

IPNext 230™

NGN IP KeyPhone System

High-performance Next Generation IP KeyPhone System

Preliminary Product Overview



AddPac

AddPac Technology

2008, Sales and Marketing

www.addpac.com

IPNext 230 NGN IP KeyPhone System

- Product Overview
- Hardware Specification
- Software Service
- IP KeyPhone Service and Features
- RTP Proxy Service
- User Presence Service
- Network Service and Features
- User Terminals
- Application Area
- Ordering Information

Product Overview

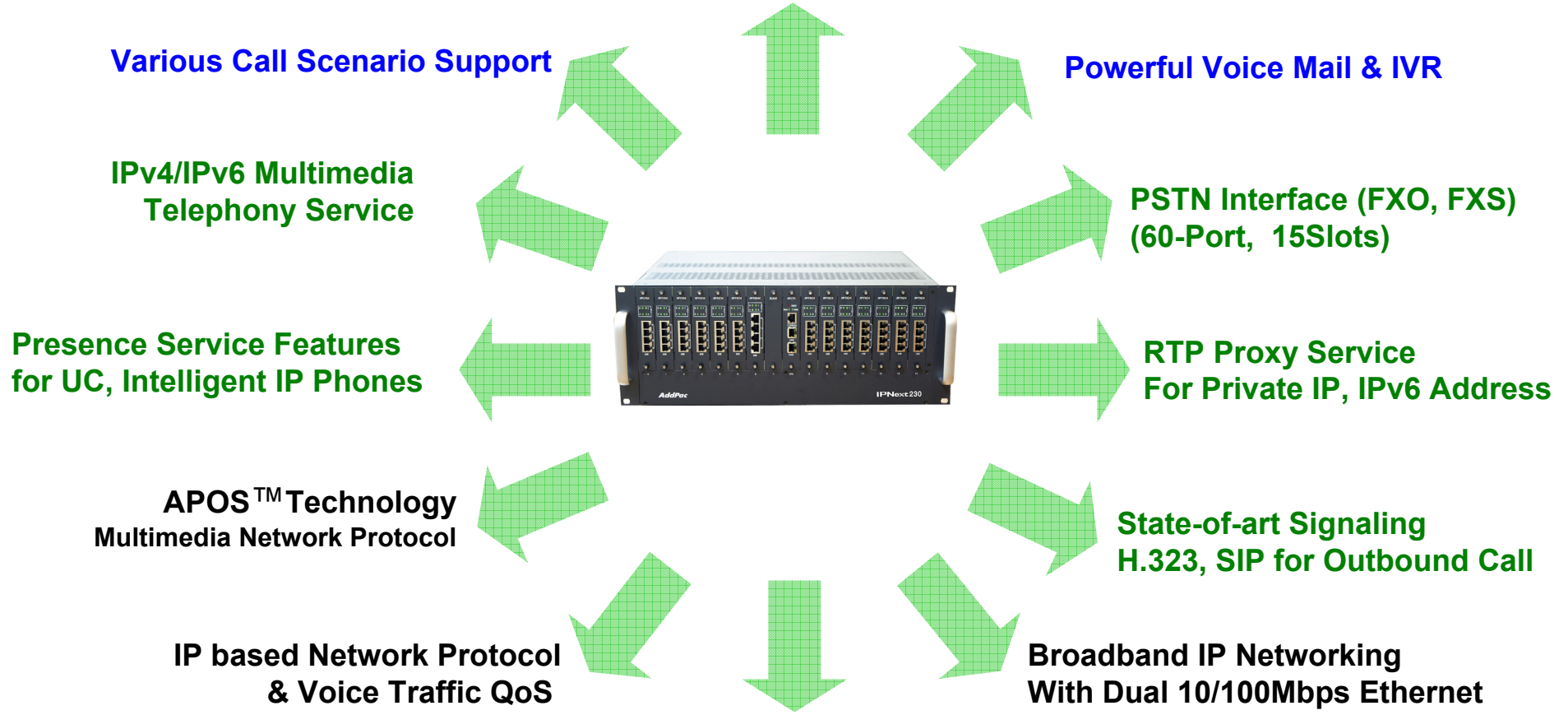
IPNext 230 Next Generation IP KeyPhone System

- IP based Advanced KeyPhone Solution
- IPv4/IPv6 Multimedia Telephony Solution for Small&Medium Office
- PSTN Interface (FXO, FXS) Support
- Powerful Management and User Friendly Features
- Fault Tolerant and Scalability Architecture
- High-performance Video, Audio, and Voice Service
- Firmware Upgradeable Architecture
- IVR Service with Scenario Editor
- Voice Mailing Service
- Presence Service for High-End IP Key Phone, UC
- RTP Proxy Service for Private IP service
- SIP, H.323 Signaling for Outbound Calls
- Various Call Scenario (Call Pickup, Call Park, Call Transfer, etc)
- Various IP Terminal Support

Product Highlights

IPNext 230 Next Generation IP KeyPhone System

IP based Advanced IP KeyPhone System



Hardware Specification

IPNext 230 Next Generation IP KeyPhone System

RISC
CPU

- **RISC Microprocessor Computing Power**
- **Main Chassis**
 - **Network Interface**
 - Two(2) 10/100Mbps Fast Ethernet
 - One(1) RS-232C Console (RJ45)
 - **15 VoIP Module Slots for FXS, FXO etc**



