

AP-ISMS100

Integrated Security Management System

High-performance Integrated Security Management System
Solution for Unmanned Security Zone

Product Overview

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



AddPac

AddPac Technology

Sales and Marketing

www.addpac.com

Contents

- Product Overview
- Product Highlight
- Hardware Specification
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 - Voice Paging Service
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- Application Network Diagram
- Integrated Security Management System Comparison Table (unmanned system, regional command center)
- Ordering Information

Product Overview

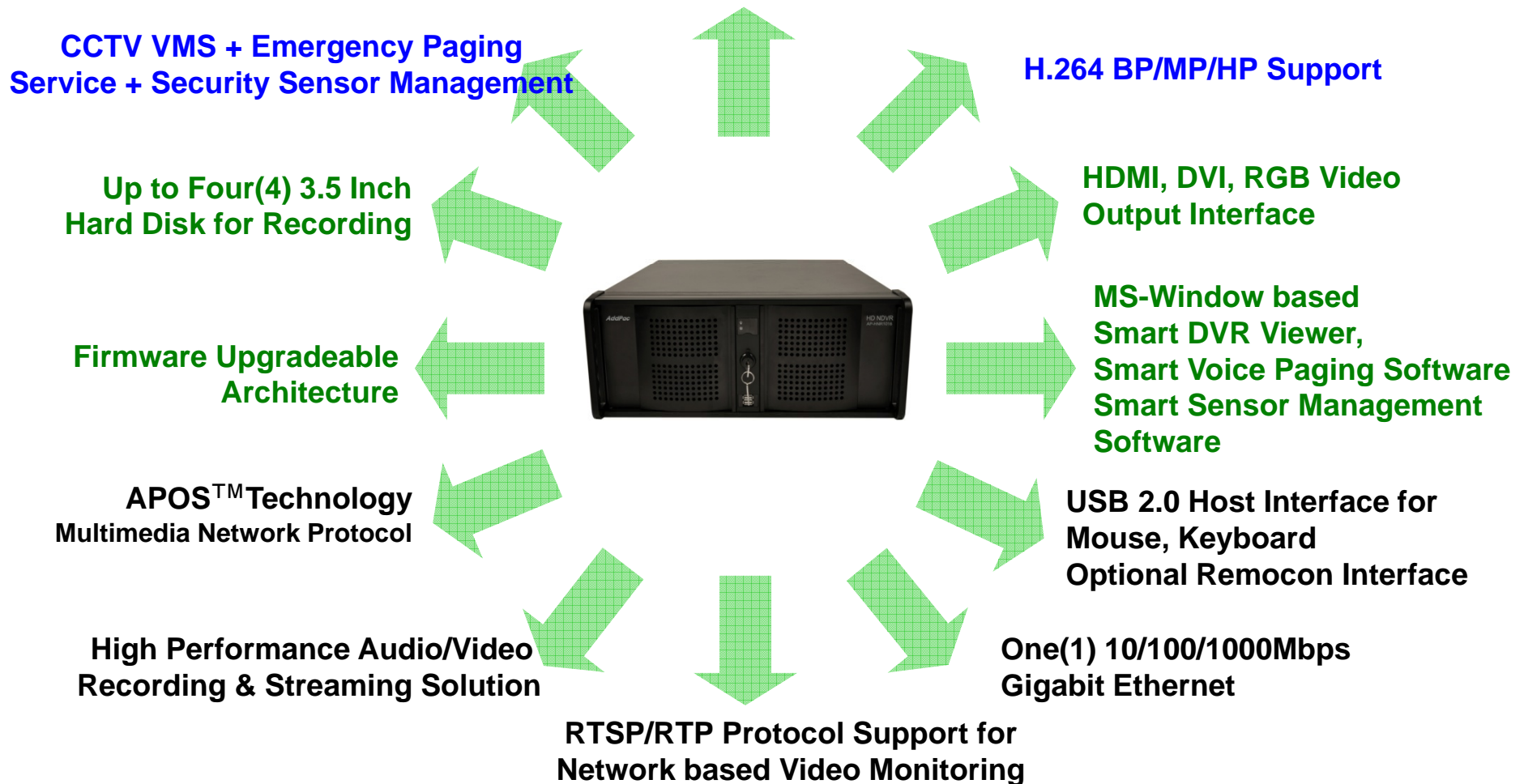
AP-ISMS100 Integrated Security Management System

- CCTV NVR Service + Emergency Paging Service + Security Sensor Management Service + RTSP Video Streaming Service
- Window based Operating System
- High-Performance Full HD, HD/SD Network DVR
- H.264 Video Codec BP/MP/HP
- Onvif Standard based IP Camera, Video Codec Support
- Full HD, HD, D1 Video Resolution Support
- Video Out : HDMI, DVI, RGB Interface
- HD Video Recording and Streaming Service
- Smart DVR Viewer Support (MS-Window S/W)
- Smart DVR Manager Support (MS-Window S/W)
- File Back Manager Support (MS-Window S/W)
- Powerful Management and User Friendly Features
- High-performance Audio and Video Service
- Firmware Upgradeable Architecture
- Up to 4 x 3.5Inch Hard Disk (SATA Type)
- One(1) DVD Writer for Video File Backup
- One(1) 10/100/1000Mbps Gigabit Ethernet Interface
- USB Interface Support (Front Side, Back Side)

Product Highlights

AP-ISMS100 Integrated Security Management System

Next Generation Security Service Integration System



Hardware Specification

AP-ISMS100 Integrated Security Management System



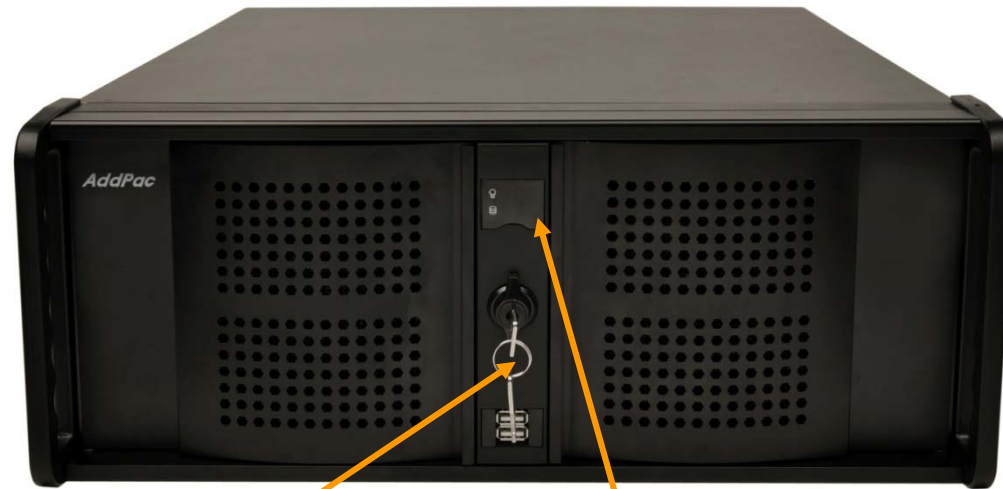
- High Performance Computing Power
- Main Chassis
 - Network Interface
 - One(1) 10/100/1000Mbps Gigabit Ethernet
 - Video Output Interface
 - HDMI, DVI,RGB Video Output
 - Secondary Video Output Interface
 - USB 2.0 Interfaces for Mouse, Keyboard, etc
 - Up to Four(4) Hard Disk

