AP-VBS5000

HD Video Broadcasting Server

Next Generation IP based HD Video Broadcasting Server Solution

Preliminary Product Overview

AddPac

AddPac Technology

2008, Sales and Marketing

Contents

- Product Overview
- Benefits and Features
- Hardware Specification
- Multimedia Service
- Software Service
- Video Service & Features
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- Application Area
- HD IP Broadcasting Solution
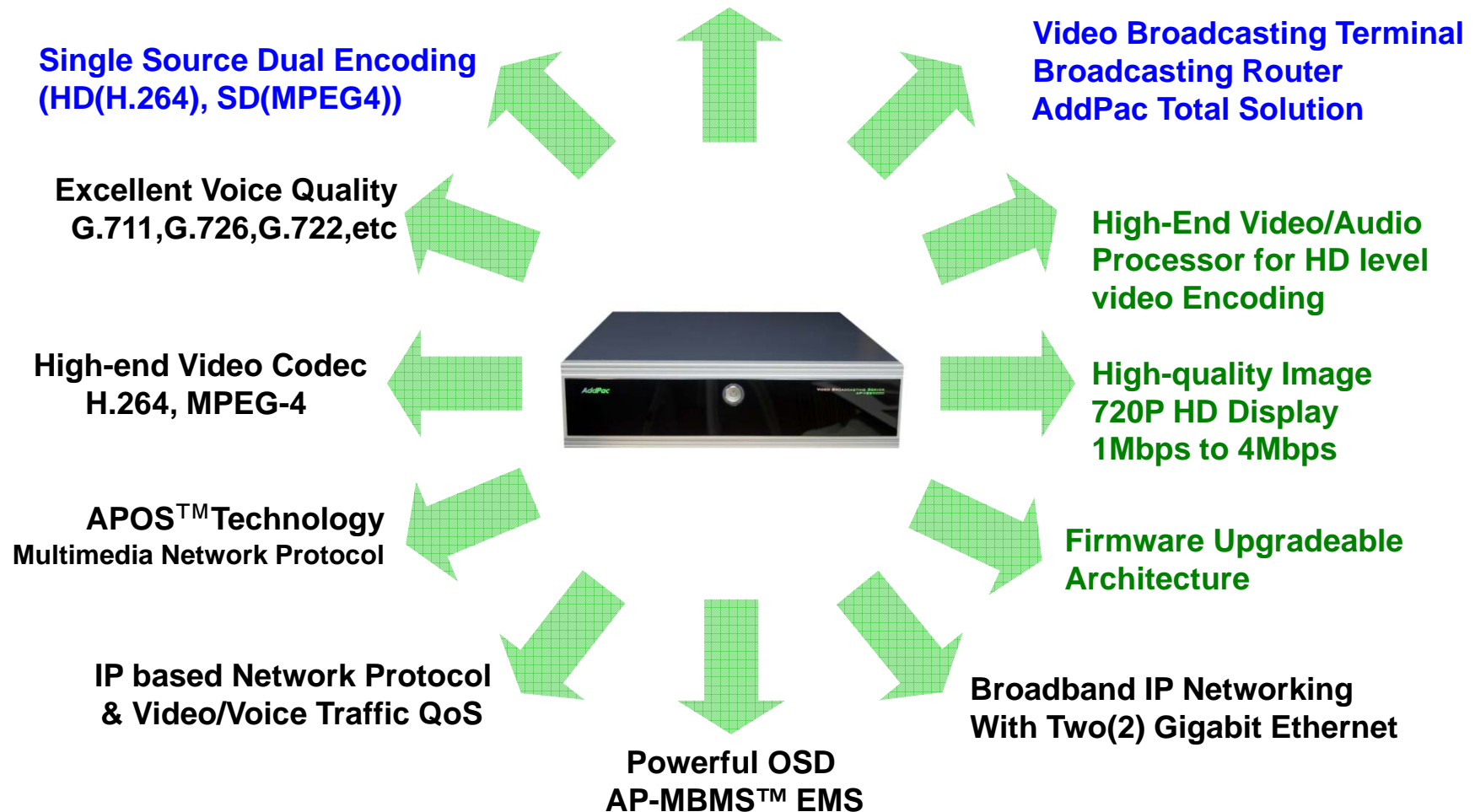- Ordering Information