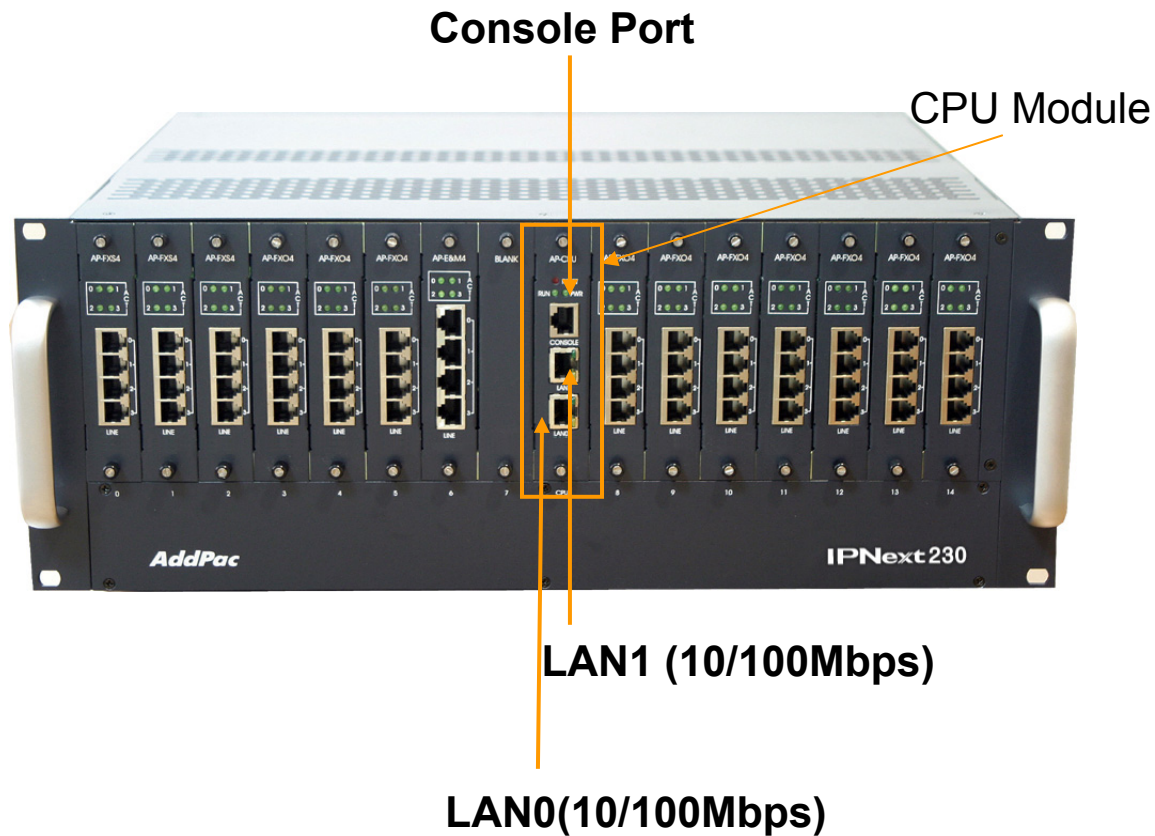
Hardware Specification

IPNext 230 Next Generation IP KeyPhone System

RISC
CPU

DSP

IPNext 230 Front Side



Hardware Specification

IPNext 230 Next Generation IP KeyPhone System

RISC
CPU

DSP

IPNext 230 Back Side



Power Inlet

Power Switch

Software Service

IPNext 230 Next Generation IP KeyPhone System

- **Built-in AddPac APOS Internetworking Software**

- Scalability, Functionality, and Stability Features
- Advanced Call Manager Features
- Media Gateway Features
- QoS Control Features

- **Programmable Video, Audio, and Voice Services**

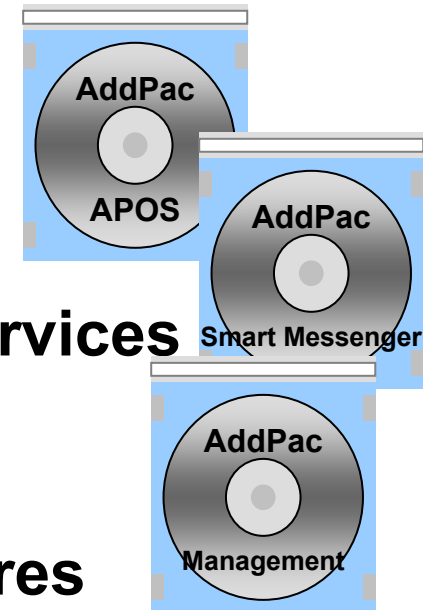
- Audio, and Voice Codec

- **Firmware Upgradeable Architecture**

- **Industry Standard Network Protocol Features**

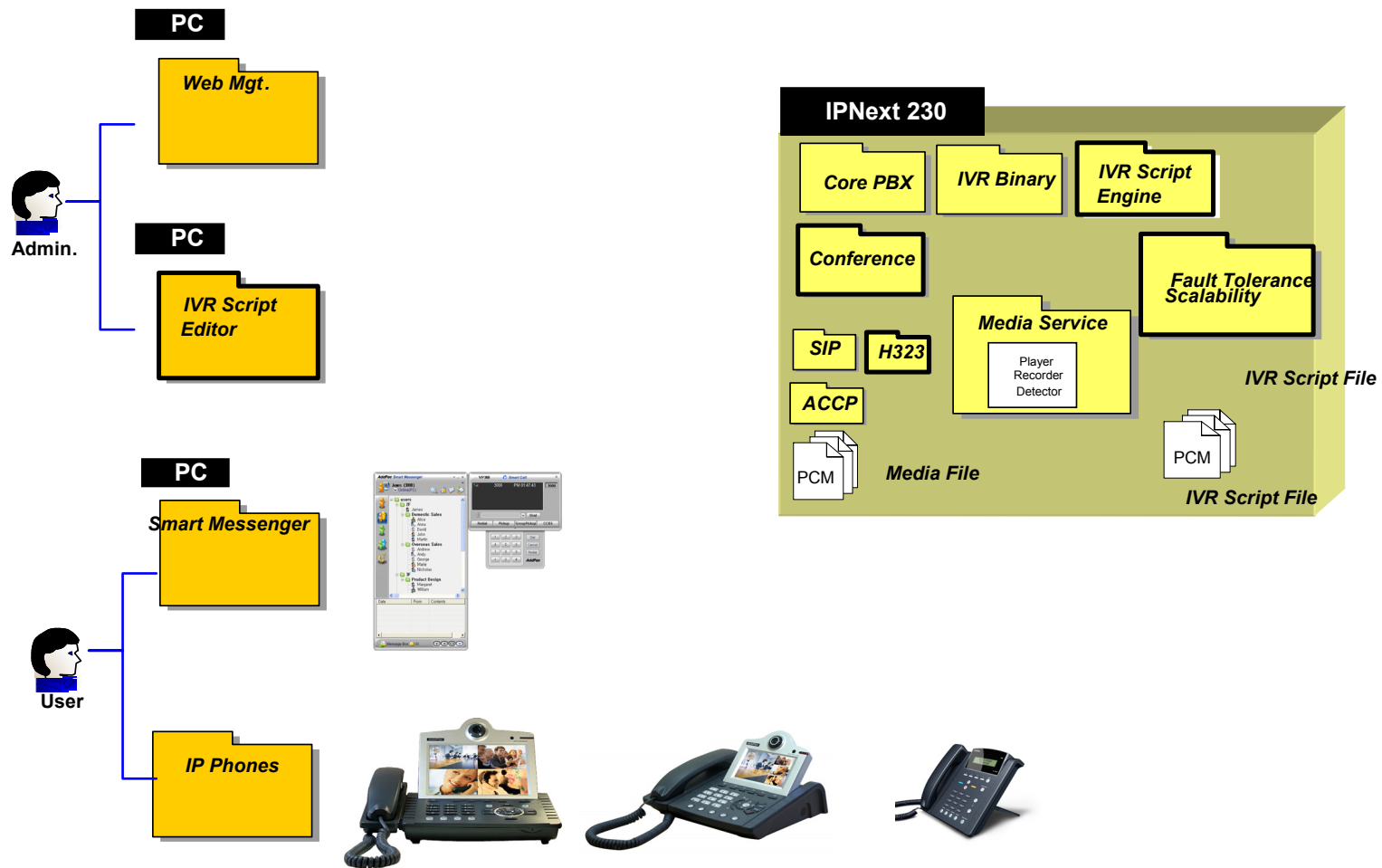
- **Highly User Friendly Management Features**

