AP-SPS180
SIP Paging Server

High-performance Next Generation SIP Paging Server Solution





Product Overview

(Without notice, following described technical spec. can be changed)

AddPac Technology

Sales and Marketing

www.addpac.com

Contents

- Product Overview
- Hardware Specification
- System Redundancy Features
- Software Service
- Network Service and Features
- SIP IP Phone for Paging Service
- SIP Paging Terminals
- SIP Paging Server Service Diagram
- Paging Scenario & Service Features
- Ordering Information

Product Overview

AP-SP180 SIP Paging Server

- SIP Application Server, Proxy, Registrar and Location Server
- SIP Paging Server Service
- Standalone SIP Paging & Broadcasting Service Support
- Legacy IP-PBX Clone Mode Support (Trunk, etc)
- RTP(Real-time Transport Protocol) Support for Unicast and Multicast Paging Service
- Internal & External RTP Routing Service Support
- Web based SPMS(SIP Paging Management Software) Support
- Various Paging Service Mode Support (Ex : Scheduled Broadcasting, etc)
- Various SIP Paging Terminal Support (SIP Paging Terminal, SIP Phone, etc) beside AddPac Terminal
- Paging Service Support via SIP IP Phone
- Paging Service Support via AddPac Smart Communicator (PC based AddPac Multimedia Manager)
- TTS Paging Service Support (Option)
- High Performance RISC Architecture
- Powerful Network Protocols (PPPoE, DHCP, Static Routing, etc)
- Private IP Address Support (ex : Wifi AP Environment)
- Firmware Upgradeable Architecture

Product Highlights

AP-SPS180 SIP Paging Server

Advanced SIP Paging Server

SIP Application Server, Proxy, Registrar and Location Server

Standalone SIP Paging & Broadcasting Service Support

SPMS (SIP Paging Management Software) Support

Powerful IVR Support



Private IP Address Support

Support the Various SIP Paging Terminals

APOS™ Technology
Multimedia Network Protocol

Various paging Service Support (Ex : schedule paging service,etc)

IPv4/IPv6 based Network Protocol & Voice Traffic QoS

Broadband IP Networking with Dual Fast Ethernet

Smart Multimedia Management for Operation & Management

Hardware Specification

AP-SPS180 SIP Paging Server

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

Hardware Specification

AP-SPS180 SIP Paging Server

Front Side



LAN1 (10/100Mbps)

LAN0(10/100Mbps)

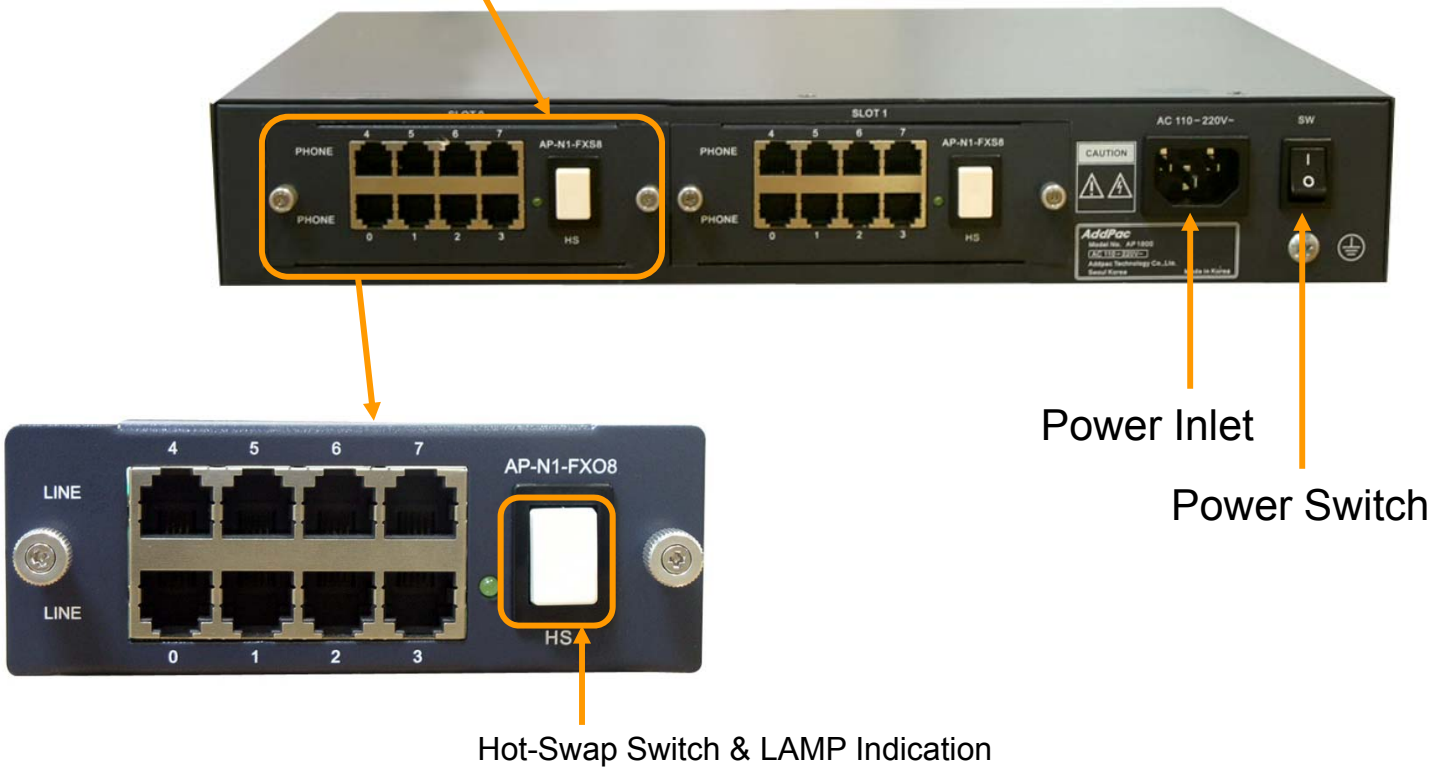
Console Port

Hardware Specification

AP-SPS180 SIP Paging Server

Back Side

PSTN Interface Module



Power Inlet

Power Switch

Hot-Swap Switch & LAMP Indication

Hardware Specification

AP-SPS180 SIP Paging Server

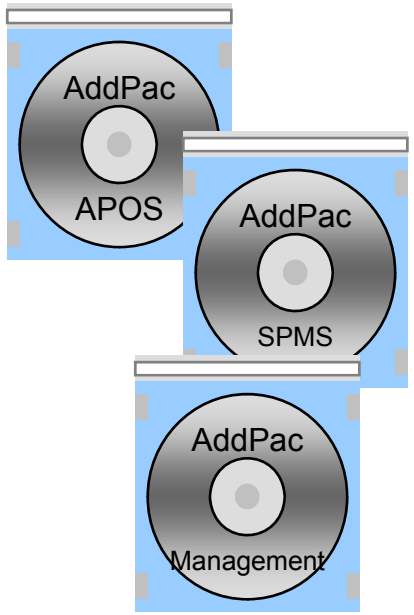
PSTN Interface Module (Option)

AP-N1-FXS8		8-Port FXS Voice Processing Module (8 x RJ11)
AP-N1-FXO8		8-Port FXO Voice Processing Module (8 x RJ11)
AP-N1-FXO4S4		4-Port FXO and 4-Port FXS Voice Processing Module (8 x RJ11)
AP-N1-E1T1		1-Port VoIP Digital E1/T1 Interface Module(1xRJ45)

