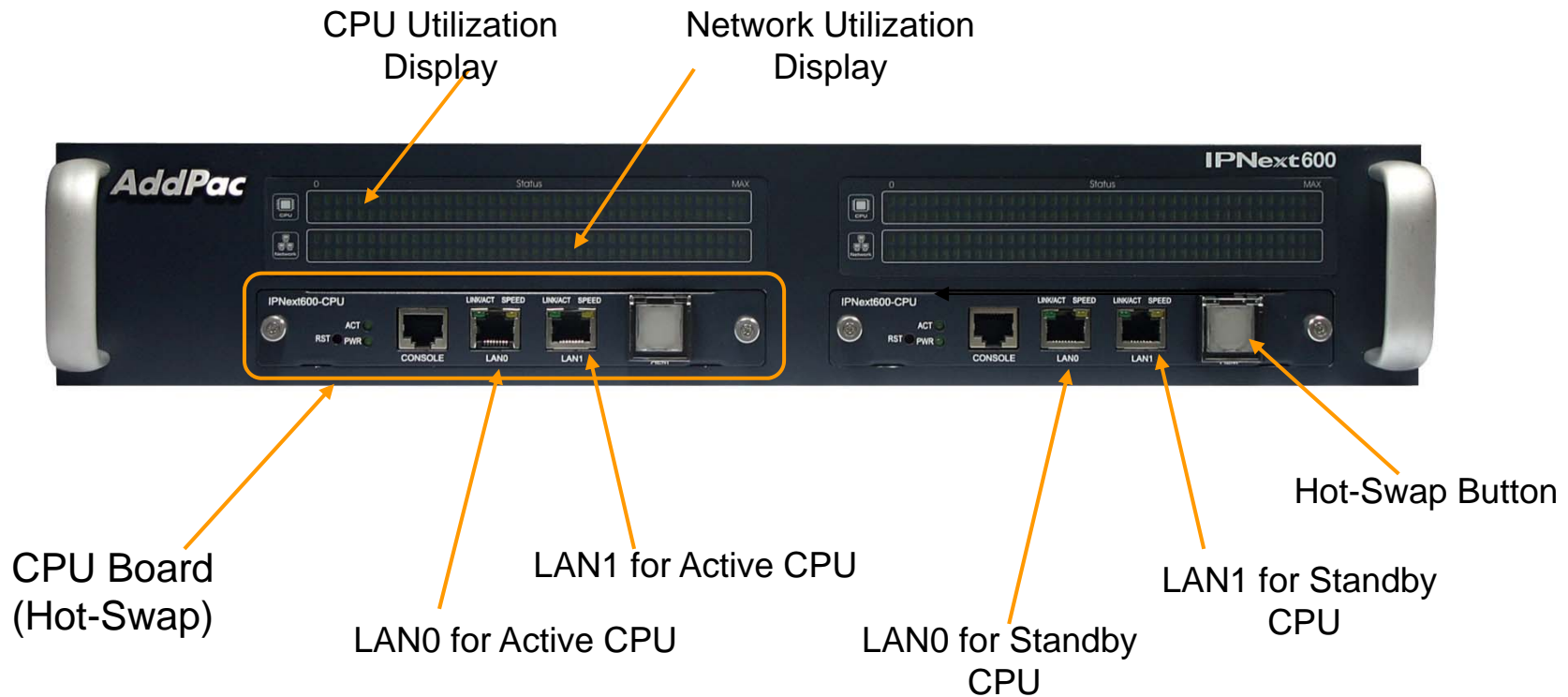
- 64bit High-End Microprocessor Computing Power
- Main Chassis
  - Dual Redundancy CPU Boards for System Fault Tolerant
    - Two(2) 10/100Mbps Gigabit Ethernet
    - One(1) RS-232C Console (RJ45)
  - Dual Redundancy Power Supply Module
  - Hot-Swap Features

# Hardware Specification

IPNext600 Next Generation IP-PBX System

RISC  
CPU

## IPNext600 Front Side





# Hardware Specification

IPNext600 Next Generation IP-PBX System

RISC  
CPU

## IPNext600 Back Side

Dual Power Supply  
Modules  
(Hot-Swap)