- Smart Messenger for UC
- Smart Multimedia Manager



IP-PBX Software Components

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IP Telephony Service and Features

IPNext 230 Next Generation IP KeyPhone System

- **Signaling Server**

- SIP Application Server, Proxy, Registrar and Location Server (RFC3261)
- Multiple ITSP Trunk with SIP & H.323 Accounts Support
 - IP UA Client Role for Registering to ITSP SIP Server
 - H.323 Gatekeeper Client Role for Registering to ITSP H.323 Gatekeeper Server

- **IVR & Auto Attendant**

- Default Auto Attendant Support
- Interactive Voice Response (IVR)
 - Provides with GUI-based Smart IVR Scenario Editor
 - Upload/Download Scenario by Smart IVR Scenario Editor
 - Supports Multiple Concurrent Scenarios
 - Supports Recordable IVR Prompts

- **Voice Mail**

- Support Voice Mail with IVR
- Access from Remote Site via Trunk Support
- Voice Mail Notification Support

IP Telephony Service and Features

IPNext 230 Next Generation IP KeyPhone System

- **Number & Call Routing**

- Trunk Hunting by Preference or Sequential
- Call Hunting by Preference, Simultaneous, Random
- Call Hunting by Chained Hunting Group
- Partition for Address Grading
- Call Class for Call Access Control
- Number Translation Rule for Inbound/Outbound Call
- Centrex with Prefix Support
- Multiple Shared Devices with One Number
- Multiple Numbers on One Device
- Individual Call Park within Park Number Pool
- Group Call Park within a Group or Other Group
- Call Pickup of Ringing Call of Same Group or Other Group
- Call Pickup of Parked Call
- Call Transfer - Blind, Consult
- Call Forwarding - Unconditional, Busy, No Answer, Voice Mail
- Call Waiting
- Call Swaping
- Call Hold

IP Telephony Service and Features

IPNext 230 Next Generation IP KeyPhone System

- **IP-PBX Advanced Features with AddPac IP Phones**

- Multiple Call Handling with Call Status and Calling Line Number and Name
- Plug and Play with Auto Discovery Function
- Softkey Map Download and Control
- Time and Date Setting
- Voice Mail List View
- Parked Call List View
- Call Forward Setting
- Recent Call List View
- Calling Number and Name Identification
- Individual Call Park within Park Number Pool by Softkey
- Group Call Park within a Group or Other Group by Softkey
- Call Pickup of Ringing Call of Same Group or Other Group by Softkey
- Call Pickup of Parked Call by Softkey
- Call Transfer - Blind, Consult by Softkey
- Call Waiting Indication
- Call Swaping by Softkey
- Call Hold by SoftKey
- Conference Control

IP Telephony Service and Features

IPNext 230 Next Generation IP KeyPhone System

- **User & Device Management**
 - LDAP (Light weight Directory Access Protocol) Support
 - Supports Hierarchical Organization
 - Auto Discovery of IP Phones & Video Phones
 - Monitoring Status of Phones
- **Miscellaneous***
 - Distinctive Ring by Calling User
 - Auto Config & Upgrade
 - Personal Directory
 - Downloadable Ring
 - Do not Disturb

IP Telephony Service and Features

IPNext 230 Next Generation IP KeyPhone System

- **Conference**

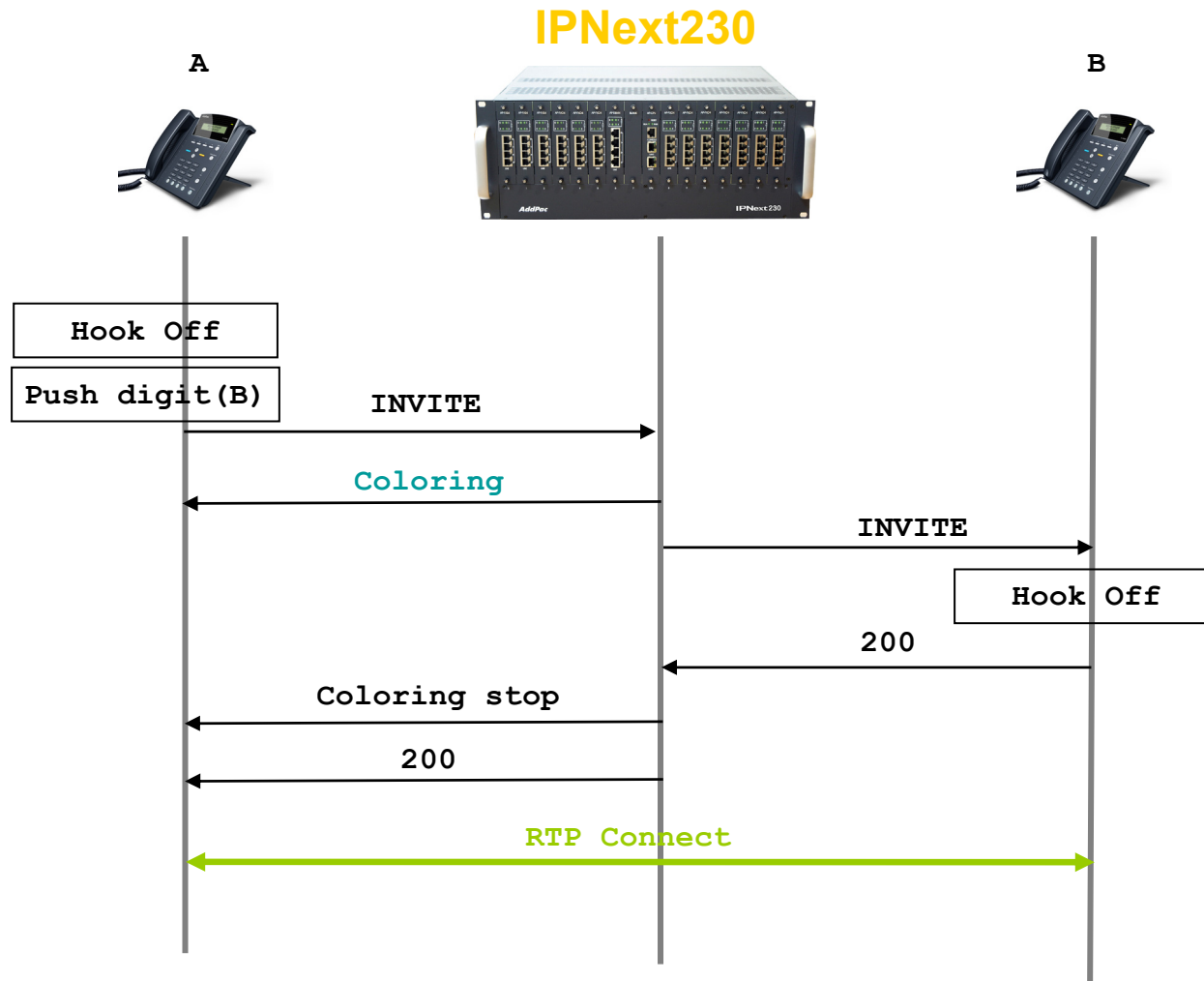
- G.711 (4-party Conference, 2 session) : basic
- G.711/G.729/G.723 (4-party Conference, 2session) Internal MCU Module : Option
- Ad-hoc Conference
- Dial-Out Conference
- Meet-me Conference
- Multiple External MCU support(Video, Audio, etc) : AddPac AP-MC1000, etc
- Conference Chair and Participants Management