Product Overview

- IP based HD Video Broadcasting Service Solution
- High Performance Real-time Audio/Video Broadcasting Solution
- High Performance Non-Real-time Scheduled HD Video Broadcasting Solution
- High-performance Video, Audio, and Voice Service
- Firmware Upgradeable Architecture
- Video Solution with Outstanding Network Service Capability
- Multimedia Broadcasting Management Software (Client/Server Architecture)

Product Highlights

AP-VBS5000 HD Video Broadcasting Server
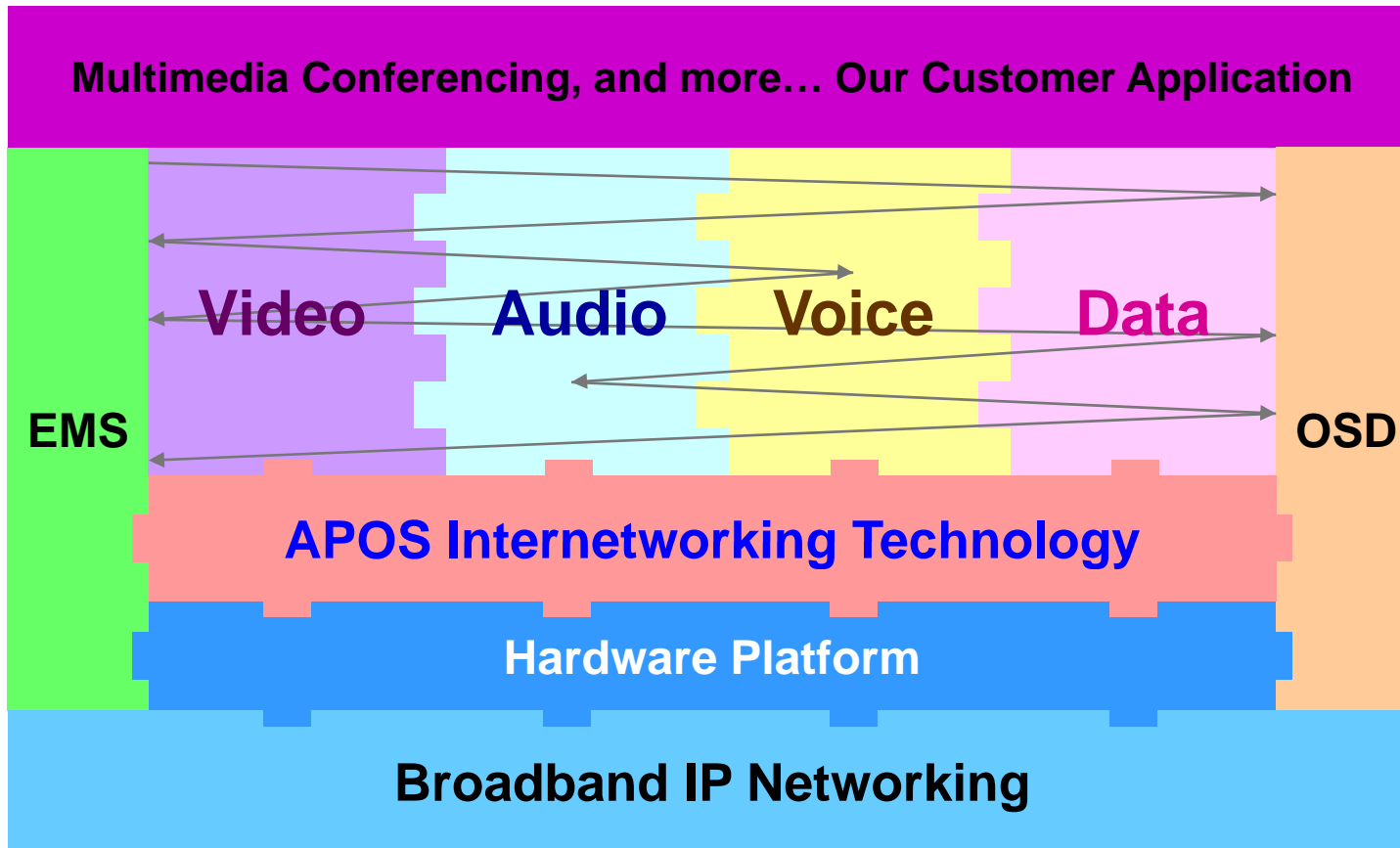
IP based HD Video Broadcasting Server

Single Source Dual Encoding (HD(H.264), SD(MPEG4))