Software Service

AP-SPS180 SIP Paging Server

- Built-in AddPac APOS Internetworking Software
  - Scalability, Functionality, and Stability Features
  - Advanced SIP Paging Server Service Features
  - QoS Control Features
- Web based SPMS
  (SIP Paging Management Service) Support
- Various Broadcasting Management Service
- Firmware Upgradeable Architecture
- Industry Standard Network Protocol Features



SIP Signaling Service and Features

AP-SPS180 SIP Paging Server

- **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**
- **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**

Network Service and Features

AP-SPS180 SIP Paging Server

- 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

AP-SPS180 SIP Paging Server

- 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

AP-SPS180 SIP Paging Server

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

Network Service and Features

AP-SPS180 SIP Paging Server

- SNMP MIBs
  - MIB-II
  - RMON MIBs (Statistsics, 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

SIP Phones
for Paging Service

IP Phones for AddPac IP-PBX

	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(Option)	Support	Support	Support	Support	Support	Support
FXO(Option)	Support	Support	Support	Support	Support	Support

Smart Communicator

AP-SMP100 SIP Soft Phone (Video/Voice)

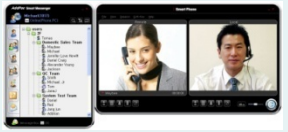
- MS-Window based SIP Soft-Phone
- Smart Multimedia (Video/Voice) Soft-Phone
- SIP Real-time Audio/Video Broadcasting Terminal Solution
- Built-In Smart Messenger Function
- Up to 30fps with HD-Resolution
- Video Conference Call Support (AddPac External MCU Inter-working)
- Advanced Voice/Video Traffic QoS
- SIP, H.323* Signaling Support
- Support Various Call Signal via AddPac SIP Paging Server





SIP Paging Terminals

SIP Paging Terminal & Solution

SIP Paging Management S/W	SIP Paging Servers	SIP Paging Terminals	SIP Phone for Paging Service
 AP-SPMS	 AP-SPS2000	 AP601	 AP-IP300 + AP-PT20x2
	 AP-SPS600	 AP1602	 AP-IP120 + AP-PT20x2
	 AP-SPS180	 AP1605	 Soft SIP Phone

AP601

SIP Paging Terminal



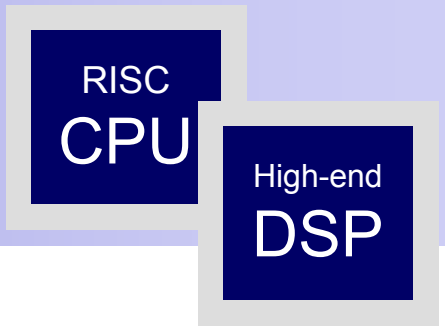
Product Overview

AP601 SIP Paging Terminal

- SIP based Voice Broadcasting Terminal Solution
- Hardware Architecture for Voice Broadcasting Terminal Service
- Remote Broadcasting Service at terminal side
- High Quality Voice Codec Support (High Quality Codec, G.711, G.726, etc)
- RTP/UDP Protocol Support
- Unicast and Multicast Broadcasting Scheme
- SPMS (SIP Paging Management Software) Support
- One(1) channel SPK/MIC Port
- Volume Control Button Support (Up, Down)
- Option (AP601A) : AMP. Built-in
- High-Quality Audio/Voice Service
- Firmware Upgradeable Architecture
- Broadcasting Solution with Outstanding Network Service Capability
- External Power Supply

Hardware Specification

AP601 SIP Paging Terminal



- RISC Microprocessor Computing Power
- High-end Programmable DSP Hardware Architecture
- High Quality Audio Encoding/Decoding Service
- One(1) 10/100Mbps Fast Ethernet (RJ45)
- One(1) RS-232C Interface (RJ45)
- SPK/MIC Audio Interface Support
- Volume Control Button Support (Up, Down)
- External Power Supply Support
- Option : 30Watt Digital AMP. Built-in (AP601A)

Hardware Specification

AP601 SIP Paging Terminal

RISC CPU

High-end DSP

Front Side



Speaker Out

MIC Input

Speaker Volume Control Button (Up, Down)

RS232C Console

Fast Ethernet (LAN)

ON-AIR LED

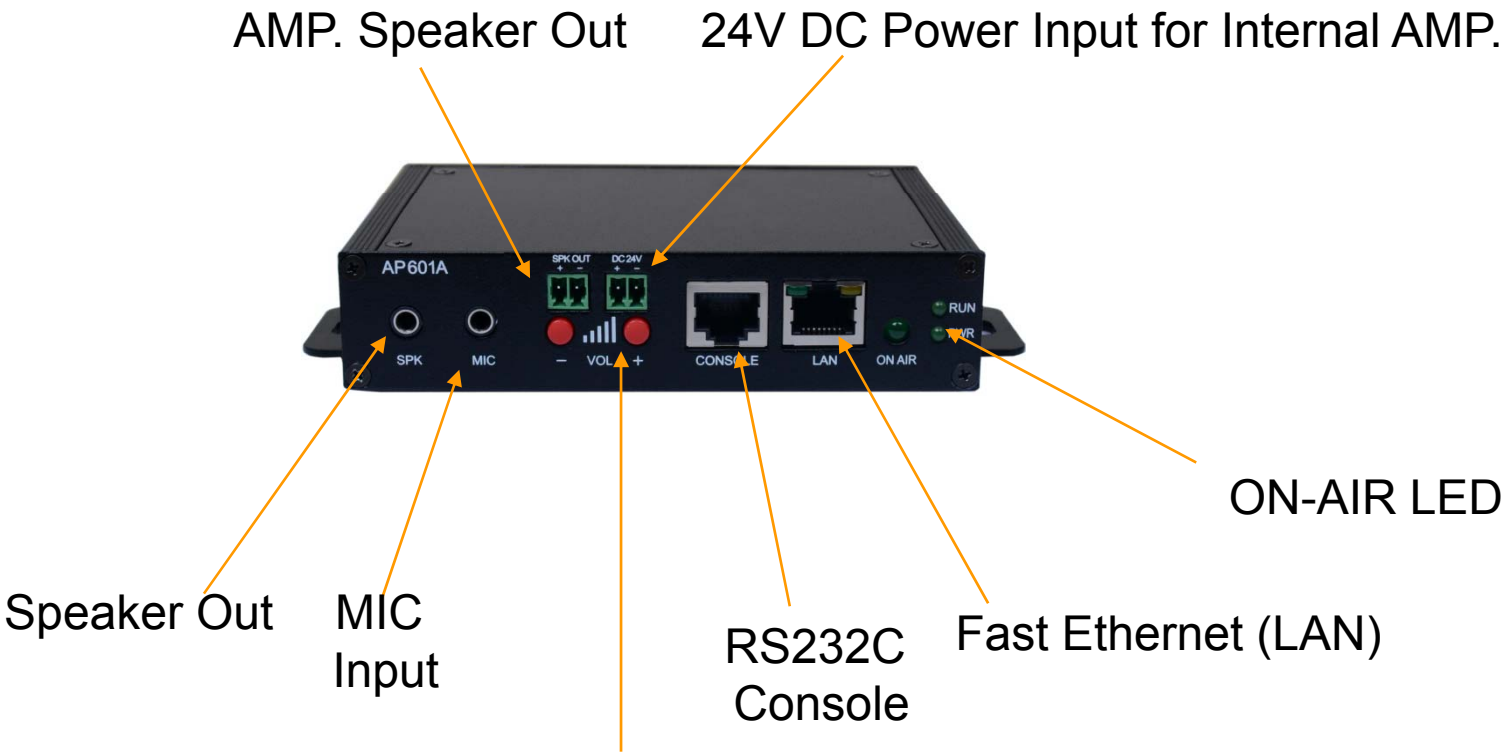
Hardware Specification

AP601 SIP Paging Terminal

RISC CPU

High-end DSP

Front Side
(AMP. Built-In Model : AP601A)