- **Music & Announcement**

- Music on Hold
- Replaceable Announcements
- Dialing Music / Tone Service

SIP based Basic Call Scenario

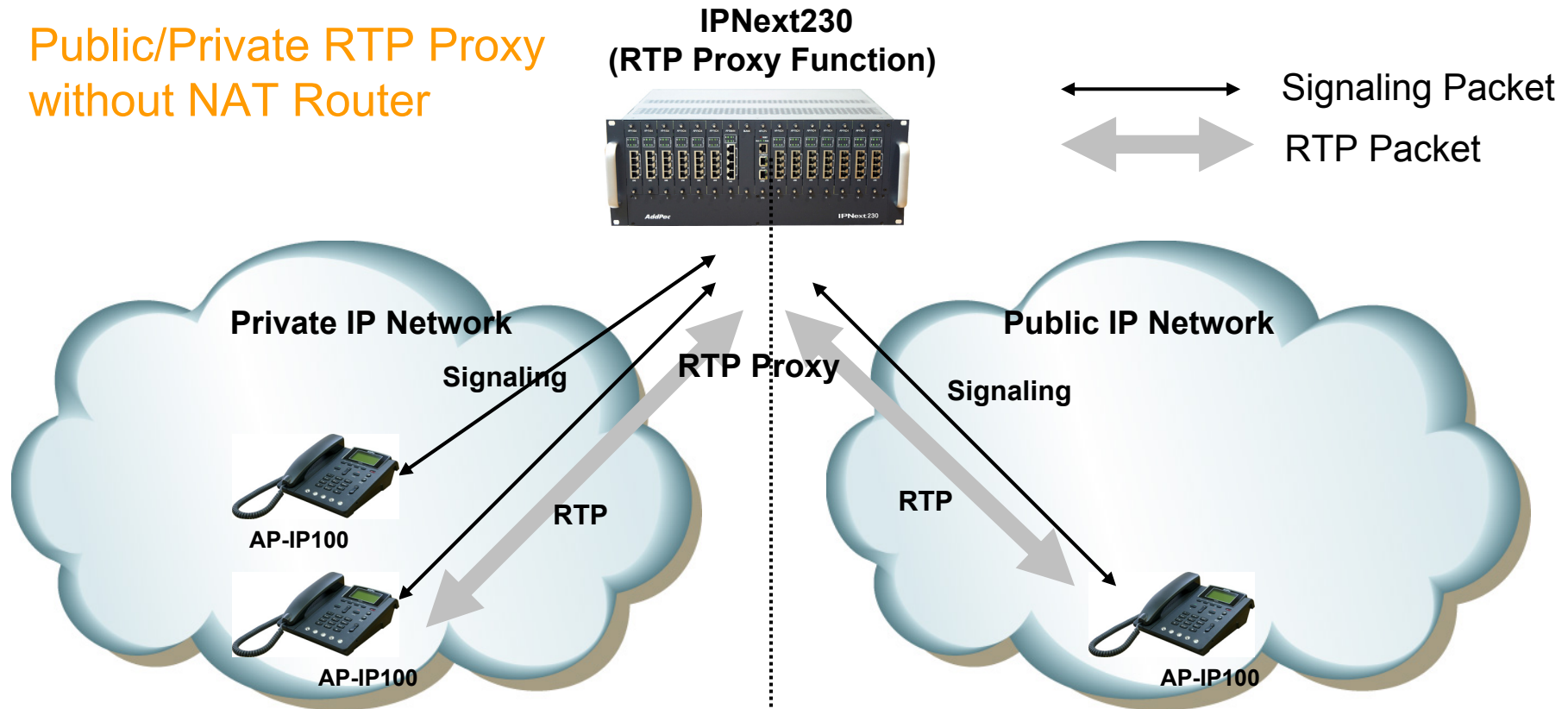
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RTP Proxy Service

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Public/Private RTP Proxy
without NAT Router