PSU Module A





PSU Module B

Power On/Off Switch  
for System



# Large Scale VoIP Gateways




# Large Capacity VoIP Gateways

Product	AP3100P	AP6200	AP6500	AP6800
				
Available VoIP Modules	AP-FXS4, AP-FXO4 AP-FXS2O2, AP-E&M4	AP-N1-FXS8, AP-N1-FXO8, AP-N1-E&M4, AP-N1-FXS4O4, AP-N1-E1/T1, AP-N1-2E1/T1	AP-N1-FXS32 AP-N1-FXO32	AP-N1-FXS32 AP-N1-FXO32
Analog Ports	Up to 60 (4-Port Module x 15)	Up to 80 (8-Port Module x 10)	Up to 128 (32-Port Module x 4)	Up to 256 (32-Port Module x 8)
Signaling	SIP, H.323	SIP, H.323	SIP, H.323	SIP, H.323
CPU Redundancy (Dual CPU)	N/A	N/A	Support (Option)	Support (Option)
E&M	Support	Support	N/A	N/A
Module Slot for VoIP Module	15 Slots	10 Slots	4 Slots	8 Slots
LAN Port	2	2	2	2
Console	1	1	1	1
Dual Power Supply (Option)	Support	Support	Support	Support

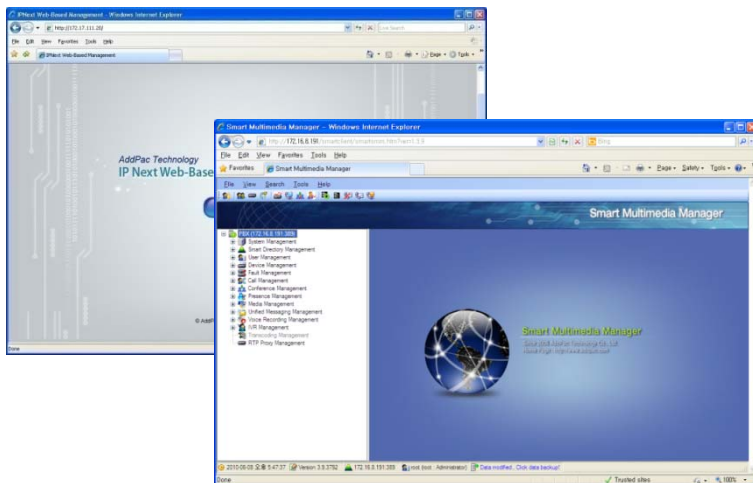


# IP Phones

# IP Phone Comparison Table

	AP-IP300 	AP-IP250 	AP-IP230 	AP-IP160 	AP-IP120 	AP-IP90 
LCD Size	4.3 Inch Color LCD	4.3 Inch Color LCD	5 Inch Color LCD	4 Text Line Graphic LCD	4 Text Line Graphic LCD	4 Text Line Graphic LCD
Touch Screen	N/A	Support	Support	N/A	N/A	N/A
Speed-Dial Keys	25 Key with Presence LED	Touch Screen based 25 Keys	Touch Screen based 25 Keys	16 Key with Presence LED	12 Key with Presence LED	N/A
Voice Codec	G.711/G.726/ G.729/G.723	G.711/G.726/ G.729/G.723	G.711/G.726/ G.729/G.723	G.711/G.726/ G.729/G.723	G.711/G.726/ G.729/G.723	G.711/G.726/ G.729/G.723
Signaling	H.323/SIP	H.323/SIP	H.323/SIP	H.323/SIP	H.323/SIP	H.323/SIP
3-Party Conversation	Support	Support	Support	Support	Support	Support
LAN Port	2	2	2	2	2	2
PoE(Optional)	Support	Support	Support	Support	Support	Support
FXO(Optional)	Support	Support	Support	Support	Support	Support

# Smart Multimedia Manager



# Contents

- System Requirements
- Main Features
- System Management
- Smart Directory Management
- User Management
- Device Management
- Fault Management
- Call Management
- PTT Management
- Conference Management
- User Presence Management
- Media Management
- Unified Message Management
- Voice Recording Management
- IVR Management