Hardware Specification

AP601 SIP Paging Terminal

RISC CPU

High-end DSP

Back Side

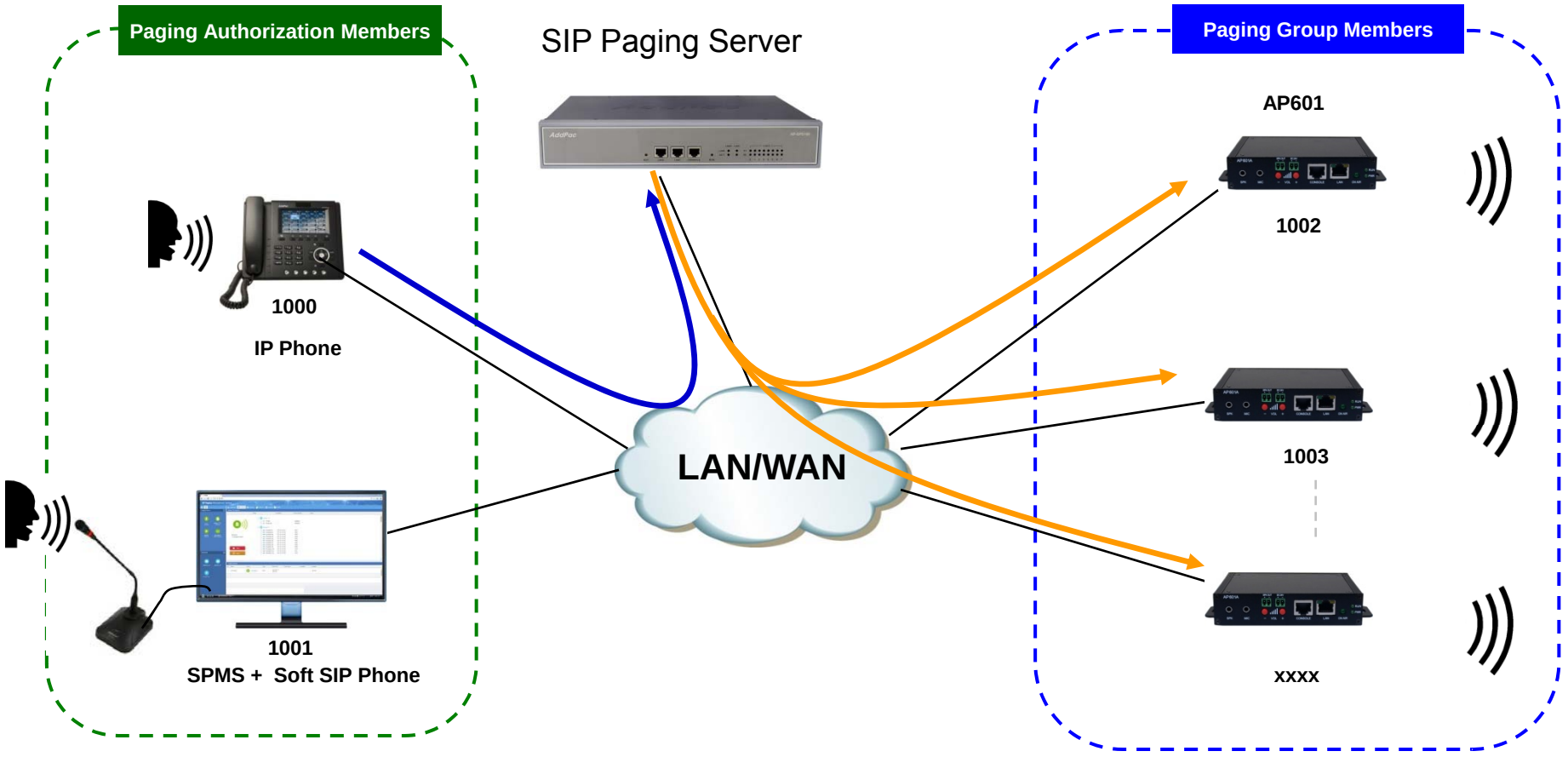


External Power Supply Adaptor

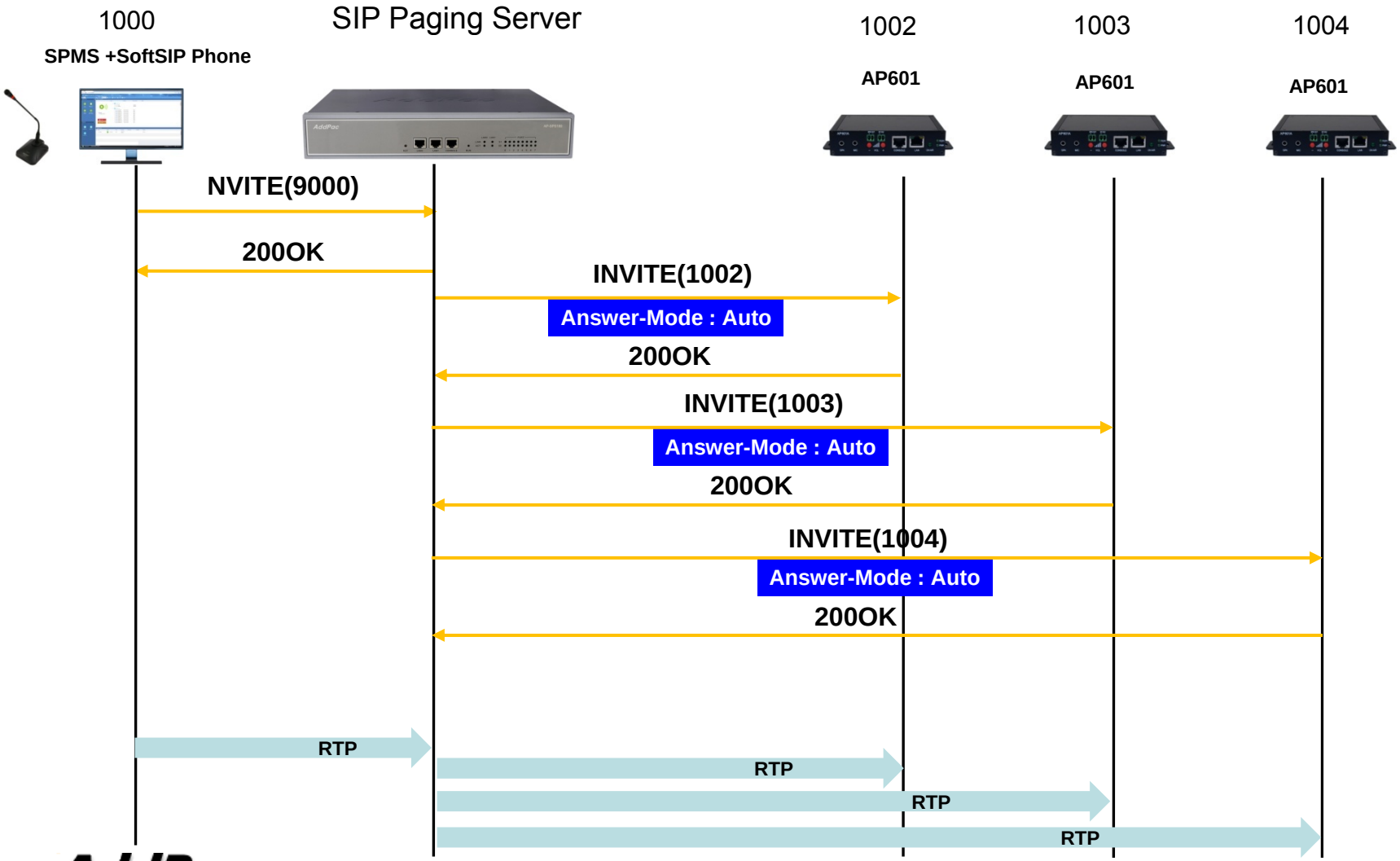
Power Switch

SIP Paging Server Service Diagram

SIP Broadcasting Network Diagram



Paging Group Signaling Flow (Standalone Mode)