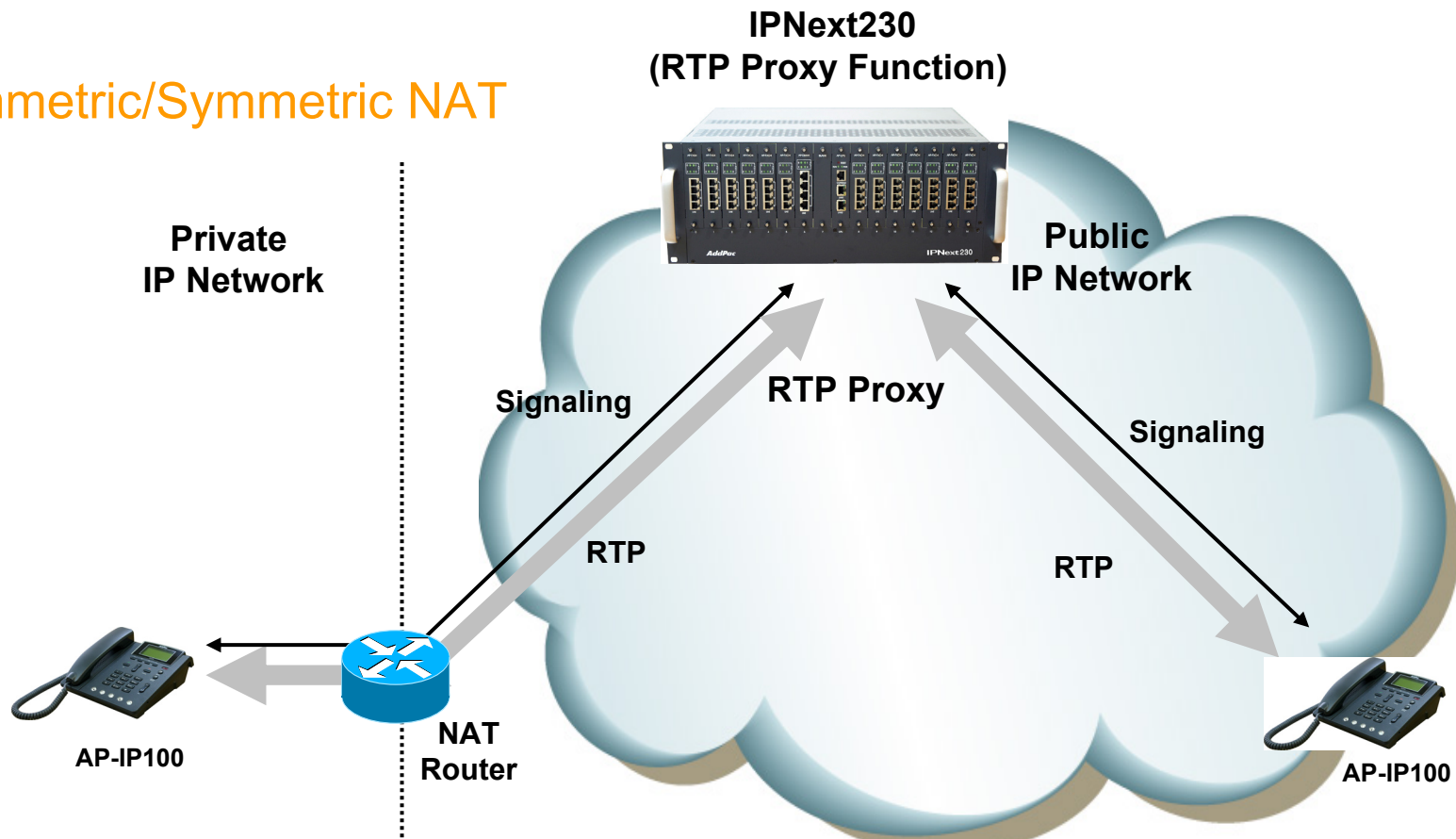


- Located between public and private network
- IPNext230(Call manager + RTP proxy) has public and private address
- IPNext230 determine that the call is internal or external

RTP Proxy Service

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Asymmetric/Symmetric NAT

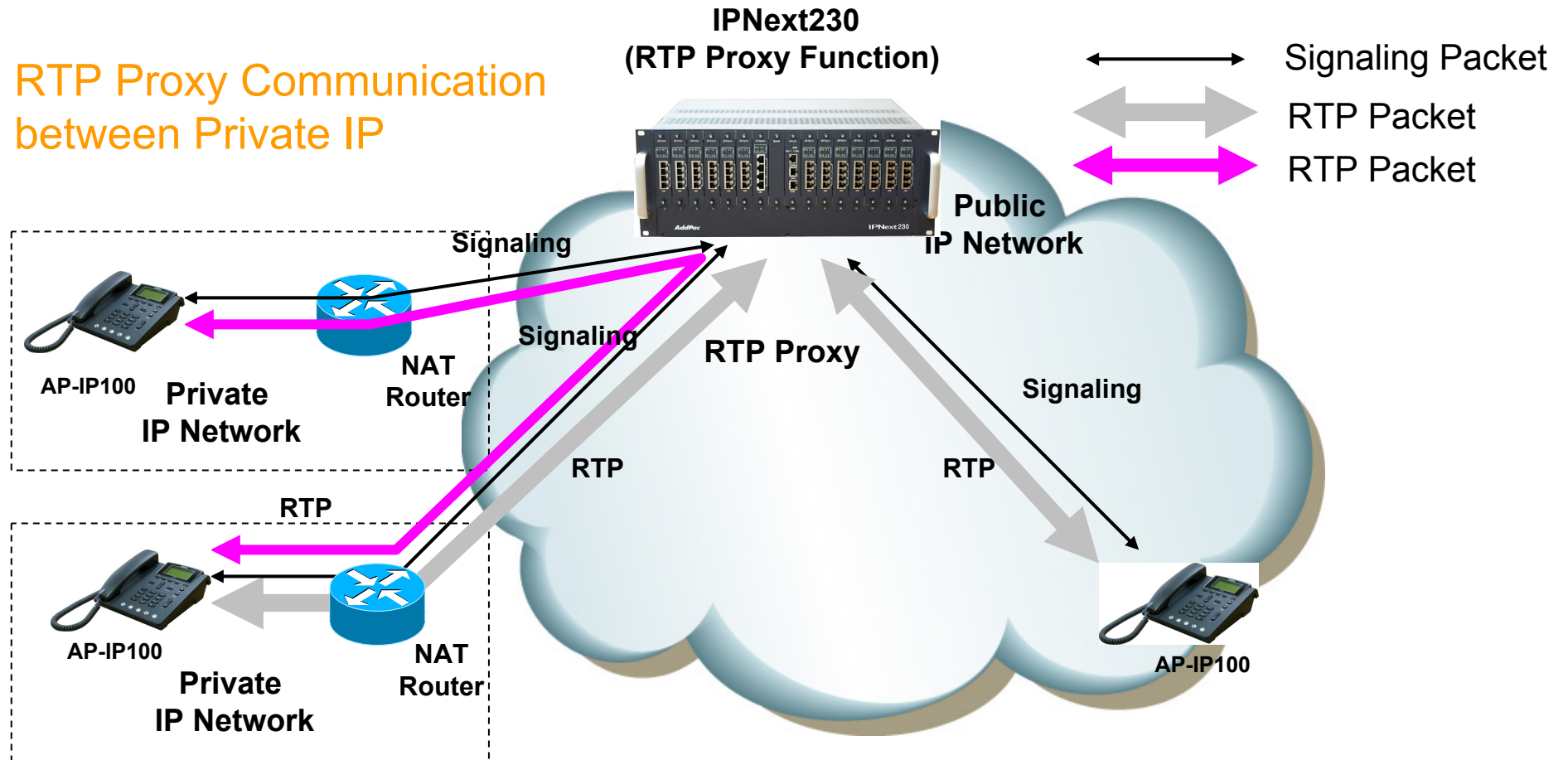


- Located in public network
- RTP Proxy has single public address
- Auto detect for asymmetric NAT via incoming RTP packet