# System Requirements

- OS : Windows XP, Vista, Windows7, Windows Server 2000/2003
- CPU : Intel Pentium processor or compatible architecture ( 32 bit and 64-bit )
- Internet browser : Microsoft Internet Explorer 6.0 or higher
- Free hard disk space : 200 MB or more
- Physical memory : 256 MB or higher
- Monitor : super VGA ( 1024 x 768 ) resolution or higher



# Main Features

- Provides PBX system information such as voice line, network interfaces(LAN/WAN) and network services.
- Manages phone user , department and devices within a business.
- Supports standard PBX functions such as routing pattern, partition, music on hold, waiting queues and trunk management.
- Manages various PBX-related services such as voicemail, call recording, presence, IVR (Interactive Voice Response) , PTT ( Push-To-Talk) and audio & video conference.
- Manages different levels of administrator access.
- Monitors system performance like a CPU utilization, memory, disk usage and current service session in use.
- Provides fault management with fault status board, fault history and reports and statistics view.



# Conference Management

# Conference Rooms

The screenshot displays the Smart Multimedia Manager web interface. On the left, a navigation tree highlights 'Conference Rooms'. The main area shows a table of conference rooms. An 'Add Conference' dialog box is open, showing configuration options for a new conference room.

**Conference Rooms Table:**

No.	Conference Name	Conference Number	Partition	Conference Type	Status	Description
1	Ad-Hoc Defaults			Ad Hoc	Running	
2	Conference1	1		Dial-Out		

**Add Conference Dialog - General Tab:**

- Conference Name: [Text Field]
- Description: [Text Field]
- Conference Number: [Text Field]
- Conference Type: Dial-Out Conference
- Media Type: Audio
- Partition: N/A
- Media Class: default
- Secondary Media Class: N/A
- Third Media Class: N/A
- Max Participant: 16
- Conference Priority: 3 (Zero is high priority)
- Speaking Mode: All Participants
- Encryption Mode: off

**Add Conference Dialog - Video Tab:**

- Apply below settings to terminal:
- Target Rate: 384K
- Frame Rate: 30 fps
- Picture Size: CIF
- Dynamic Picture Size: enable

**Annotations:**

- Conference Management manages conference services for audio and video conference setting** (points to the navigation tree).
- Conference Rooms shows conference rooms the administrator made with number, type and status.** (points to the table).
- Conference Properties specify conference room properties, which is conference type like a dial-out, meet-me and etc and you can set other optional property according to the participants type.** (points to the 'Add Conference' dialog).

# Active Conferences

Smart Multimedia Manager - Windows Internet Explorer

http://172.16.19.200/smartclient/smartsmm.htm?ver=1,3,9

File Edit View Favorites Tools Help

File View Search Tools Help

Active Conference shows conference session in progress with name, number, conference type, the processing time and so on in real-time mode.

Active Conferences											
Conference											
Conference Name	Conference Number	Status	Conference Type	Start Time	Duration	Media Type	Floor to Full..	Layout Mode	Arrange Mode	Layout	No
업무회의7	7002	Running	Dial-Out	20050714-15:30:22	121	Video	Off	Manual	Dynamic		4
업무회의8	7002	Running	Dial-Out	20050714-15:30:22	121	Video	Off	Manual	Dynamic		4
업무회의9	7002	Running	Dial-Out	20050714-15:30:22	121	Video	Off	Manual	Dynamic		4
업무회의10	7002	Running	Dial-Out	20050714-15:30:22	121	Video	Off	Manual	Dynamic		4

Participants										
Participant Name	Phone Number	IP	Status	Audio	Video	Mic.	Speaker	Floor	In Picture	Reason
ihkown	7030	172.16.10.1	Joined			8	10			
jschoi	7031	172.16.10.2	Joined			8	10			
이민지	7032	172.16.10.3	Joined			8	10			
장화구	7033	172.16.10.3	Left			8				

Participants shows the participants for the selected conferences with phone number, ip, status and other properties.

6/11/2010 11:36:46 AM Version 3.9.3812 172.16.19.200:389 root (root : Administrator) Data modified.. Click data backup!

Done Trusted sites 100%



# Thank you!

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