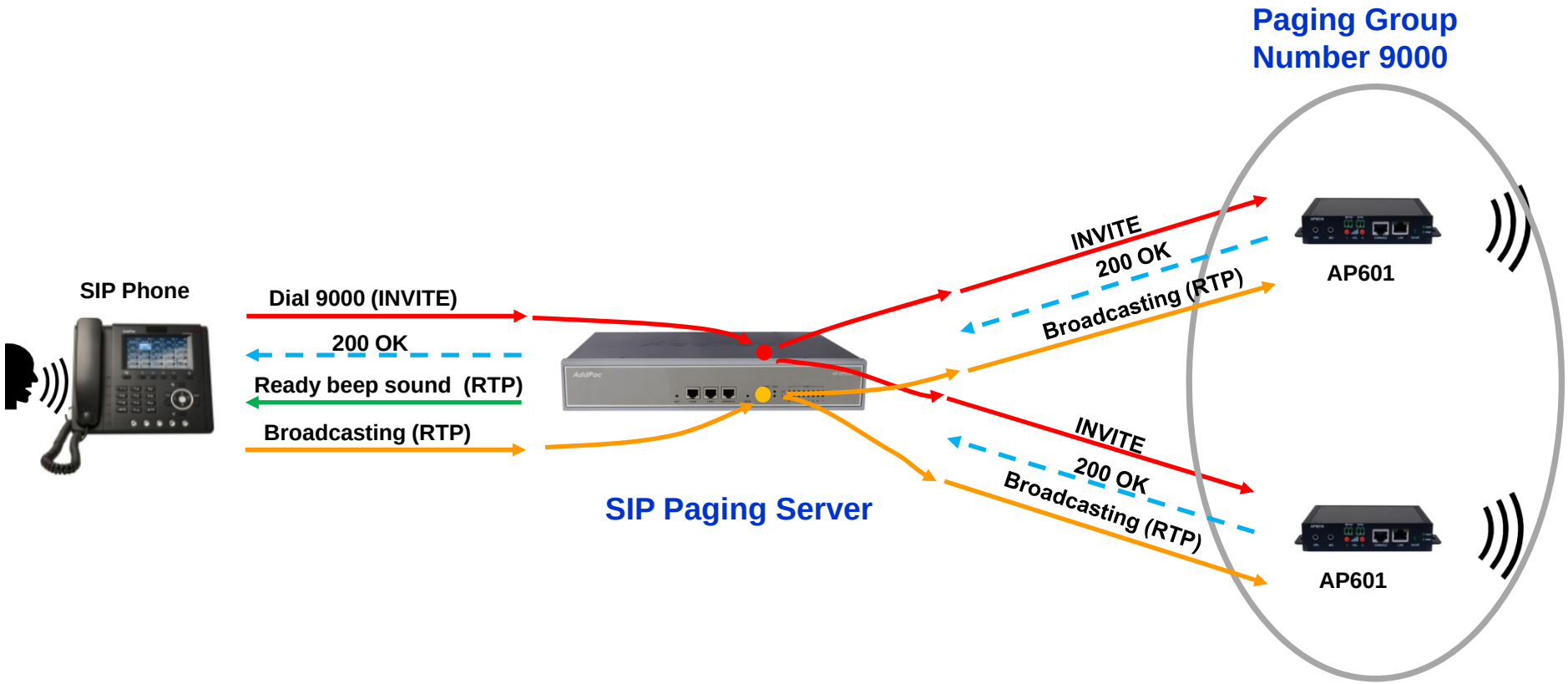


Paging Scenarios & Service Features

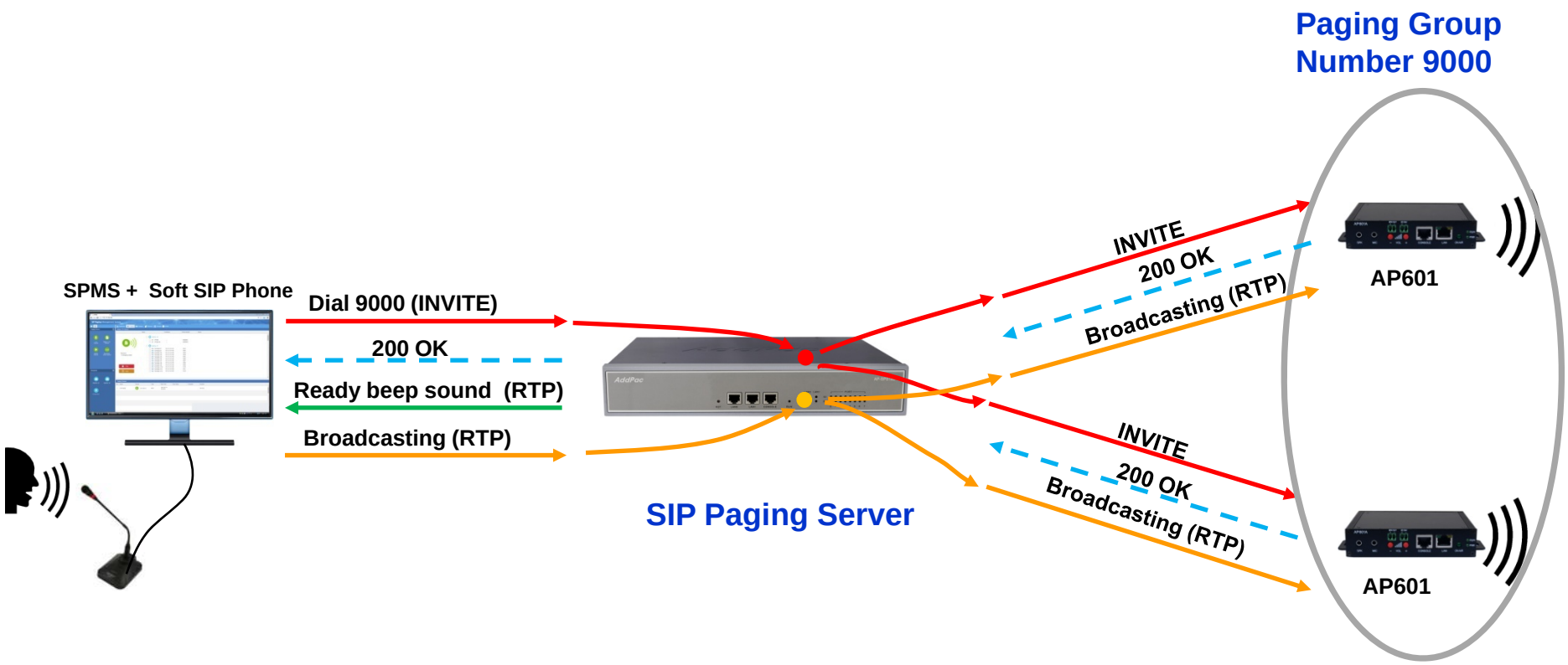
Paging Scenarios

- SIP Phone Initiated Real-Time Paging
- Soft SIP Phone Initiated Real-Time Paging
- SIP Phone Initiated Real-Time Paging via PBX
- SIP Phone Initiated Real-Time Paging to PBX
- SIP Paging to and from PSTN/Mobile Network
- Web Controller Initiated Real-Time Paging
- Add-hoc Paging with IVR
- Recorded Paging with Simultaneous Casting
- Recorded Paging with Individual Casting
- TTS (Text to Speech) Paging
- Audio and SMS Paging by HTTP API
- Scheduled Paging