RTP Proxy Service

IPNext 230 Next Generation IP KeyPhone System

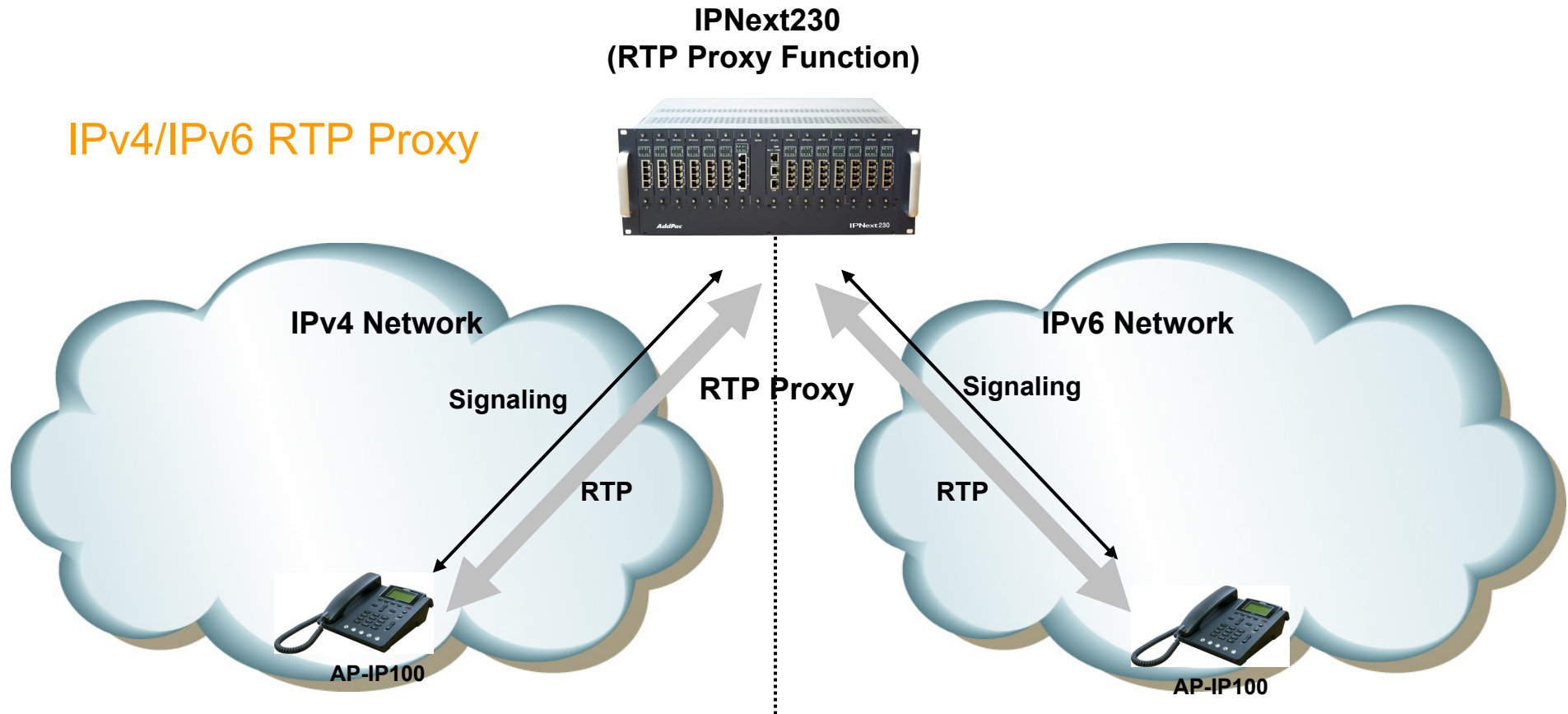
RTP Proxy Communication between Private IP



- Located in public network
- RTP Proxy has single public address
- Auto detect for asymmetric NAT via incoming RTP packet

RTP Proxy Service

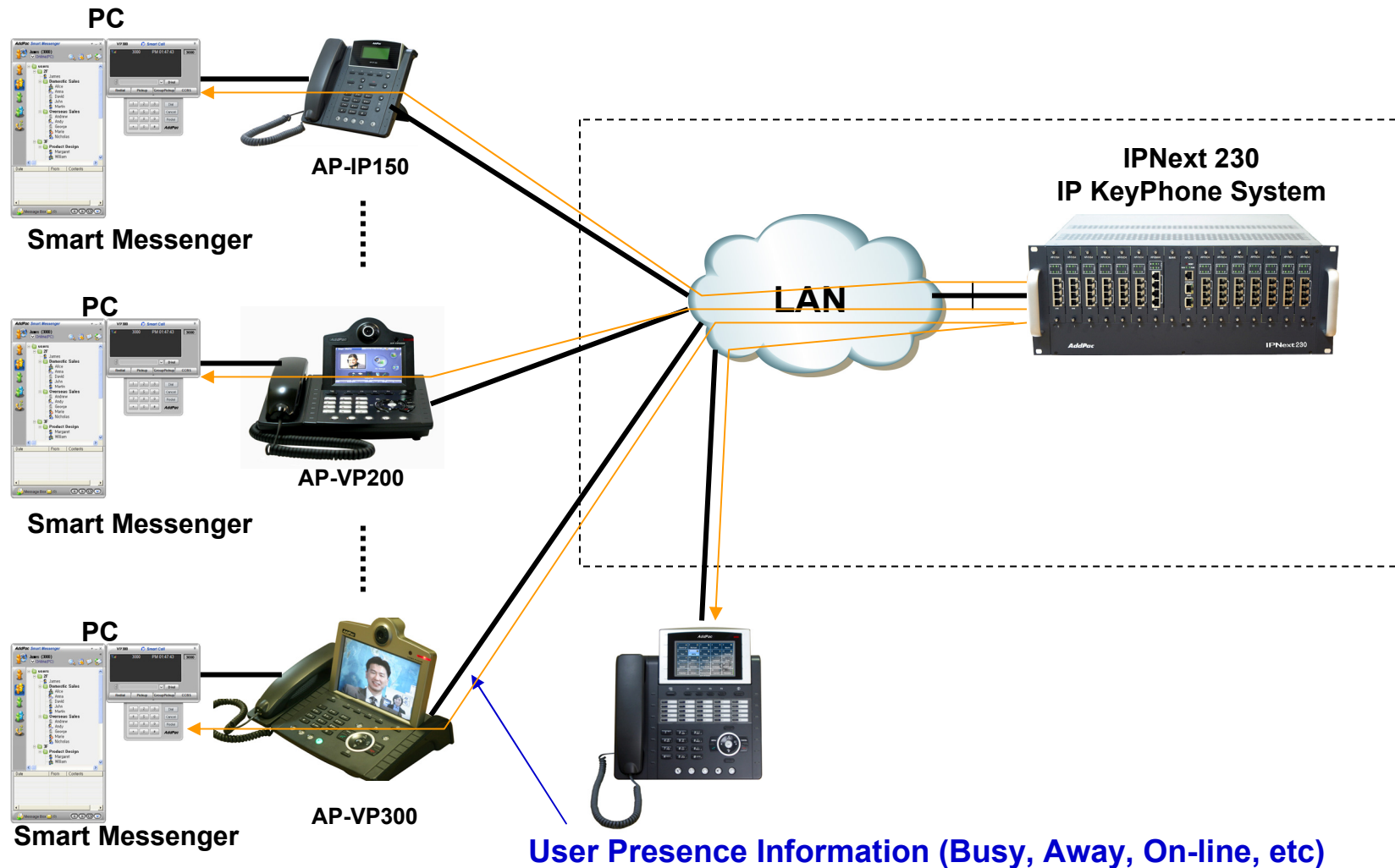
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- IPNext230(Call manager + RTP proxy) has IPv4 and IPv6 address