Video Broadcasting Terminal Broadcasting Router AddPac Total Solution

Excellent Voice Quality G.711,G.726,G.722,etc

High-End Video/Audio Processor for HD level video Encoding

High-end Video Codec H.264, MPEG-4

High-quality Image 720P HD Display 1Mbps to 4Mbps

APOS™Technology Multimedia Network Protocol

Firmware Upgradeable Architecture

IP based Network Protocol & Video/Voice Traffic QoS

Broadband IP Networking With Two(2) Gigabit Ethernet

Powerful OSD AP-MBMS™ EMS

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Multimedia Service

AP-VBS5000 HD Video Broadcasting Server

Multimedia Conferencing, and more… Our Customer Application

EMS

Video **Audio** **Voice** **Data**

OSD

APOS Internetworking Technology

Hardware Platform

Broadband IP Networking

- APOS : AddPac Internetworking Operating System
- OSD : On- Screen Display
- EMS : Element Management System

Benefits and Features

- **High Quality Images up to 1Mbps and 4Mbps**
- **High-performance Audio & Video Codec Support**
  - H.264, MPEG-4 Video Codec
  - Line IN : G.726, G.711, etc, Audio Codec
- **Single Source Dual Video Encoding Scheme for HD(H.264), SD (MPEG4) Broadcasting Terminals**
- **Up to 30 frame/sec, 1280x720 HD Resolution**
- **RTP based Real-Time HD Broadcasting Service**
- **IP based Network Protocol Support**
- **Video Application**
  - Audio & Video Broadcasting Solution

Hardware Specification

## AP-VBS5000 HD Video Broadcasting Server

High-end
**Host
Processor**

- **High-End Host Processor + High Performance DSP**

- **Main Chassis**
  - **Power On/Off Switch**
  - **Network Interface**
    - Two(2) 10/100/1000Mbps Gigabit Ethernet
    - One(1) RS-232C Console (RJ45)
    - Two(2) PTZ RS-232C Ports (Channel #0,#1)
  - **Video Interface (Input)**
    - RCA Composite (CH#0, CH#1)
    - S-Video(CH#0, CH#1)
    - Component (CH#0, CH#1)
    - RGB Interface (CH#0, CH#1)
    - HD-SDI Interface (CH#0, CH#1)
  - **Audio Interface (Input)**
    - RCA Stereo Connector (CH#0, CH#1)

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Hardware Specification

AP-VBS5000 HD Video Broadcasting Server

Power On/Off Switch (blue lamp)
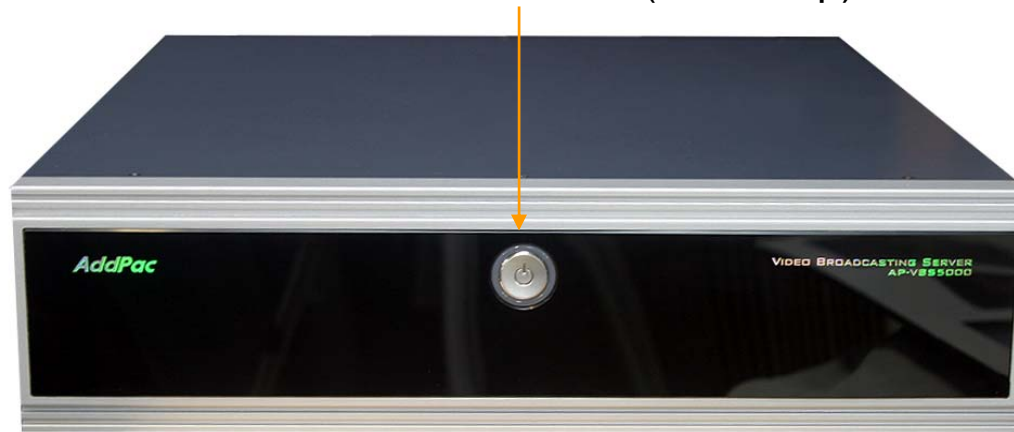
CH #0 A/V Output Block
(HD-SDI, RGB, Component, S-Video,
RCA, Audio RCA)