Hardware Specification

AP-ISMS100 Integrated Security Management System

High End Processor

Front Side



Cabinet Open Key

USB Interface

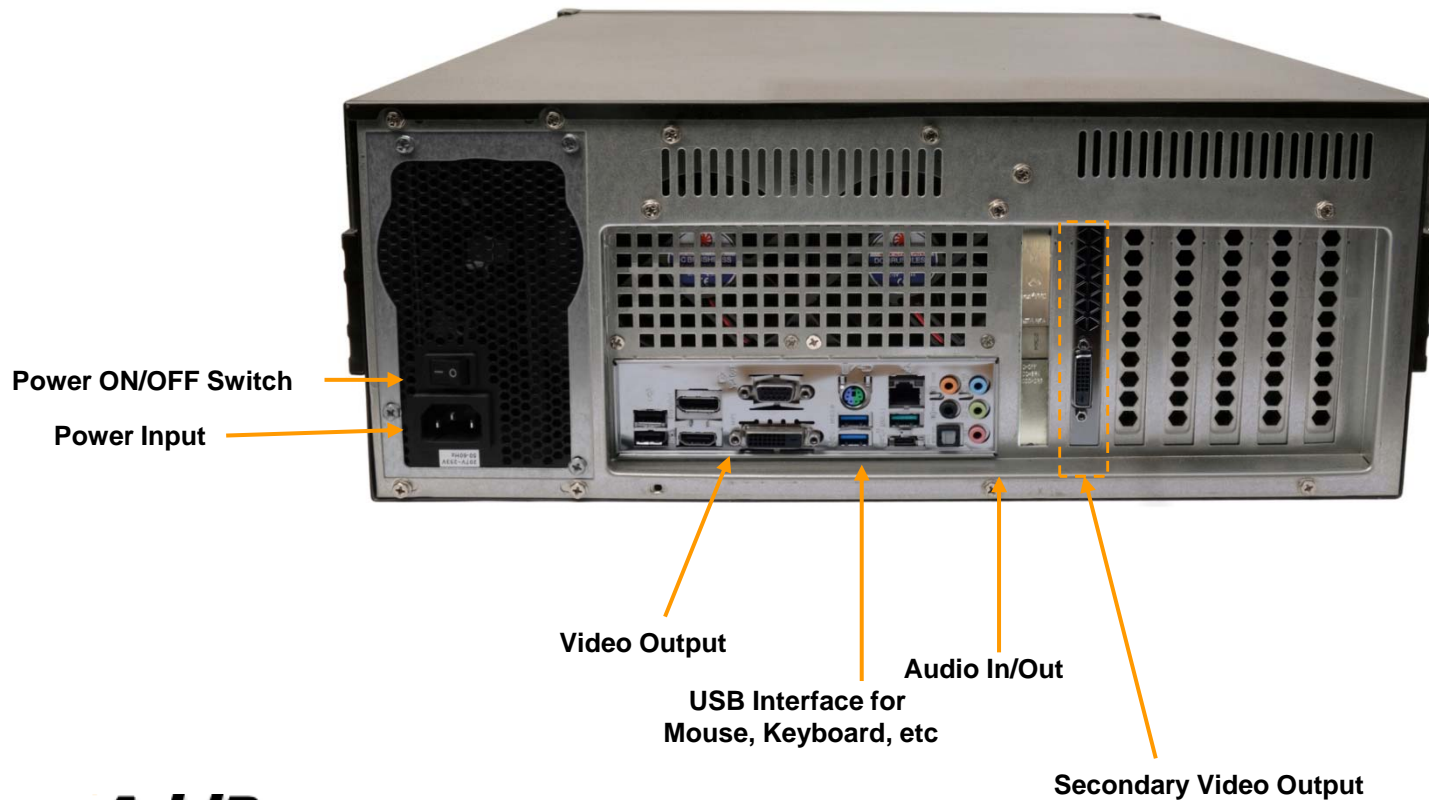
Power & HDD Access Indication LAMP

Hardware Specification

AP-ISMS100 Integrated Security Management System

High End Processor

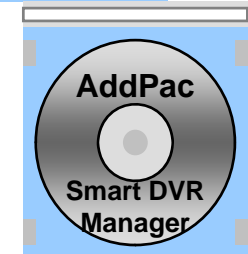
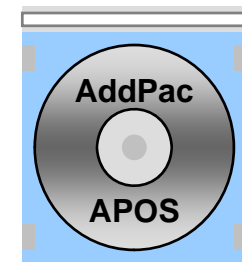
Back Side



Software Service

AP-ISMS100 Integrated Security Management System

- Built-in AddPac APOS Internetworking Software
 - Scalability, Functionality, and Stability Features
 - Advanced HD Standalone DVR Recording & Streaming Features
 - QoS Control Features
- Firmware Upgradeable Architecture
- Industry Standard Network Protocol Features
- Highly User Friendly Management Features
 - MS-Window based Smart DVR Viewer
 - Smart DVR Manager





CCTV NVR Service

Smart DVR Viewer

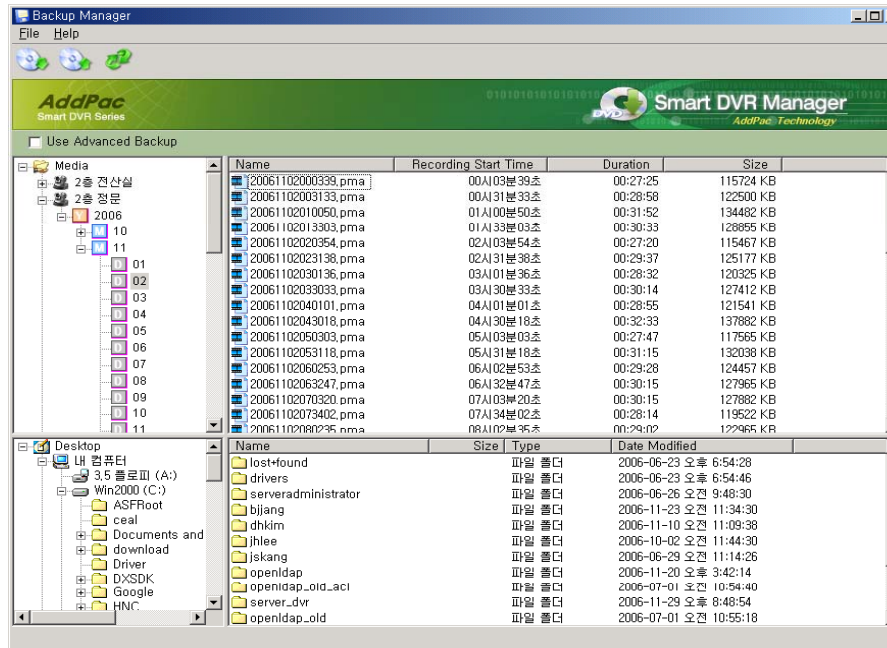
AP-ISMS100 Integrated Security Management System