User Presence Service for UC

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Network Service and Features

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Basic Network Protocols

- ARP, IP, IPv6, TCP, UDP, ICMP, ICMPv6, SCTP, IGMP, MLD

Routing Protocol

- IPv4 : Static
- IPv6 : Static

Service Protocol

- FTP, Telnet, TFTP, DHCP Server/Relay, SNMP Server
- CDP (Cisco Discovery Protocol)
- DNS Resolver , DDNS(nsupdate)
- Bridge
- Syslog
- IP/IPv6 policy control (QoS)
- VPDN (Virtual Private Dial-up Network : L2TP Server)

Network Service and Features

IPNext 230 Next Generation IP KeyPhone System

IPv4/IPv6 Interworking

- NAT/PAT for IPv4
- IP connect (formerly ip-share) and device cascade for IPv4
- IP/IP, IP/GRE tunneling
- NAT-PT
- 6to4, Autoconfig tunneling

IPv4 Address Configuration

- Fixed (Static)
- DHCP
- PPPoE

IPv6 Address Configuration

- Fixed (Static)
- EUI-64
- Autoconfig (Neighbor Advertisement and Solicitation)

Network Service and Features

IPNext 230 Next Generation IP KeyPhone System

Miscellaneous

- Cisco Style CLI
- Standard & Extended IPv4/IPv6 Access List
- Multi-level User Account Management
- IP accounting
- fsh (Embedded file system shell)
- STUN Client

Network Service and Features

IPNext 230 Next Generation IP KeyPhone System

SNMP MIBs

- MIB-II
- RMON MIBs (Statistics, History, Alarm, Hosts Group)
- RFC2465 Management Information Base for IP Version 6: Textual Conventions and General Group
- RFC2466 Management Information Base for IP Version 6: ICMPv6 Group
- RFC2452 IP Version 6 Management Information Base for the Transmission Control Protocol
- RFC2454 IP Version 6 Management Information Base for the User Datagram Protocol
- AddPac Enterprise MIBs
- etc

User Terminals

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- AP-VP500 Video Phone (for CEO)
- AP-VP300 Video Phone (for Director)
- AP-VP250 Video Phone (for Secretary)
- AP-VP150 Video Phone
- AP-VP120 Video Phone
- AP-IP300 IP Phone
- AP-IP150 IP Phone
- AP-IP100 IP Phone
- AP-PT100 Presence Terminal
- AP-WP100* WiFi IP Phone
- Smart Messenger for UC



AP-VP500 Video Phone

IPNext 230 Next Generation IP KeyPhone System

- 12.1 Inch LCD Display, Touch Screen
- External Video Interface
 - Composite (RCA) Video In/Out, S-Video Out,
 - Component Out
- External Audio In/Out
- High-performance Video Codec Support
 - H.263, MPEG-4, JPEG, and H.264
- Powerful Image Resolution Support
 - QCIF(176x144), CIF(352x288), QVGA(320x240), and VGA(640x480)
- Up to 30fps at 1Mbps with VGA-Resolution(MPEG-4)
- Video Conference Call Support (AddPac MCU Inter-working)
- SIP, H.323 Signaling Support
- Rate Control for Video Traffic QoS
 - Ensuring Optimized Quality, Frame Rate with Limited Bandwidth
- High-end Error Resilient Against Various Packet Error



AP-VP300 Video Phone

IPNext 230 Next Generation IP KeyPhone System

- 7 Inch LCD Display, Touch Screen
- External Video Interface
 - Composite (RCA) Video In/Out, S-Video Out
- External Audio In/Out
- High-performance Video Codec Support
 - H.263, MPEG-4, JPEG, and H.264
- Powerful Image Resolution Support
 - QCIF(176x144), CIF(352x288), QVGA(320x240), and VGA(640x480)
- Up to 30fps at 1Mbps with VGA-Resolution(MPEG-4)
- Video Conference Call Support (AddPac MCU Inter-working)
- SIP, H.323 Signaling Support
- Rate Control for Video Traffic QoS
 - Ensuring Optimized Quality, Frame Rate with Limited Bandwidth
- High-end Error Resilient Against Various Packet Error



AP-VP250 Video Phone

IPNext 230 Next Generation IP KeyPhone System

- 4.3 Inch LCD Display, Touch Screen
- 25 Speed-Dial Key with Presence Indication LAMP.
- External Video Interface
 - Composite (RCA) Video In/Out, S-Video Out
- External Audio In/Out
- High-performance Video Codec Support
 - H.263, MPEG-4, JPEG, and H.264
- Powerful Image Resolution Support
 - QCIF(176x144), CIF(352x288), QVGA(320x240), and VGA(640x480)
- Up to 30fps at 1Mbps with VGA-Resolution(MPEG-4)
- SIP, H.323 Signaling Support
- Rate Control for Video Traffic QoS
 - Ensuring Optimized Quality
 - Frame Rate with Limited Bandwidth
- High-end Error Resilient Against Various Packet Error



AP-VP150 Video Phone

IPNext 230 Next Generation IP KeyPhone System

- 4.3 Inch LCD Display
- External Video Interface
 - Composite (RCA) Video Out, S-Video Out
- External Audio In/Out
- High-performance Video Codec Support
 - H.263, MPEG-4, JPEG, and H.264
- Powerful Image Resolution Support
 - QCIF(176x144), CIF(352x288), QVGA(320x240), and VGA(640x480)
- Up to 30fps at 1Mbps with VGA-Resolution(MPEG-4)
- Video Conference Call Support (AddPac MCU Inter-working)
- SIP, H.323 Signaling Support
- Rate Control for Video Traffic QoS
 - Ensuring Optimized Quality
 - Frame Rate with Limited Bandwidth
- High-end Error Resilient Against Various Packet Error



AP-VP120 Video Phone (New)

IPNext 230 Next Generation IP KeyPhone System

- 4.3 Inch LCD Display
- External Video Interface
 - Composite (RCA) Video Out, S-Video Out
- External Audio In/Out
- High-performance Video Codec Support
 - H.263, MPEG-4, JPEG, and H.264
- Powerful Image Resolution Support
 - QCIF(176x144), CIF(352x288), QVGA(320x240), and VGA(640x480)
- Up to 30fps at 1Mbps with VGA-Resolution(MPEG-4)
- Video Conference Call Support (AddPac MCU Inter-working)
- SIP, H.323 Signaling Support
- Rate Control for Video Traffic QoS
 - Ensuring Optimized Quality
 - Frame Rate with Limited Bandwidth
- High-end Error Resilient Against Various Packet Error