RS-232C PTZ Controller
for CH #0

CH #1 A/V Output Block

Gigabit
LAN Ports

Free Voltage
Power Inlet

Power On/Off Switch

Console
Interface

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Software Service

- **Built-in AddPac APOS Internetworking Software**
  - Scalability, Functionality, and Stability Features
  - Video Traffic QoS Control
- **Programmable Video, Audio, and Voice Services**
  - Video Codec, Audio, and Voice Codec
- **Industry Standard IP based Network Protocol Features**
- **AP-MBMS (Multi-media Broadcasting Management System) Solution**
  - Server and Client Architecture
  - JAVA based EMS Solution
  - Broadcast Status Monitoring, Scheduling, Login Management, and Remote System Management Support
  - Intel Pentium Machine with MS Window Server OS and MS-SQL
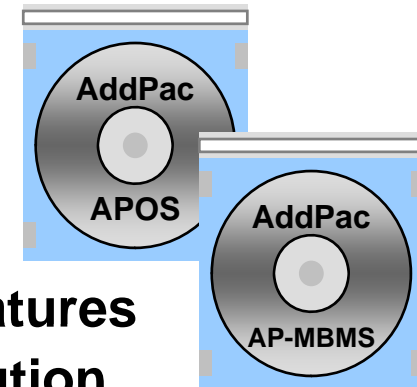
Video Service and Features

- **High-performance Video Codec Support**
  - H.264, MPEG-4
- **Powerful Image Resolution Support**
  - VGA(640x480), 720P(1280x720)
- **Up to 30fps at HD-Resolution (H.264)**
- **1Mbps to 4Mbps Operating Video Traffic Bandwidth**
- **Video Buffer Control for Video Traffic QoS**
  - Ensuring Optimized Quality
  - Frame Rate Control with Limited Bandwidth
- Single Source Dual Video Encoding (HD, SD Terminals)
- RTP/UDP based Real-time Video Broadcasting Service

AP-VBS5000 HD Video Broadcasting Server

Application Area

- Audio Real-time Broadcasting
- Audio/Video Real-time Broadcasting
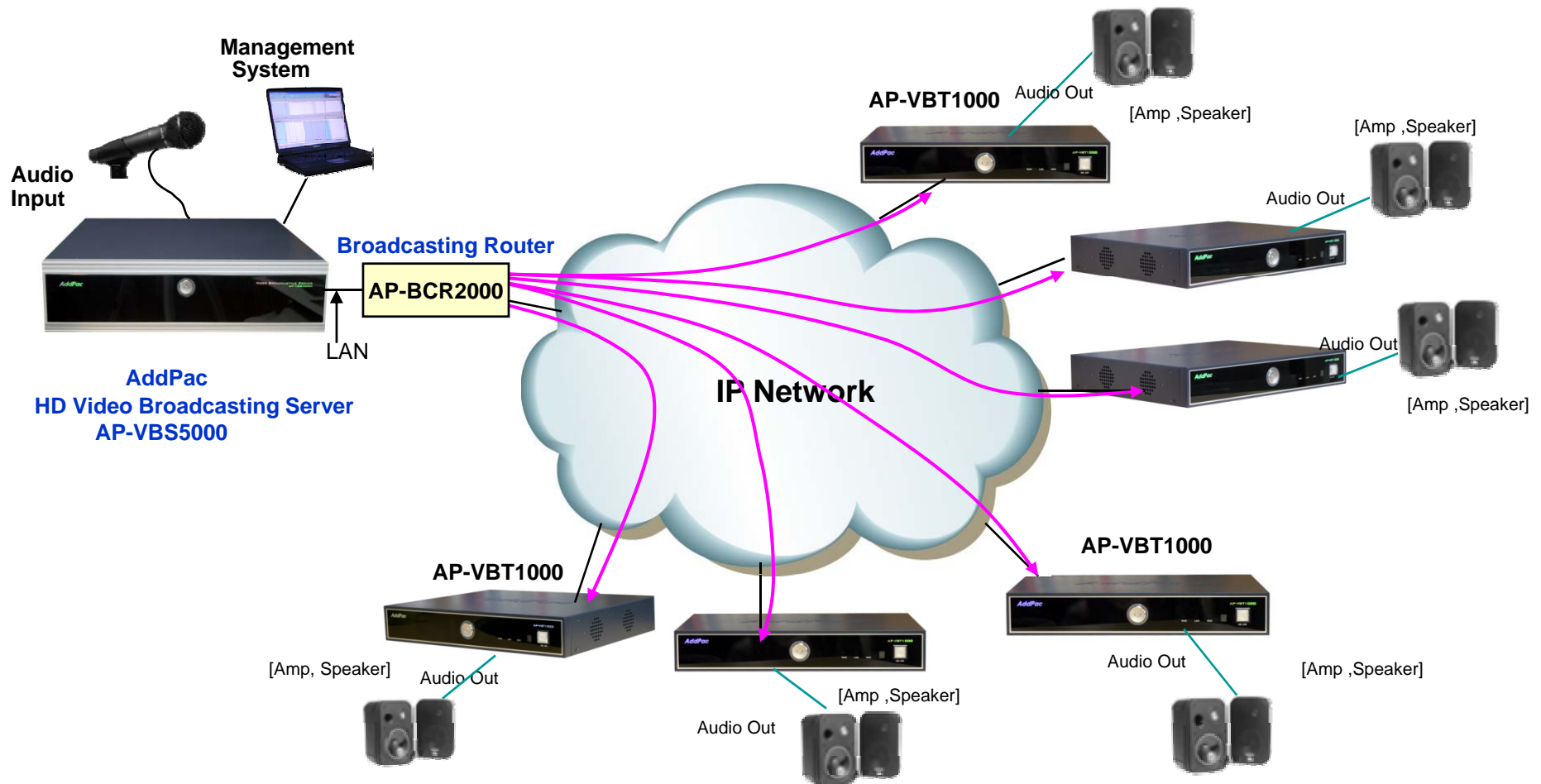