- Multi-Standalone DVR Server Support
- Onvif Protocol Support for CCTV Device Control
- PAN/TILT/ZOOM Control, Layout & Screen Mode Change
- Multi-Live View, Multi-Recording View, Time Synchronization View
- Fast Search, Jog Shuttle Slow Motion & Rewind
- Recording ZOOM View
- Audio/Video Support.

Smart DVR Backup Manager

AP-ISMS100 Integrated Security Management System



- DVR Backup Software for AddPac DVR Solution
- User can backup DVR data by using DVR Backup Manager.
- Support the Advanced Backup Function
- Support the Backup Data Restore Function
- DVD Burning Support

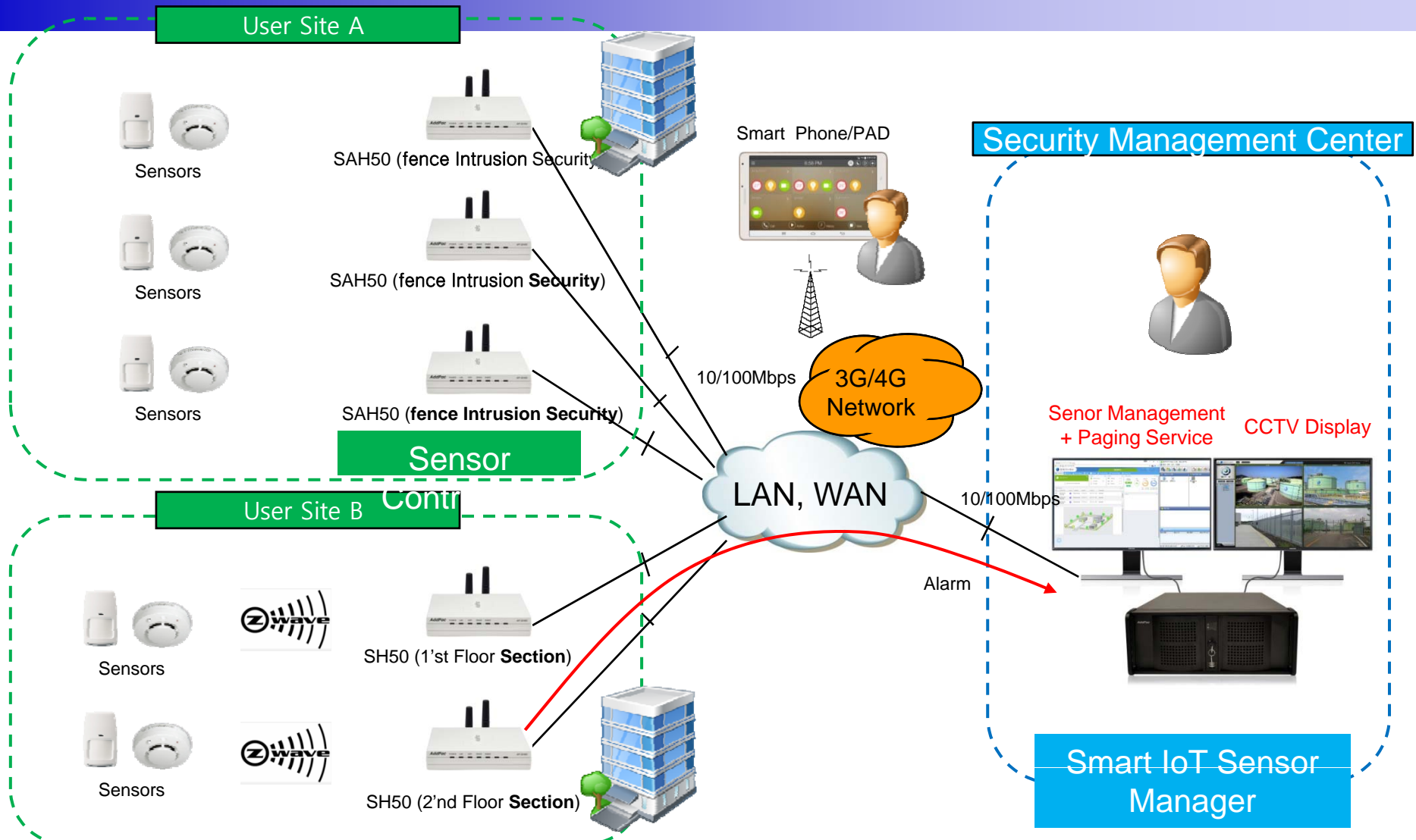


Sensor Management Service

Contents

- IoT Sensor Manager Service Diagram
- Overview
 - Key Concepts for Enterprise IoT Solution
 - Sensor Controller and Manager Role
 - Hierarchical Administrative Domains
- Smart IoT Sensor Manager UI
 - Global Dashboard
 - Site Dashboard
 - Section List
 - Operator List
 - Section Dashboard
 - Device List
 - Active Alarms
 - Event History
 - Section View

Smart IoT Sensor Manager Service Diagram





Overview

Key Concepts for Enterprise IoT Solution

- **Enterprise Requirements**

- The things in enterprise are controlled on much more complex environment and configurations than home.
- Network conditions and management requirements are also much more various than home.

- **Our Solution**

- We do support flexible configuration of Sensor Controllers and Managers to meet various enterprise requirements.
- We do support several type of Sensor Controllers and Managers to meet various enterprise environments.
- We do support flexible management authority and access control for center/site operators and users.

Sensor Controller and Manager Role

- **Smart Sensor Controller**

- It controls his section composed by several sensors.
- It provides his own smart phone app interface, PC web interface and Wall Pad interface to show sensor status and to control the sensors.
- It provides discovering sensor for inclusion and configure it.
- This Sensor Hub integrated with Controller provides robust on network and server fault.