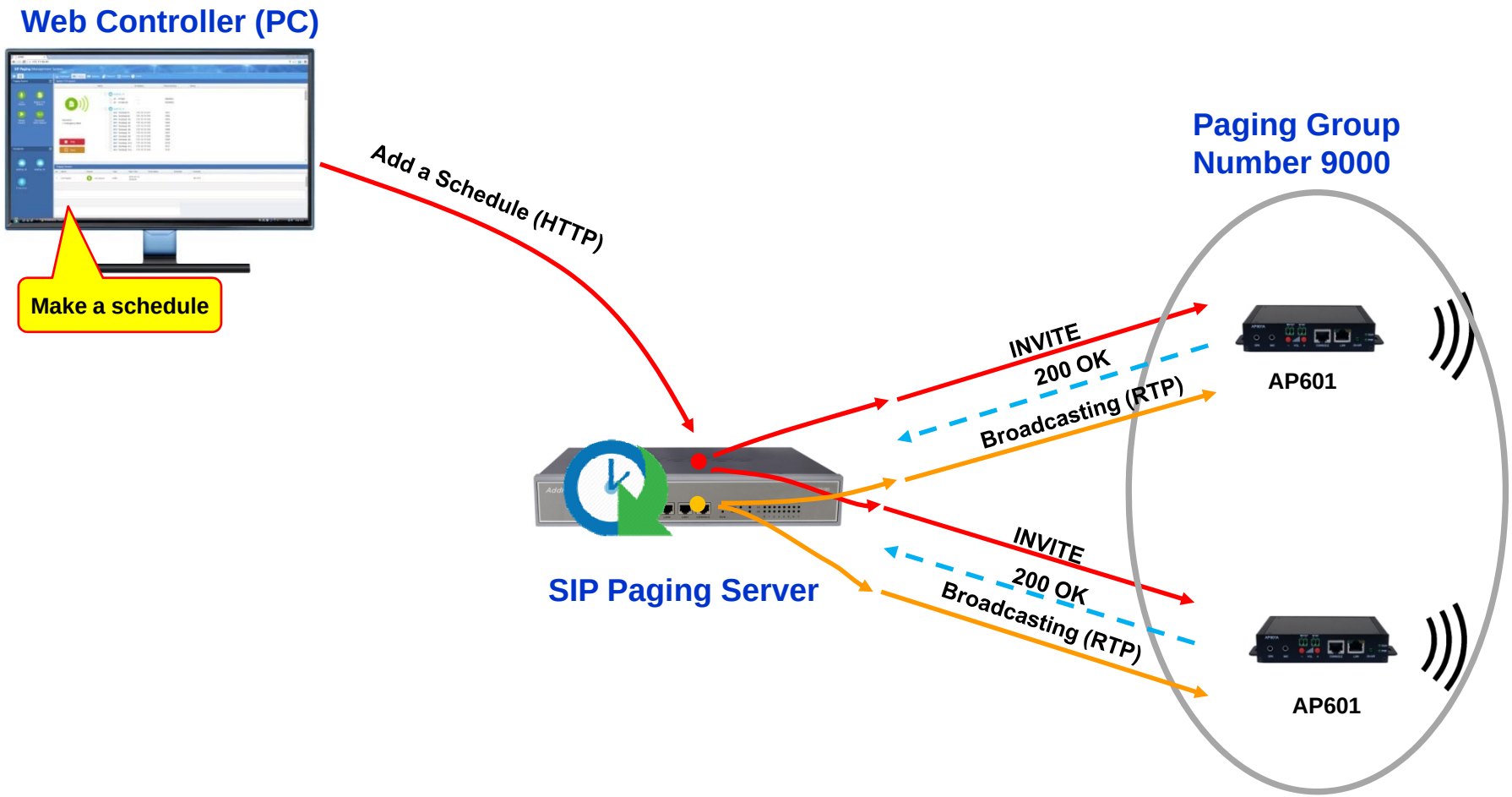
SIP Phone Initiated Real-Time Paging



Soft SIP Phone Initiated Real-Time Paging



Scheduled Paging

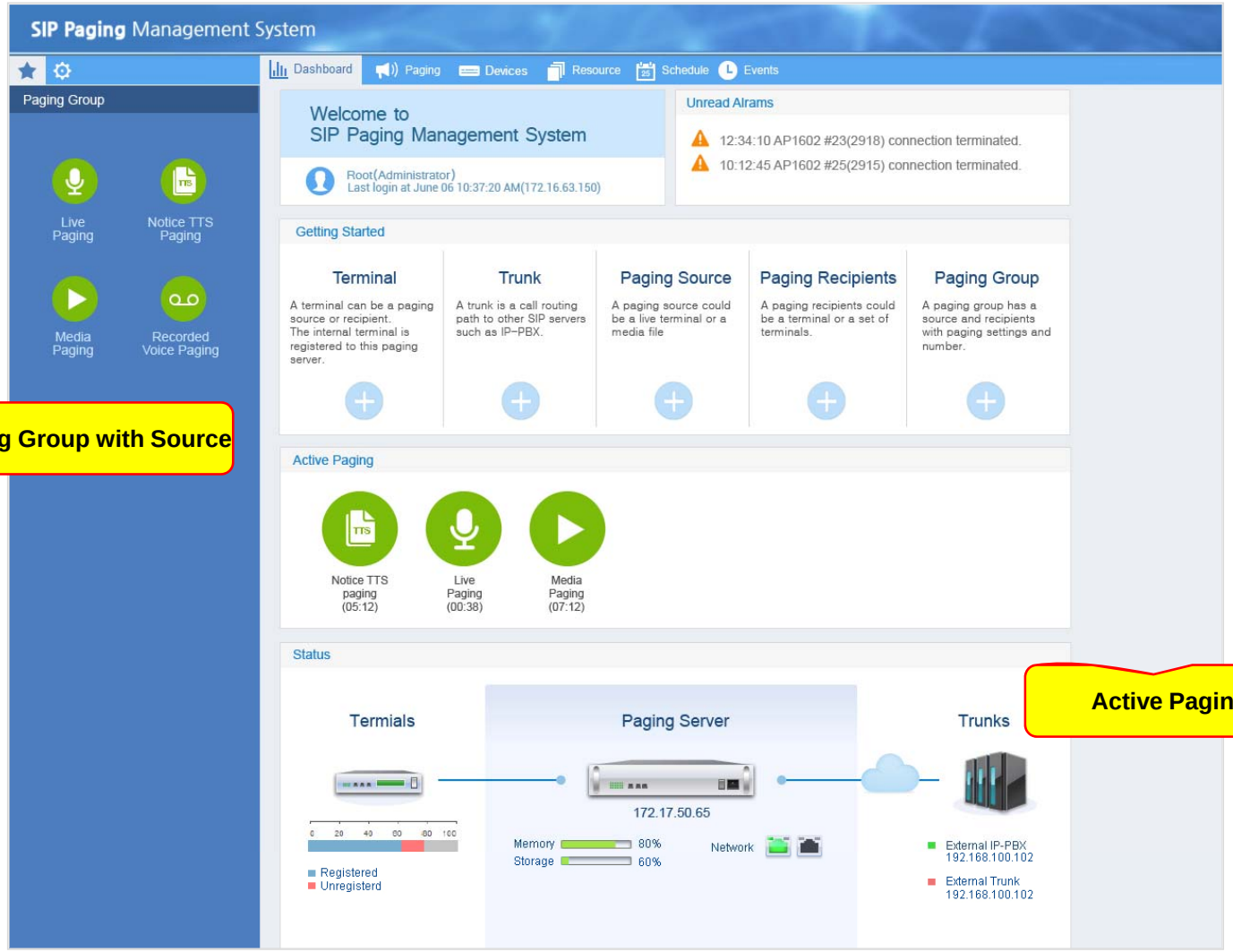


SIP Paging Management Software (SPMS)

Contents

- SIP Paging Management Software Overview
  - Paging Device Management