AP-VBS5000 HD Video
Broadcasting Server

AP-VBT1000 HD Video Terminal

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Audio Real-time Broadcasting
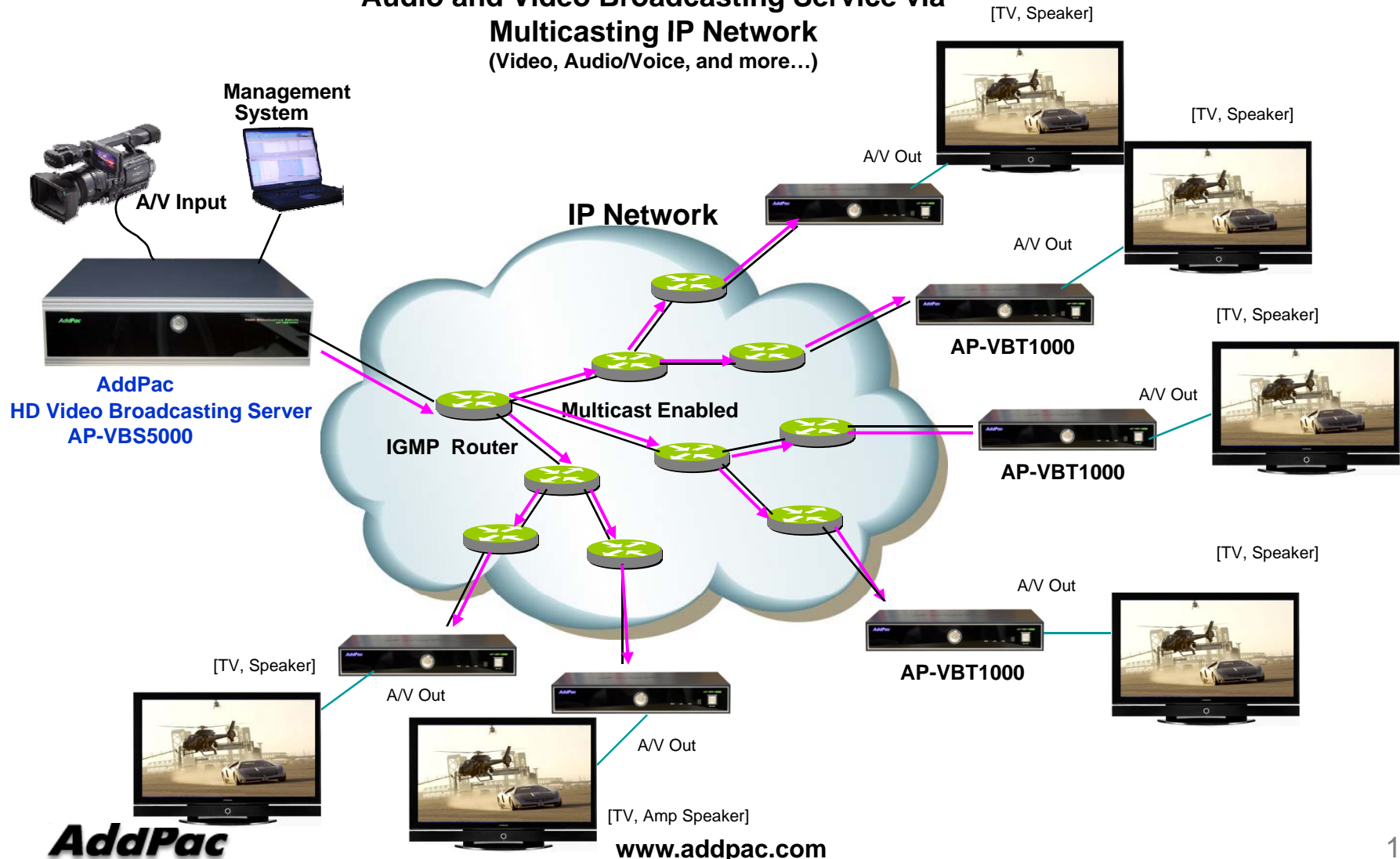
AP-VBS5000 HD Video Broadcasting Server