AP-IP300 Premium IP Phone

IPNext 230 Next Generation IP KeyPhone System

- LCD Window : 4.3 Inch High Quality Color LCD
- External I/O Interface
 - Audio In/Out
 - Two(2) Fast Ethernet Interface
 - PSTN FXO Interface (option)
 - USB 1.1 Host Mode Interface
- 25 Speed Dial Key and Presence Indication LAMP
- Various Voice Codec Support
 - G.711, G.726, G.729, G.723.1, etc
- SIP, H.323 Signaling Support
- Traffic Control, IP Share
- IP Audio Broadcasting Support



AP-IP150 IP Phone

IPNext 230 Next Generation IP KeyPhone System

- LCD Display
- External I/O Interface
 - Audio In/Out
 - Two(2) Fast Ethernet Interface
 - RS-232C Console(RJ45)
 - PSTN FXO Interface (optional)
- PoE (Power over Ethernet) Support
- Various Voice Codec Support
 - G.711, G.726,G.729,G.723.1 etc
- SIP, H.323 Signaling Support
- Traffic Control, IP Share
- IP Audio Broadcasting Support



AP-IP100 IP Phone

IPNext 230 Next Generation IP KeyPhone System

- LCD Window : 66.54mm x 33.26mm(Active Area) Graphic LCD
- External I/O Interface
 - Audio In/Out
 - Two(2) Fast Ethernet Interface
 - PSTN FXO Interface (optional, AP-IP100E Model)
 - FXS Interface (optional, AP-IP100B Model)
- Various Voice Codec Support
 - G.711, G.726, G.729, G.723.1, etc
- SIP, H.323 Signaling Support
- Traffic Control, IP Share
- IP Audio Broadcasting Support



AP-PT100 Presence Terminal

IPNext 230 Next Generation IP KeyPhone System

- User Presence and Touch Screen based Speed Dialing Terminal
- “7 Inch Color TFT LCD with Touch Screen
- Inter-working with IP Terminal, Presence Server, Call Manager
- Multiple Terminal Cascading Feature
- User Presence Group Feature
- Firmware Upgradeable Architecture
- PoE (Power over Ethernet) Function
- Internal Speaker



Smart Messenger for UC

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- **Smart Messenger Program**

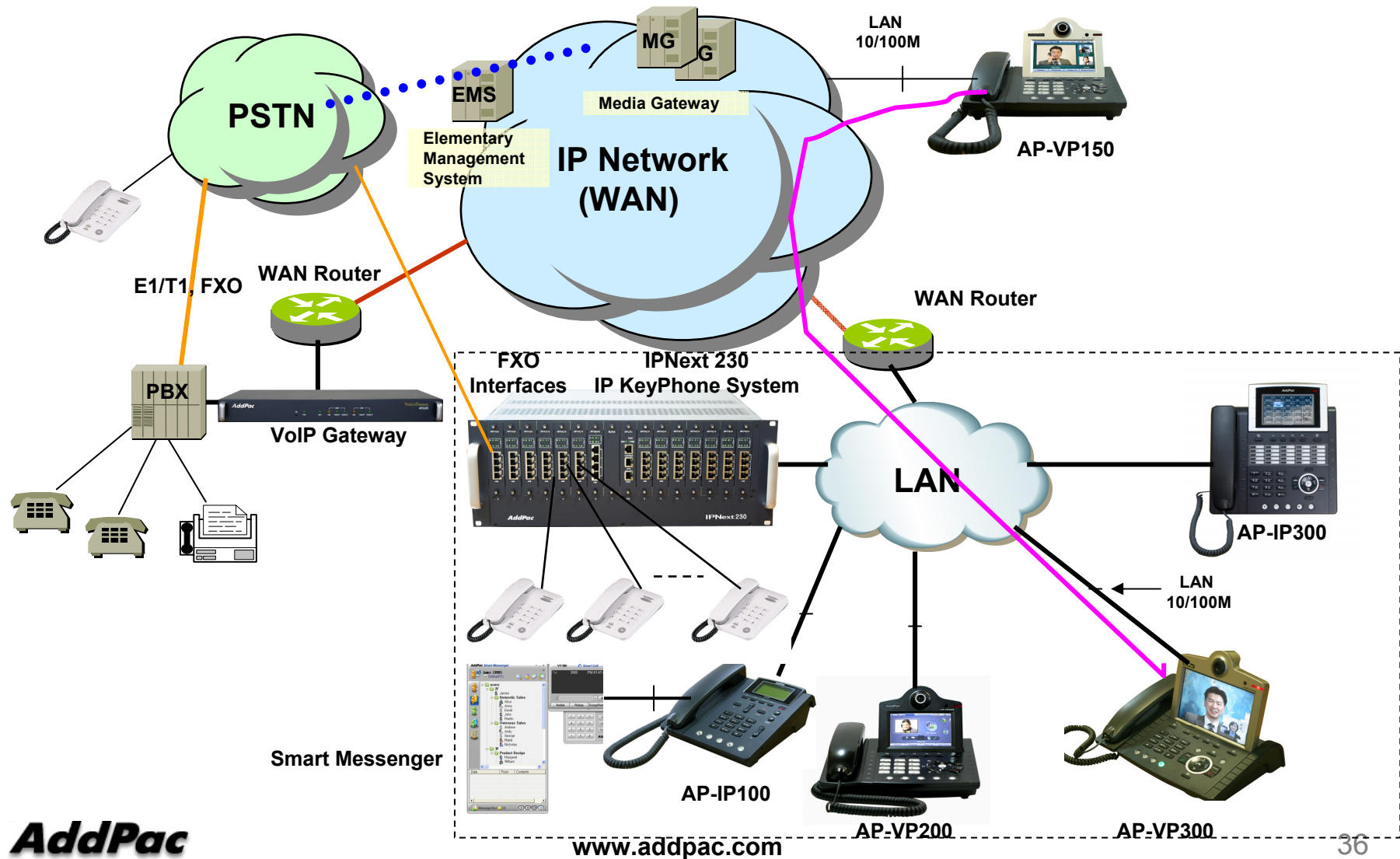
- PC based MS-Window Program
- Support Messenger Service
- Support Various Address Book
- Support User Presence Information (Busy, Away, On-line, etc)
- Support User Search Feature
- Interoperation with Address Book and Smart Phone
- Support Smart Phone Control and Setup
 - Call Control and Forward Setup
- Support Unified Message Box
 - Voice Mail Box
 - Short Message Box



Smart Messenger

Standard IP KeyPhone System Application

IPNext 230 Next Generation IP KeyPhone System



Ordering Information

- **IPNext230 Next Generation IP KeyPhone System**
 - IPNext230 IP KeyPhone System Main Body
 - High-performance RISC CPU
 - 2-ports 10/100Mbps Fast Ethernet and 1-port RS-232C Console
 - Dual Power Supply Module for Power Redundancy
 - Including Network Cable Set & Power Supply Cable,etc.
 - VoIP Interface Modules (Option)
- **Built-in APOS Internetworking Software for IPNext230**
- **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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