- **Smart IoT Manager**

- It monitors controller and sensor status for continuous service.
- It monitors alarm status of section and device by categorizing to safety alarm, security alarm, and system alarm.
- It controls multiple sections by task with immediately or schedule downloaded to controllers. (TBD.)

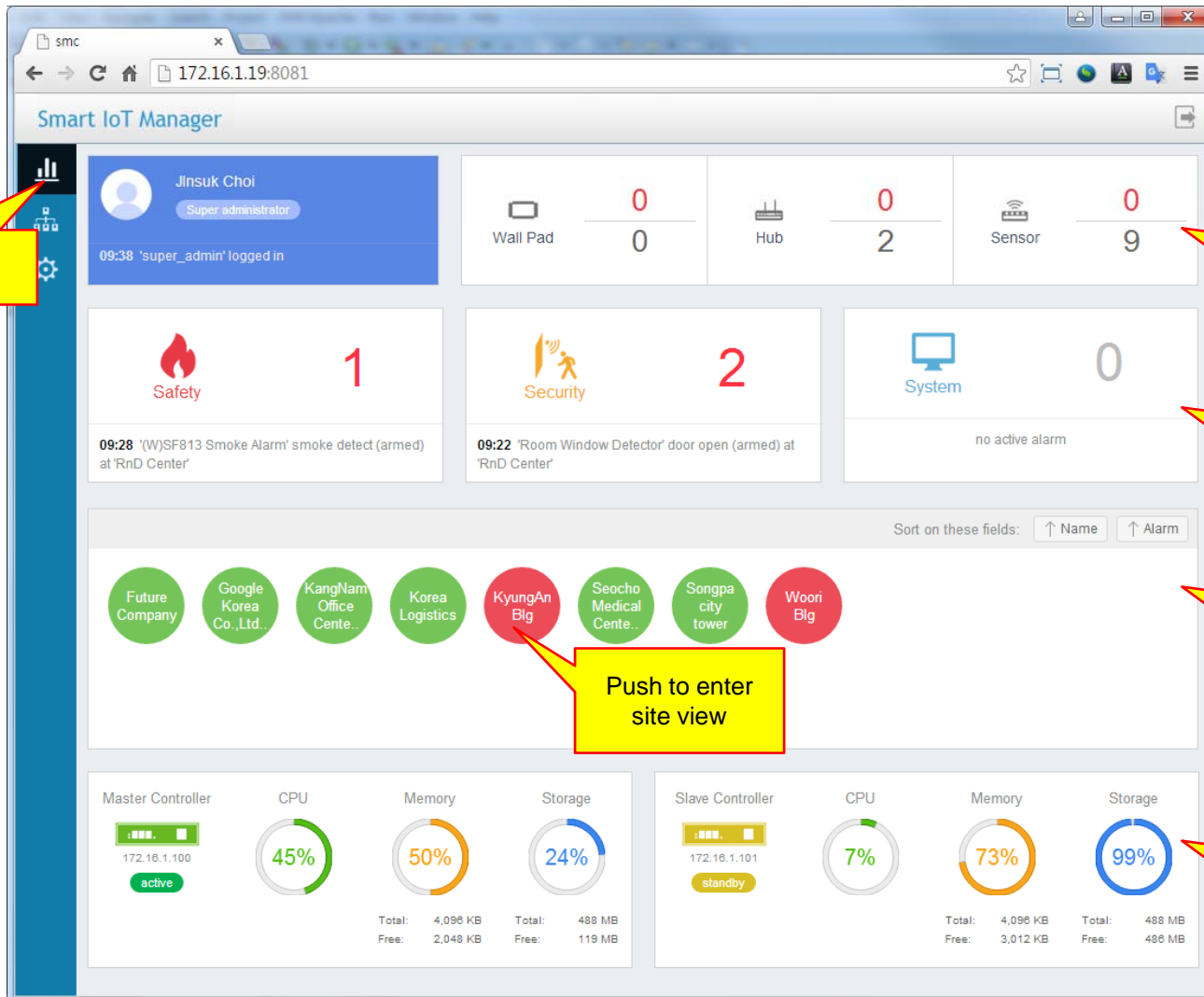
Hierarchical Administrative Domains

- **Super Administrator**
 - He can manage multiple sites and site operators.
- **Site Operator**
 - A site is logically independent administrative domain which can be a building or a set of offices and buildings.
 - A site is composed by multiple sections build up hierarchically.
 - A site operator can manage all sections in his site.
- **Group Operator**
 - A group operator can view and control his sections in a group.
- **User**
 - An user can view and control his section by Wall Pad, PC web and smart phone app.



Manager UI

Global Dashboard



Select Global Dashboard

Shows number of abnormal categorized devices

Shows number of active categorized alarms

Shows alarm status of managed sites

Push to enter site view

Shows manager system status

Site Dashboard

The screenshot shows the Smart IoT Manager interface. On the left, a sidebar lists sections under 'KyungAn Bldg', including 'RnD Center' (with a red notification badge), 'SungNam Fact...', '2F_hr', and '5f_Hallway'. Below these are other sites like 'DongNam Account Firm', 'KyungAn Cables 8F', 'KyungAn Cables 9F', 'KyungAn Calbes 7F', and 'TOM and TOMS'. A callout 'Select Site View' points to the site selection icon. A callout 'Section Group' points to the 'KyungAn Bldg' header, and another 'Section' callout points to the 'RnD Center' item.

The main dashboard area has a top navigation bar with 'Dashboard', 'Sections', 'Devices', 'Active Alarms' (with a red badge '2'), 'History', and 'Operators'. Below this is a user profile for 'Jinsuk Choi' (Super administrator) and a login timestamp. A summary card shows device counts: Wall Pad (0), Hub (2), and Sensor (9). A callout 'Shows number of abnormal categorized devices in this site' points to this card.

Below the summary card are three alarm status cards: 'Safety' (1), 'Security' (1), and 'System' (0). The Safety and Security cards show recent alarm messages. A callout 'Shows number of active categorized alarms in this site' points to these cards. Below the alarm cards is a section status visualization with four circles: '2F_hr' (grey), '5f_Hallway' (grey), 'RnD Center' (red), and 'SungNam Factory' (green). A callout 'Shows alarm status of sections in this site' points to this visualization.

At the bottom, there is a table for 'Active Alarms (2)'. A callout 'Shows active alarm list' points to this table.