Audio Broadcasting Service via IP Network

Audio/Video Real-time Broadcasting

AP-VBS5000 HD Video Broadcasting Server

Audio and Video Broadcasting Service via Multicasting IP Network
(Video, Audio/Voice, and more…)

[TV, Speaker]

[TV, Speaker]

Management System

A/V Input

A/V Out

A/V Out

IP Network

AddPac
HD Video Broadcasting Server
AP-VBS5000

Multicast Enabled

AP-VBT1000

IGMP Router

[TV, Speaker]

A/V Out

AP-VBT1000

[TV, Speaker]

[TV, Speaker]

A/V Out

[TV, Speaker]

A/V Out

AP-VBT1000

A/V Out

[TV, Amp Speaker]

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Audio/Video Real-time Broadcasting

AP-VBS5000 HD Video Broadcasting Server

Audio and Voice Broadcasting Service via Unicasting IP Network
(Video, Audio/Voice, and more…)

[TV, Amp Speaker]

A/V Input

AddPac HD Video Broadcasting Server AP-VBS5000

AP-BCR2000

Broadcasting Router

IP Network

Area 1

AP-VBT1000

A/V Out

A/V Out

A/V Out

A/V Out

A/V Out

[TV, Amp Speaker]

Area 2 Broadcasting Router

AP-BCR2000

IP Network

AP-VBT1000

A/V Out

AP-VBT1000

Area 3 Broadcasting Router

AP-BCR2000

IP Network

A/V Out

A/V Out

[TV, Amp Speaker]

Area N Broadcasting Router

AP-BCR2000

……

AP-VBT1000

IP Network

A/V Out

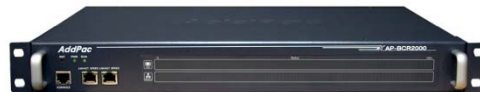A/V Out

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HD IP Broadcasting Solution
AP-VBS5000 HD Video Broadcasting Server