  - Paging Group Management
  - Access Authority Management
  - Real-time and Recorded Paging
  - One Click Paging
  - Scheduled Paging
  - HTTP API Paging
  - TTS Paging
  - SMS Paging

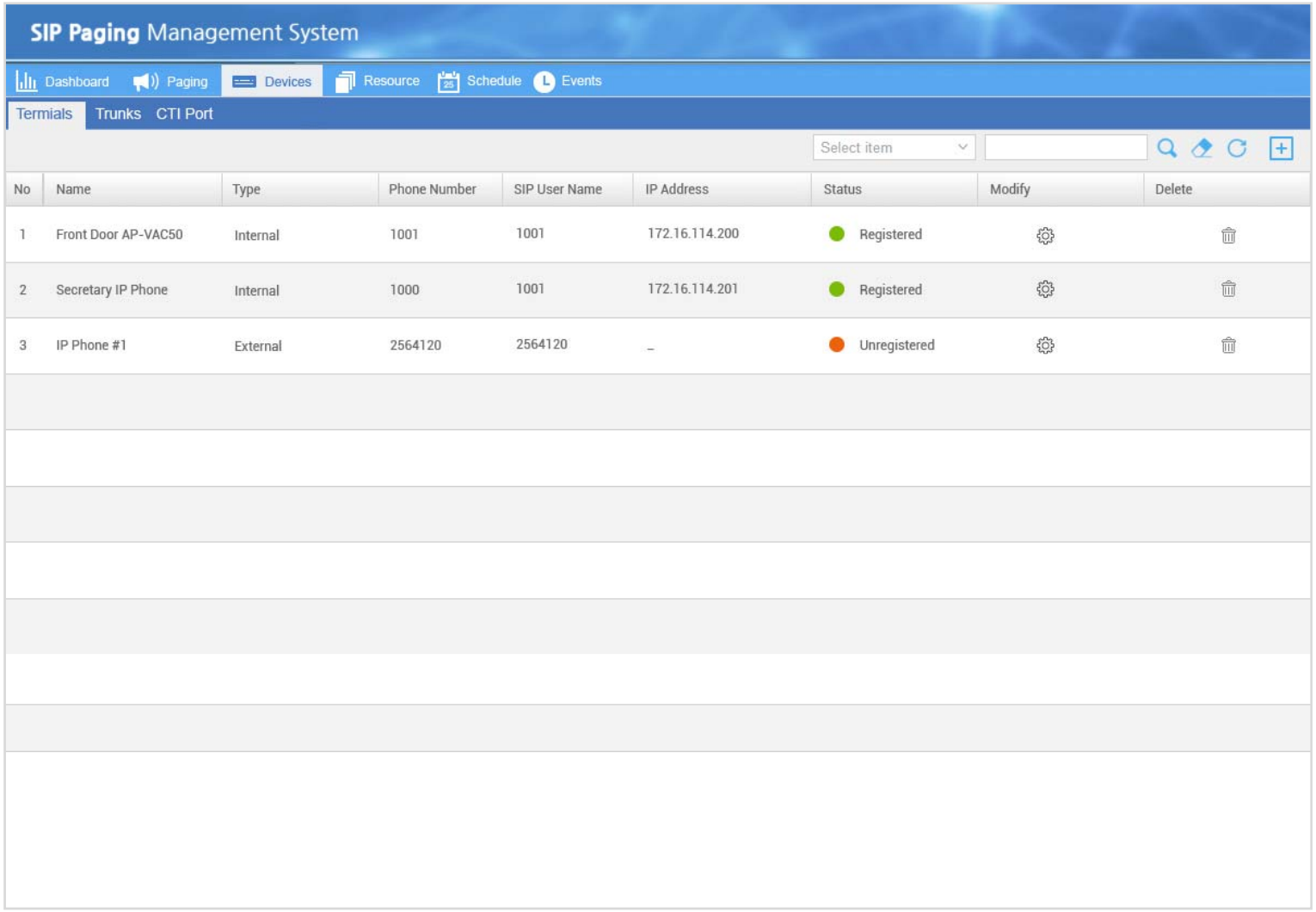
SIP Paging Management System GUI Initial Screen