Date Time	Level	Category	Section	Device	Message
2015-11-12 09:28:33	High	Safety	RnD Center	(W)SF813 Smoke Alarm	smoke detect (armed)
2015-11-12 09:22:16	High	Security	RnD Center	Room Window Detector	door open (armed)

Section List

The screenshot displays the Smart IoT Manager web interface. The browser address bar shows the URL `172.16.1.19:8081/index.html`. The main navigation bar includes tabs for Dashboard, Sections, Devices, Active Alarms (with a red '2' notification), History, and Operators. The left sidebar shows a tree view under 'KyungAn Bldg' with sub-items: AddPac Co.,Ltd. (with a red '2' notification), DongNam Account Firm, KyungAn Cables 8F, KyungAn Cables 9F, KyungAn Calbes 7F, and TOM and TOMS. The main content area displays a table of sections with the following data:

Name	Group	Device			Alarm			Mode	
		Wall Pad	Hub	Sensor	Safety	Security	System	Security	Automation
1 2F_hr	AddPac Co.,Ltd.	-	-	-	-	-	-	🔒	🏠
2 5f_Hallway	AddPac Co.,Ltd.	-	-	-	-	-	-	🔒	✈️
3 RnD Center	AddPac Co.,Ltd.	-	0/1	0/9	-	2	-	🔒	🏠
4 SungNam Factory	AddPac Co.,Ltd.	-	0/1	-	-	-	-	🔒	🌙

At the bottom of the page, there is a pagination control showing 'Page 1 of 1' and a 'Total: 4' indicator.

Operator List

The screenshot displays the 'Smart IoT Manager' interface. The 'Operators' tab is selected in the top navigation bar. The main content area shows a table with the following data:

	Name	ID	Level	Access Group	Email
1	jhkwon	jhkwon	Site operator		
2	kyung an administrator	ka_admin	Site operator		ka@company.com
3	woori bld admin	woori_admin	Site operator		admin@woori.com
4	AddPac Admin.	addpac	Group operator	AddPac Co.,Ltd.	addpac@addpac.com

Two yellow callout boxes provide additional context: one points to the 'Operators' tab in the navigation bar, and another points to the table content, indicating that it displays site operators and group operators.

Section Dashboard

The screenshot shows the 'Smart IoT Manager' interface. The left sidebar contains a tree view of sections under 'KyungAn Blg', including 'RnD Center' (highlighted with a red callout 'Select a section'), 'SungNam Fact...', '2F_hr', '5f_Hallway', and several other sections. The main dashboard area is titled 'RnD Center' and contains several widgets. The top row shows 'Security' (0), 'Automation' (0), 'Wall Pad' (0), 'Hub' (1), and 'Sensor' (9). The second row shows 'Safety' (1), 'Security' (1), and 'System' (0). Below these are two active alarm cards: '09:28 (W)SF813 Smoke Alarm' smoke detect (armed) and '09:22 (W)Room Window Detector' door open (armed). A bottom section shows a grid of device icons with their status (e.g., (W)127..., (W)456..., (W)Eco..., (W)RGB..., (W)SE8..., (W)SF8..., Front ..., Room W., Smart ...). At the bottom, there is a table of active alarms.

Date Time	Level	Category	Section	Device	Message
2015-11-12 09:28:33	High	Safety	RnD Center	(W)SF813 Smoke Alarm	smoke detect (armed)
2015-11-12 09:22:16	High	Security	RnD Center	Room Window Detector	door open (armed)

Select a section

Shows number of abnormal categorized devices in this section

Shows number of active categorized alarms in this section

Shows alarm status of devices in this site

Shows active alarm list

Device List

The screenshot displays the Smart IoT Manager web interface. The browser address bar shows the URL 172.16.1.19:8081. The page title is "Smart IoT Manager". The navigation menu includes "Dashboard", "Devices", "Active Alarms 2", "History", and "Section View". The "Devices" tab is selected, and the "Sensor" sub-tab is active. A search bar is present above the device list. The device list table has the following columns: Name, Model, IP address, Version, Sensor, Alarm, and Disconnected. The table contains the following data:

Name	Model	IP address	Version	Sensor	Alarm	Disconnected
RnD Center						
Smart Hub	SHD50_G2	172.16.50.89:60225	8.50.00T	-	-	-
Front Door Detector	HSM02 Mini Do...			-	-	-
Lamp Dimmer Module	45602 Lamp Di...			-	-	-
Living Room Light	RGBW LED Bulb			-	-	-
PIR Motion Sensor	Ecolink Z-Wave ...			-	-	-
Room Window Detector	HSM02 Mini Do...			-	1	-
Siren	SE812 Siren			-	-	-
Smart Switch	12722 Smart S...			-	-	-
Smoke Alarm	SF813 Smoke ...			-	1	-

At the bottom of the page, there is a pagination control showing "Page 1 of 1" and "Total: 10".

Active Alarms

Select active alarm tab

	Date Time	Level	Category	Section	Device	Message
1	2015-11-11 15:44:36		Security	RnD Center	Smoke Alarm	smoke detect (armed)
2	2015-11-11 15:19:39		Security	RnD Center	(W)HSM02 Mini Door/Window Detector	door open (armed)

Shows active alarms in this section.

This active alarm can be cleared by acknowledge it.

Page 1 of 1 | Total: 2

Event History

Select history tab

	Date Time	Level	Category	Section	Device	Message	Cleared
1	2015-11-11 15:31:32	Security	RnD Center	Smoke Alarm	alarm (smoke detect (armed)) occurred, id=29	-	
2	2015-11-11 15:13:08	Security	RnD Center	(W)HSM02 Mini Door/Window Detector	alarm (door open (armed)) occurred, id=28	-	
3	2015-11-11 15:08:03	Management	RnD Center		controller registration success, user_id=rnd_admin,ip=172.17.50.200,...	-	
4	2015-11-11 14:56:52	Security	RnD Center	(W)HSM02 Mini Door/Window Detector	alarm (1699) cleared	system (2015-11-11 14:56:52)	
5	2015-11-11 14:56:52	Security	RnD Center	(W)HSM02 Mini Door/Window Detector	alarm (1698) cleared	system (2015-11-11 14:56:52)	
6	2015-11-11 14:53:20	Management	RnD Center		controller registration success, user_id=rnd_admin,ip=172.17.50.200,...	-	
7	2015-11-11 14:27:38	Security	RnD Center	(W)HSM02 Mini Door/Window Detector	alarm (door open (armed)) occurred, id=27	-	
8	2015-11-11 13:52:17	Management	RnD Center		controller registration success, user_id=rnd_admin,ip=172.17.50.200,...	-	

Shows alarm history .