- HD Video Broadcasting Server : AP-VBS5000
- IP Broadcasting Router : AP-BCR2000
- HD Video Broadcasting Terminal : AP-VBT1000
- Video Broadcasting Monitoring Terminal: AP-VP500
- Video Broadcasting Terminals : AddPac Video Phones
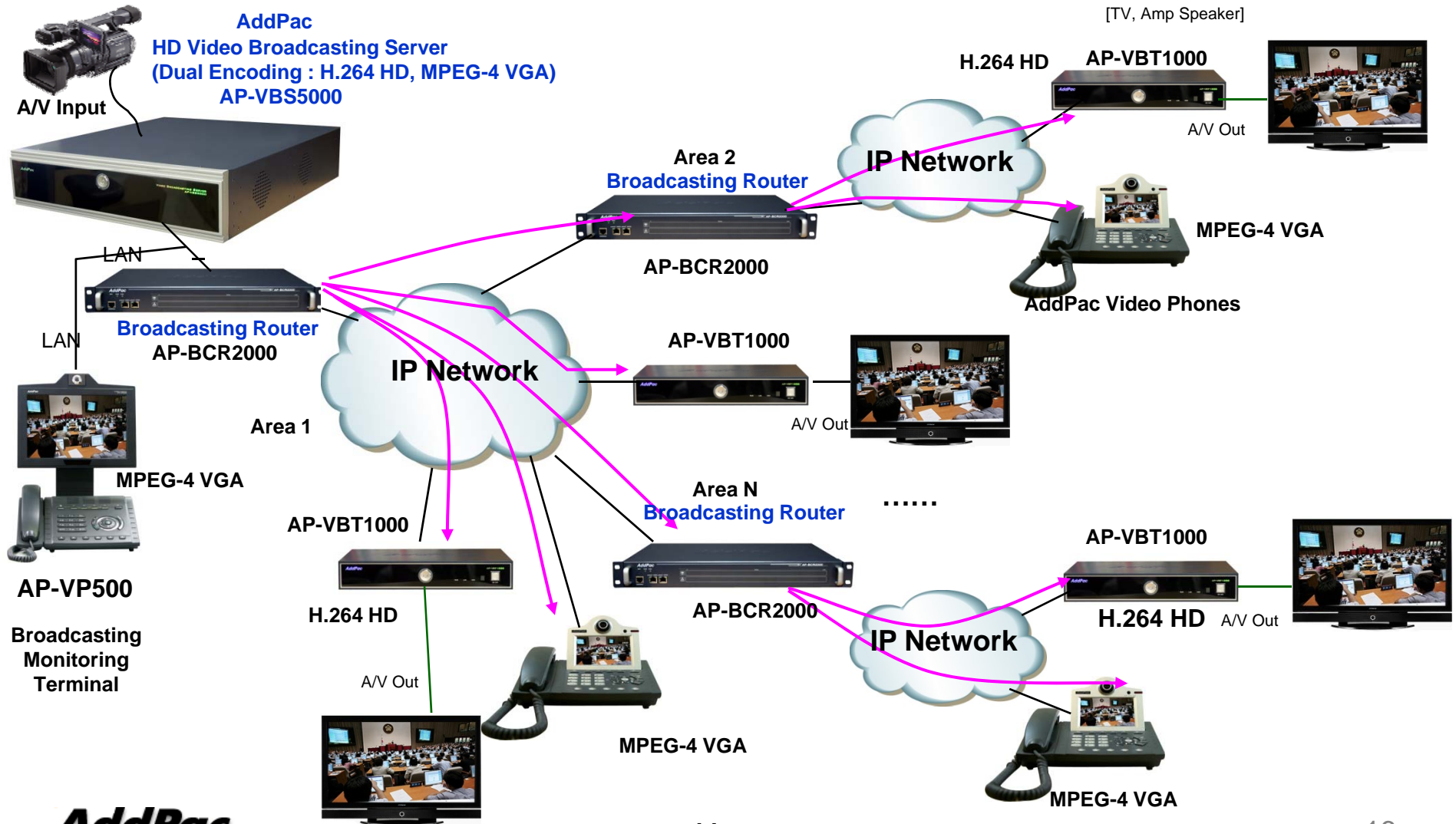- Network Service Diagram

AP-VBS5000

AP-BCR2000

AP-VBT1000

AP-VP500

HD IP Broadcasting Component Diagram

AP-VBS5000 HD Video Broadcasting Server

AddPac
HD Video Broadcasting Server
(Dual Encoding : H.264 HD, MPEG-4 VGA)
AP-VBS5000

A/V Input

[TV, Amp Speaker]

H.264 HD   AP-VBT1000

A/V Out

Area 2
Broadcasting Router

IP Network

AP-BCR2000

MPEG-4 VGA

LAN

AddPac Video Phones

Broadcasting Router
AP-BCR2000

AP-VBT1000

LAN

IP Network

A/V Out

Area 1

MPEG-4 VGA

Area N
Broadcasting Router

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AP-VBT1000

AP-VBT1000

AP-VP500

H.264 HD

AP-BCR2000

H.264 HD   A/V Out

IP Network

Broadcasting
Monitoring
Terminal

A/V Out

MPEG-4 VGA

MPEG-4 VGA

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Ordering Information

- **AP-VBS5000 HD Video Broadcasting Server**
  - AP-VBS5000 HD Video Broadcasting Server Main Body
  - High-performance Host Processor + DSP Architecture
  - 2-port 10/100/1000Mbps Gigabit Ethernet and 1-port RS-232C Console
  - HD-SDI, RGB, Composite, S-Video, Component Video Input (CH#0, CH#1)
  - Stereo RCA Audio Input Interface (CH#0, CH#1)
  - RS-232C PTZ Controller Interface (CH#0, CH#1)
  - Including Network Cable Set & Power Supply Cable, etc.
- **Built-in APOS Internetworking Software for AP-VBS5000**
- **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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