Favorite Paging Group with Source

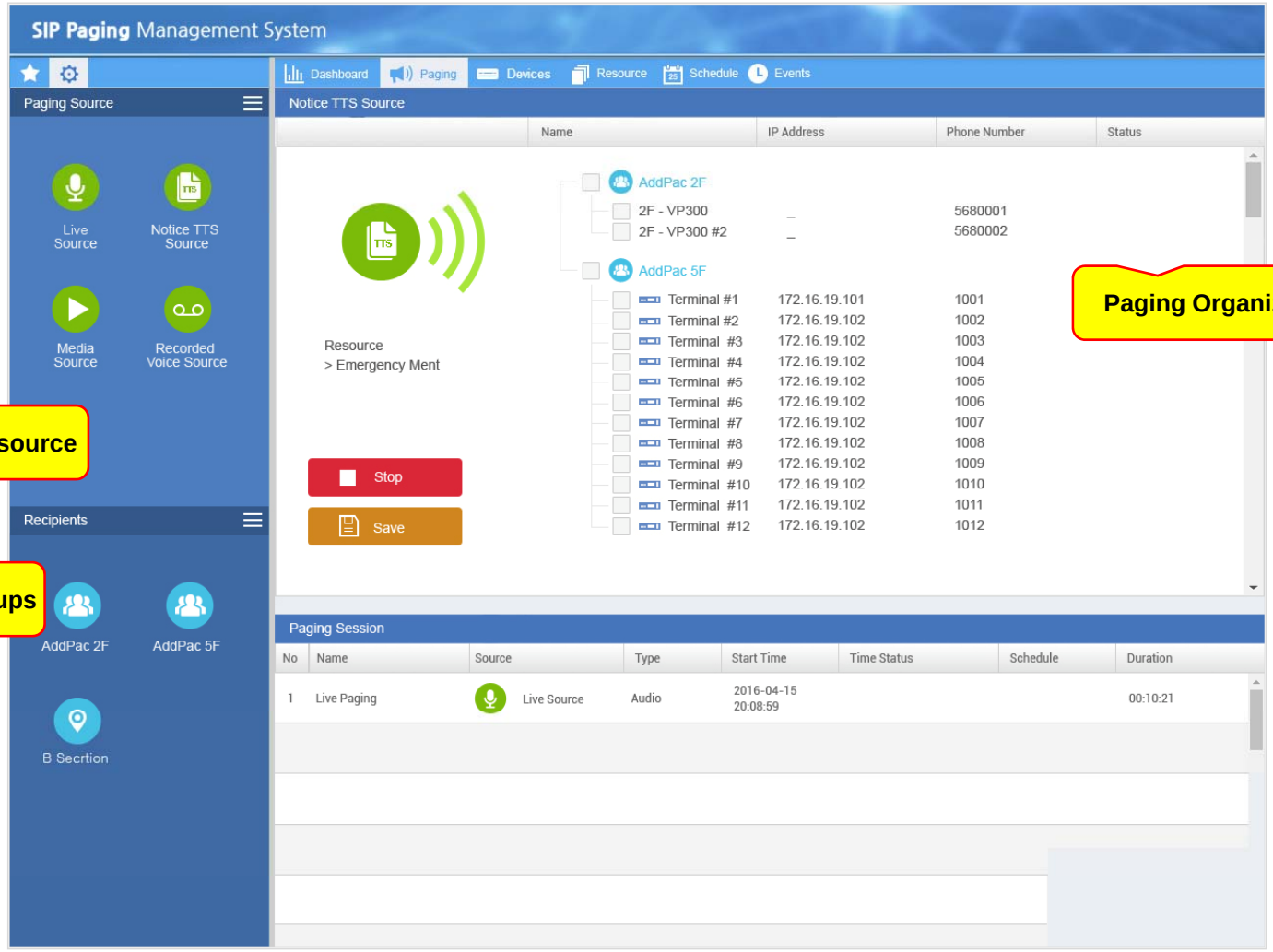
Active Paging Sessions

Paging Device Management

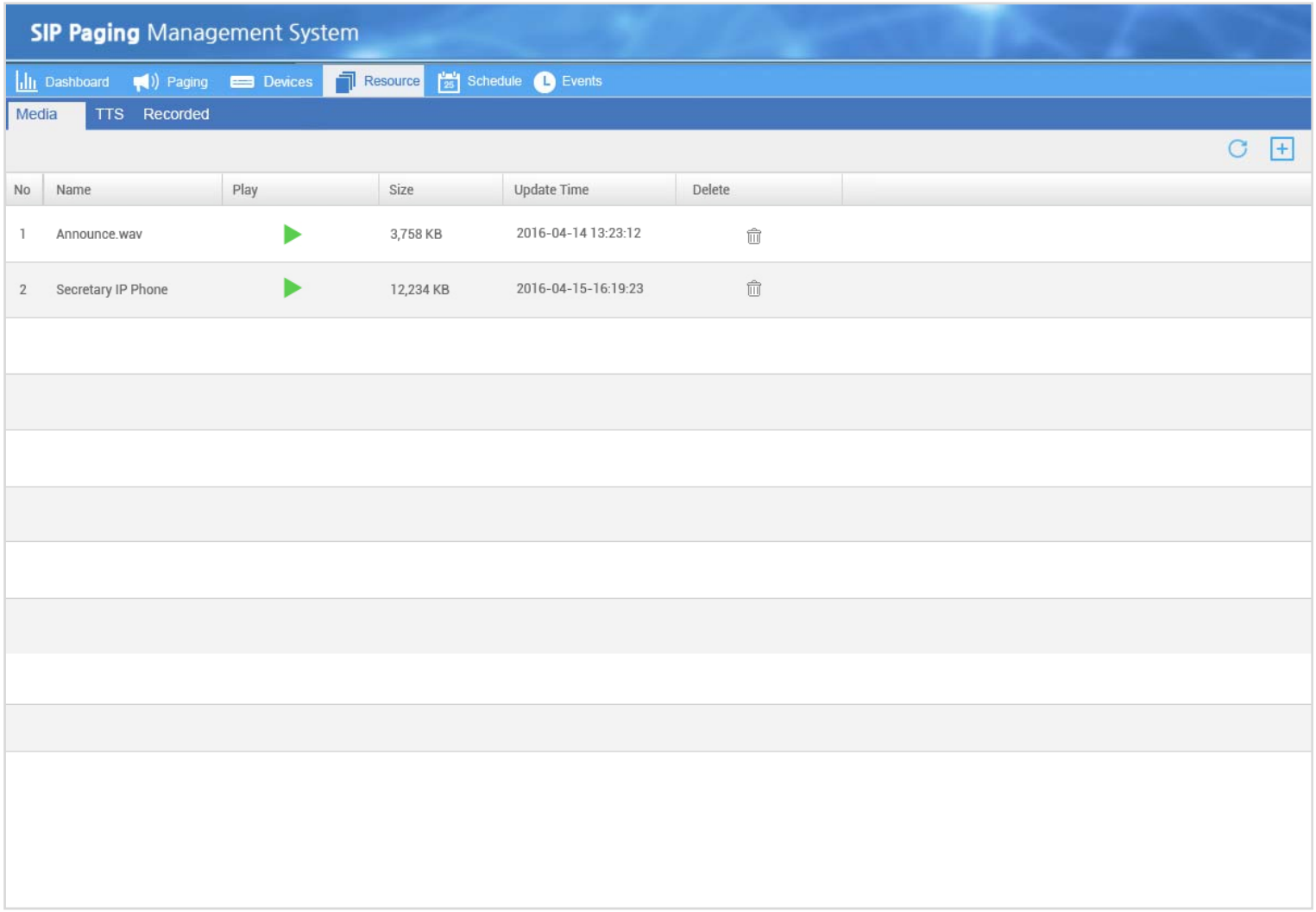


No	Name	Type	Phone Number	SIP User Name	IP Address	Status	Modify	Delete
1	Front Door AP-VAC50	Internal	1001	1001	172.16.114.200	Registered		
2	Secretary IP Phone	Internal	1000	1001	172.16.114.201	Registered		
3	IP Phone #1	External	2564120	2564120	_	Unregistered		