Section View

Select section view

Shows sensor controller web page of this section

Date	Time	Level	Category	Section	Device	Message
2015-11-11	16:44:36	Security	Security	RnD Center	Smoke Alarm	smoke detect (armed)
2015-11-11	15:19:39	Security	Security	RnD Center	(W)HSM02 Mini Door/Window Detector	door open (armed)

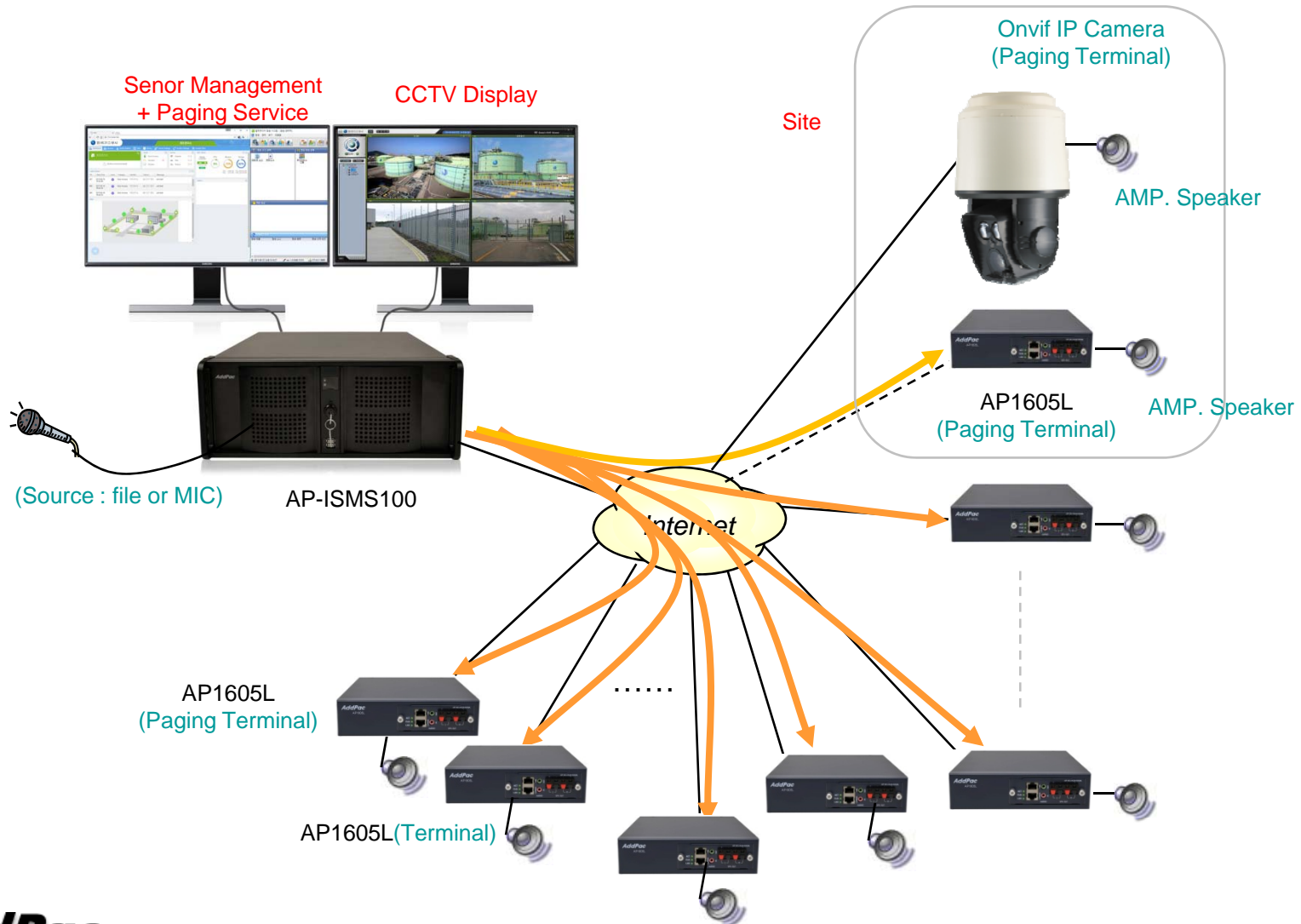


Emergency Paging Service

Contents

- Network Diagram
- Main Features
- Software Requirement
- Hardware Requirement
- GUI examples

Network Configuration



Main Feature

- Window based IP Broadcasting Server with Management Software
- Unicasting/Multicasting Service Support
- Onvif aware RTSP Protocol Support
- Onvif IP Camera Support for Broadcasting
- RTP (Real-time Transmission Protocol) Support
- Various Voice/Audio Codec Support (G.711, SPEEX, etc)
- User Register and Access Restriction Management
- Broadcasting Device Management
- Broadcasting Source, Group, Favorite List Management
- Reserved Broadcasting and Time Signal Broadcasting
- TTS Broadcasting
- IP Broadcasting Terminal Status Check, etc
- Search Event Log

Software Requirement

1. Database : MySQL Server 5.0
2. e-MBMS Server
 - Java JRE 1.5
 - e-MBMS Server
3. e-MBMS Client
 - e-MBMS Client

Hardware Requirement

1. e-MBMS Server H/W Requirement

- CPU: Intel Pentium4 1GHz (minimum)
- MEMORY: 512Mbyte (minimum)
- HDD: 40GB
- OS: Windows XP, Windows 2000, Windows 7..

2. e-MBMS Client H/W Requirement

- CPU: Intel Pentium Series
- MEMORY: 256Mbyte (minimum)
- OS: Windows XP, Windows 2000, Windows 7..

WBS GUI Initial Screen

Broadcasting Source

media_source nms broadcast video broadcast

Broadcasting Group

media_group multimedia team nms team

Broadcasting Session Status

Device Name	IP Address	Status
<input checked="" type="checkbox"/> media_server	172.17.101.247	No response
<input checked="" type="checkbox"/> media_group		
<input checked="" type="checkbox"/> vp200_hqiang	172.16.253.106	Broadcasting in ...

Favorites

Media Server broadcast

Broadcasting Session

Broadcasting Name	Broadcasting Source	Broadcasting T.type	Start Time	Number of terminals bei...	Number of terminals fail...	Schedule Name	Bbroadcasting Time
Media Server broadca...	media_source	Video Broadcasting	2008-03-27 10:13:46	1	1		00:00:13

3/27/2008 10:13:59 AM ver 1.2.2965.20959 127.0.0.1:8089 Super Admin (administrator)

Broadcasting Device Management

Device Properties

Device Name: media_server
 Description:
 IP Address: 172.17.101.247
 Device Model: AP3120
 Remote control of Broadcasting:
 Module Information:

Slot	Module
0 (Slot)	<N/A>
1 (Slot)	AP-AUDIO2

Ok Cancel

Broadcasting Session

Broadcasting Name	Broadcasting Source	Broadcasting Type	Start Time	Number of terminals bei...	Number of terminals faile...	Schedule Name	Bbroadcasting Time
Media Server broadca...	media_source	Video Broadcasting	2008-03-27 10:13:46	1	1		00:03:09

3/27/2008 10:16:57 AM ver 1.2.2965.20959 127.0.0.1:8089 Super Admin (administrator)

Broadcasting Group Management

Multimedia Broadcasting System - [Broadcasting Manager]

Group Properties

Group Name: nms team

Description:

Setup for Amplifier

- Amplifier 1
- Amplifier 2
- Amplifier 3

Add Device Add Group

Broadcasting Device List			
Device Name	IP Address	Module	Port Number
landberg	172.16.19.100	AP-AV1000	(1/1) (1/0)
media_server	172.17.101.247	AP-AUDIO2	(1/0) (1/0)
media_server	172.17.101.247	AP-AUDIO2	(1/1) (1/1)
172.16.41.11	172.16.41.11	AP-VP300	(0/1) (0/0)
NMS_VP300	172.16.16.30	AP-VP300	(0/1) (0/0)
vp200_meeting_ro...	172.17.201.108	AP-VP300	(0/1) (0/0)
vp200_hgiang	172.16.253.106	AP-VP300	(0/1) (0/0)
phone_jschoi	172.16.19.101	AP-VP300	(0/1) (0/0)
VP200_phkwon	172.16.40.30	AP-VP300	(0/1) (0/0)

Broadcasting device included in the group			
Device Name	IP Address	Port Number	
172.16.41.11	172.16.41.11	(0/1) (0/0)	

Ok Cancel

3/27/2008 10:18:54 AM ver 1.2.2965.20959 127.0.0.1:8089 Super Admin (administrator)

Reserved Broadcasting Management

Multimedia Broadcasting System - [Reservation of Broadcasting Management]

Broadcasting Management View Help

Multimedia Broadcasting Management System
AddPac

Schedule Broadcasting Management

Schedule Name	Broadcasting ...	Start Time
Morning Broadcasting	General	10:21:27

Schedule Properties

Selecting Broadcasting: Media Server broadcast

Schedule Name:

Description:

Scheduled Broadcasting: General Time Information

Scheduling Method: Day Date

Select Day: Mon Tue Wed Thu Fri Sat Sun

Broadcasting Time

Start Time: 3/27/2008 10:22:16

End Time: 3/27/2008 10:22:16

Audio File: Select

Ok Cancel

Broadcasting Name	Broadcasting Source	Broadcasting Type
Media Server broadca...	media_source	Video Broadcastin

3/27/2008 10:22:10 AM ver 1.2.2965.20959 127.0.0.1:8089 Super Admin (administrator)

TTS Broadcasting

The screenshot displays the 'Multimedia Broadcasting System - [Broadcasting Manager]' interface. The main window is titled 'TTS Broadcasting' and features a 'Favorites Name' dropdown menu set to 'Media Server broadcast'. Below this, there are two tabs: 'TTS' and 'TTS List'. The 'TTS' tab is active, showing a text area with the following content:

WASHINGTON (AFP) - The Pentagon on Wednesday said an eruption of violence in southern Iraq, where US-backed government forces were battling Shiite militias, was a "by-product of the success of the surge."

Pentagon press secretary Geoff Morrell said it showed that the Iraqi government and security forces were now confident enough to take the initiative against Shiite extremists in the southern port of Basra.

At the bottom of the 'TTS' tab, there is an 'Audio File Name' input field and a 'Start' button. A 'Close' button is located at the bottom right of the 'TTS' tab.

The 'TTS List' tab is also visible, showing a table with the following data:

IP Address	Status
nms team	172.16.41.11

The interface also includes a 'Broadcasting Source' section with icons for 'media_source', 'nms broadcast', and 'video broadcast'. A 'Favorites' section shows 'Media Server broadcast'. The 'Broadcasting Session' section at the bottom has columns for 'Broadcasting Name', 'Broadcasting Source', and 'Bro...'. The status bar at the bottom indicates the date and time as 3/27/2008 10:18:54 AM, version 1.2.2965.20959, IP address 127.0.0.1:8089, and user Super Admin (administrator).