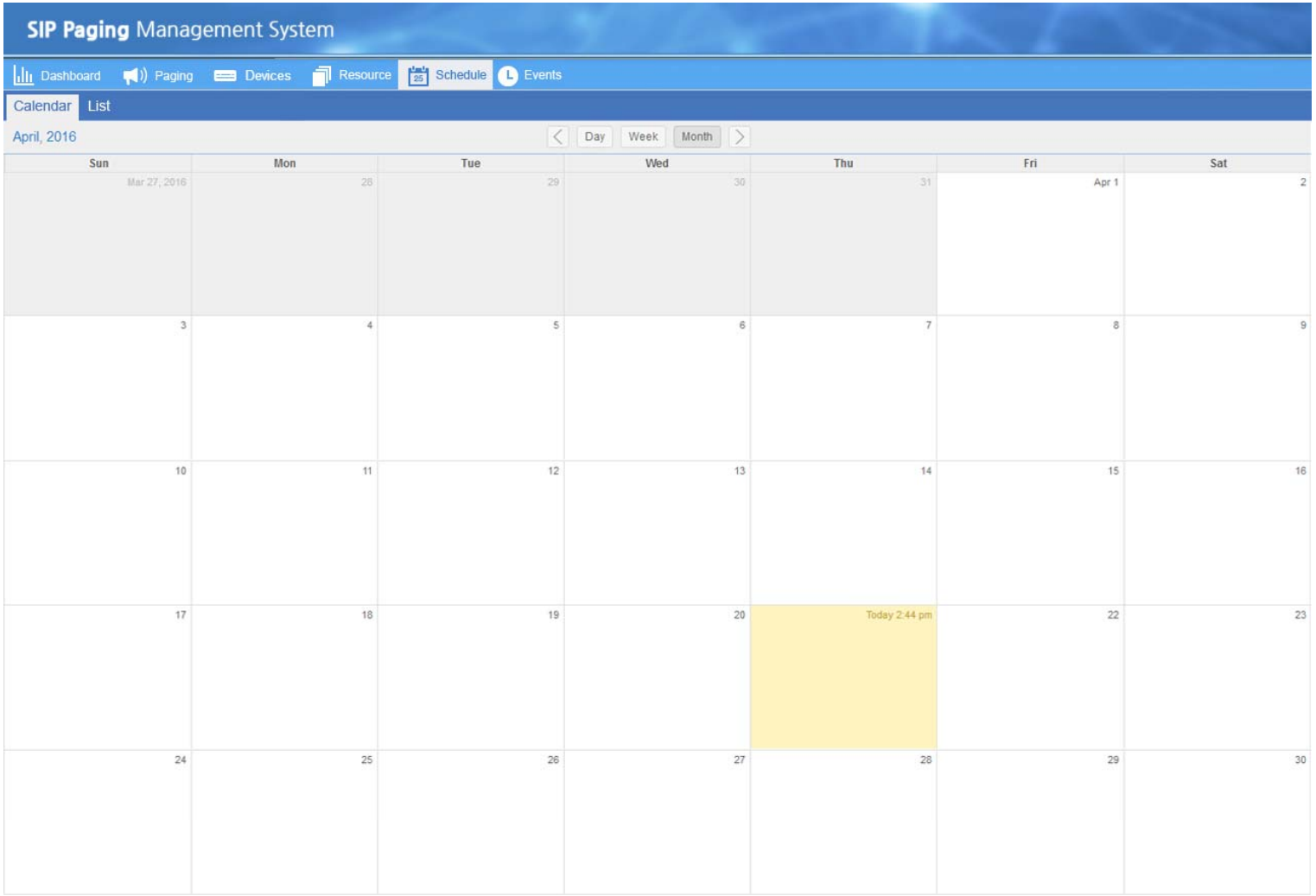
Paging Group Management



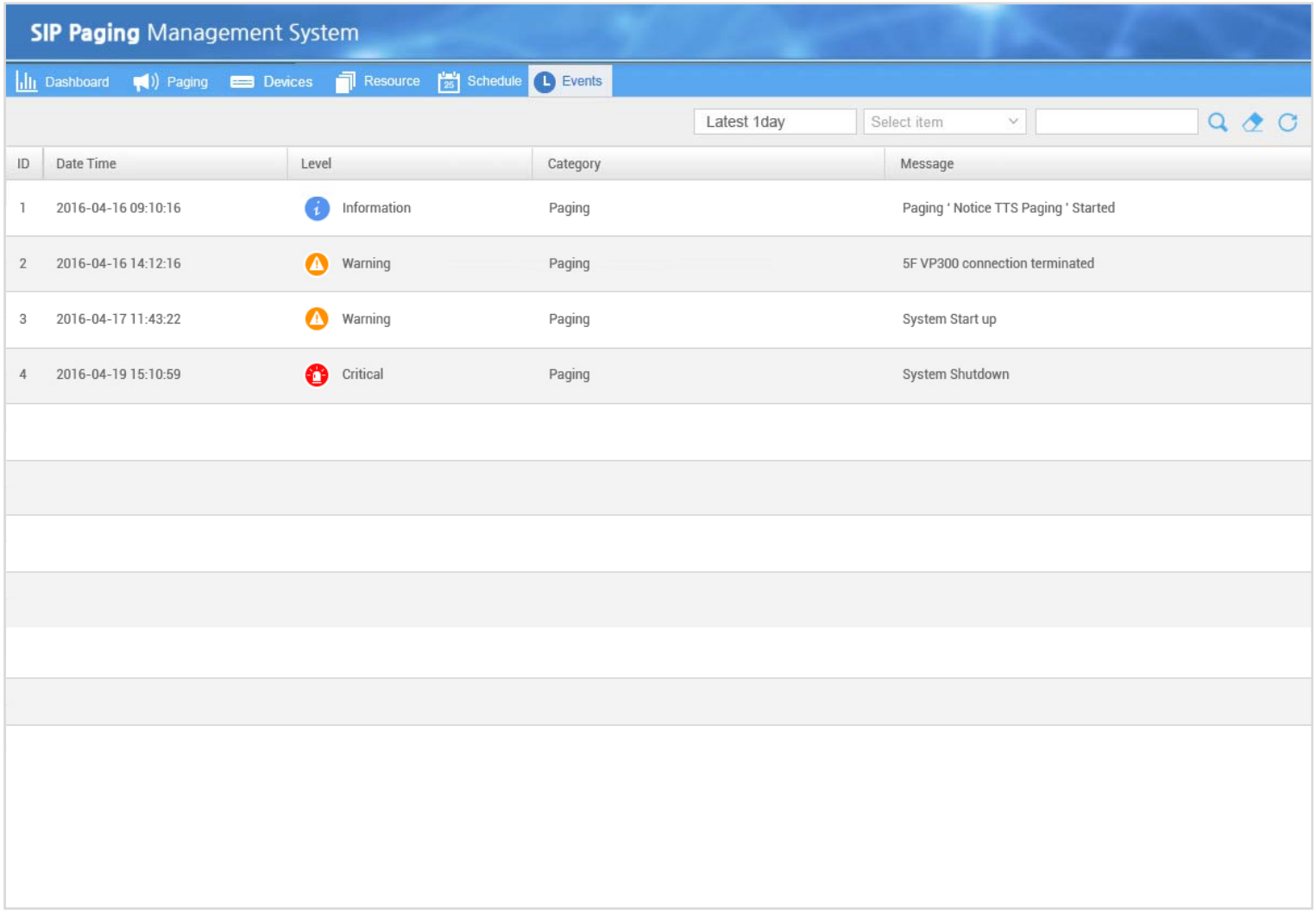
TTS Paging


SIP Paging Management System
Dashboard
Paging
Devices
Resource
Schedule
Events
Media
TTS
Recorded
No
Name
Play
Size
Update Time
Delete
1
Announce.wav
3,758 KB
2016-04-14 13:23:12
2
Secretary IP Phone
12,234 KB
2016-04-15-16:19:23

Scheduled Paging Management



Events


SIP Paging Management System
Dashboard
Paging
Devices
Resource
Schedule
Events
Latest 1day
Select item
ID
Date Time
Level
Category
Message
1
2016-04-16 09:10:16
Information
Paging
Paging ' Notice TTS Paging ' Started
2
2016-04-16 14:12:16
Warning
Paging
5F VP300 connection terminated
3
2016-04-17 11:43:22
Warning
Paging
System Start up
4
2016-04-19 15:10:59
Critical
Paging
System Shutdown

Ordering Information

- AP-SPS180 SIP Paging Server
  - AP-SPS180 SIP Paging Server Main Body
  - High-performance RISC CPU
  - 2-ports 10/100Mbps Fast Ethernet and 1-port RS-232C Console
  - Internal Power Supply
  - Including Network Cable Set & Power Supply Cable, etc.
  - **PSTN Interface Modules (Option)**
- Built-in APOS Internetworking Software for AP-SPS180
- 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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Sales and Marketing

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