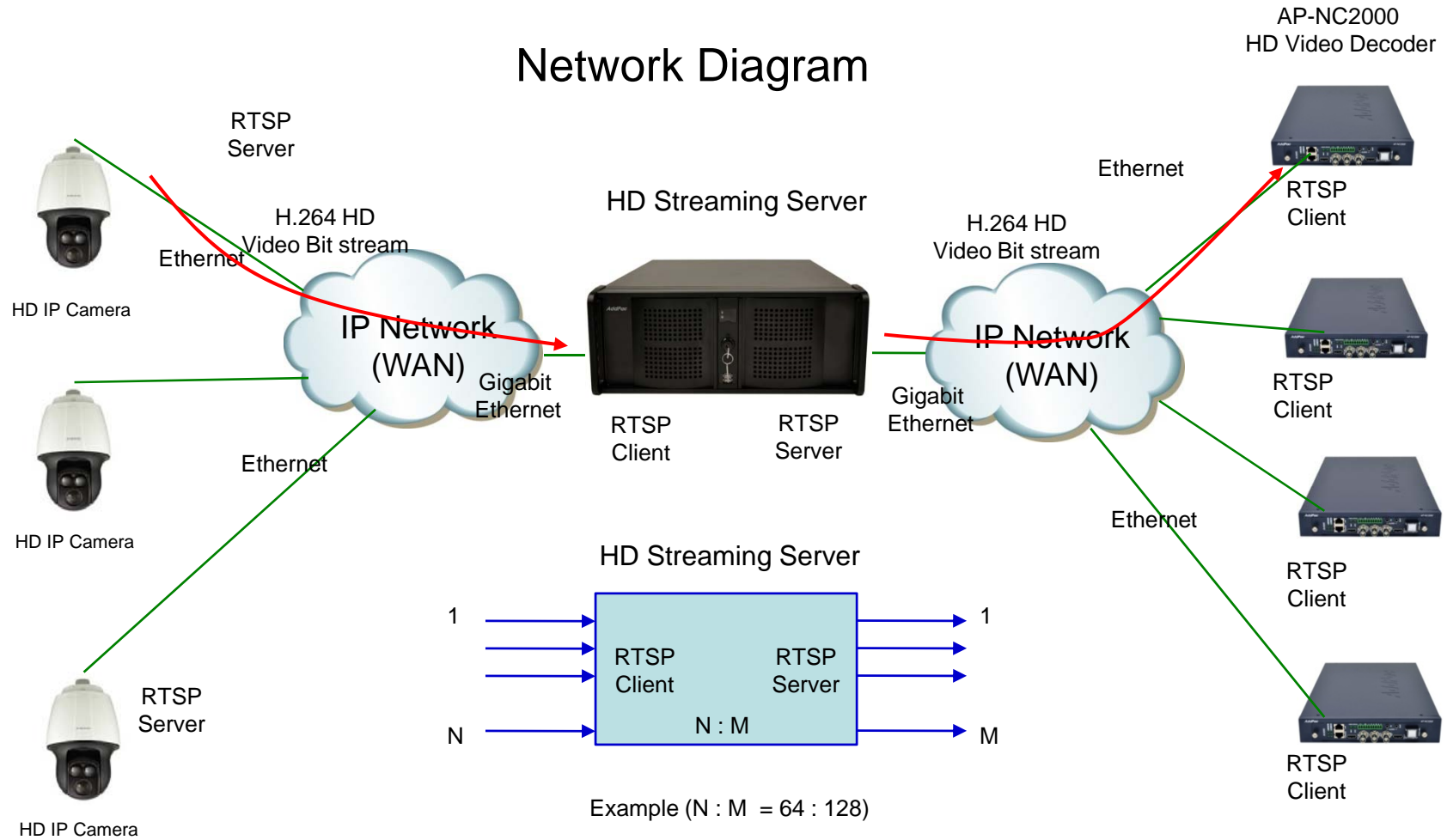
RTSP Streaming Service

RTSP Streaming Service Overview

- RTSP based Full HD/HD/D1 Streaming Service
- RTSP Server & Client Architecture
- TCP/UDP Protocol Support
- HD Video Encoder, HD Video Decoder, HD Storage Server, HD Display Server RTSP based Interworking
- HD Video Bit-Stream Input
- HD Video Bit-Stream Output
- Load Balance using RTSP Redirect Service
- IP based Network Protocol Support

RTSP based Streaming Service Diagram

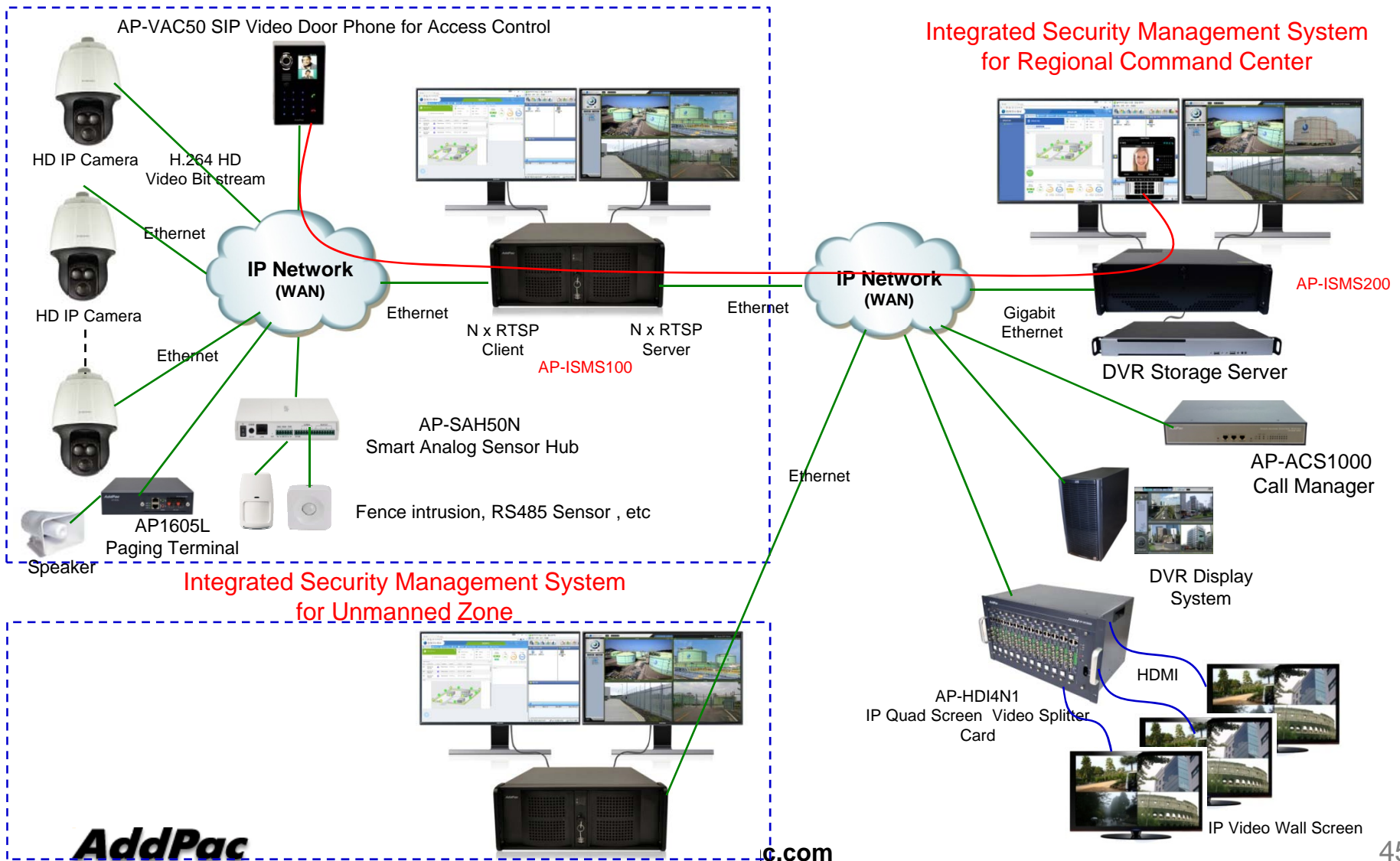
Network Diagram





Network Service and Features

- RTSP (Real Time Streaming Protocol)
 - TCP transport
 - [Session Description Protocol](#) (SDP)
- Load balance
 - 302 Moved Temporarily
 - REDIRECT method (**Optional, when the client support REDIRECT**)
- Video and Audio Support
 - Video Only
 - Audio Only
 - Video + Audio

Standard Application Diagram



Integrated Security Management System Comparison

Model	AP-ISMS100 for unmanned zone	AP-ISMS200 for regional command center
Service		
Onvif based NVR CCTV Service	Support (Small Capacity)	Support (Large Capacity, Storage Backup)
RTSP Streaming Service	Support	Support
Security Sensor Management	Support	Support
Voice Paging Service for emergency	Support	Support
Access Control Service using Video Door Phone	N/A	Support

Ordering Information

- **AP-ISMS100 Integrated Security Management System**
 - AP-ISMS100 Main Body
 - Secondary Video Output Interface
 - Including Power Supply Cable, etc.
 - Option : Video Cable (HDMI, DVI, RGB)
 - Option : Hard Disk (2ea ~ 4ea)
- **Built-in APOS Internetworking Software for AP-ISMS100**
- **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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