AP-MC7000
Full HD Video MCU

High-performance Multipoint Video Mixing Solution

AddPac Technology

Sales and Marketing

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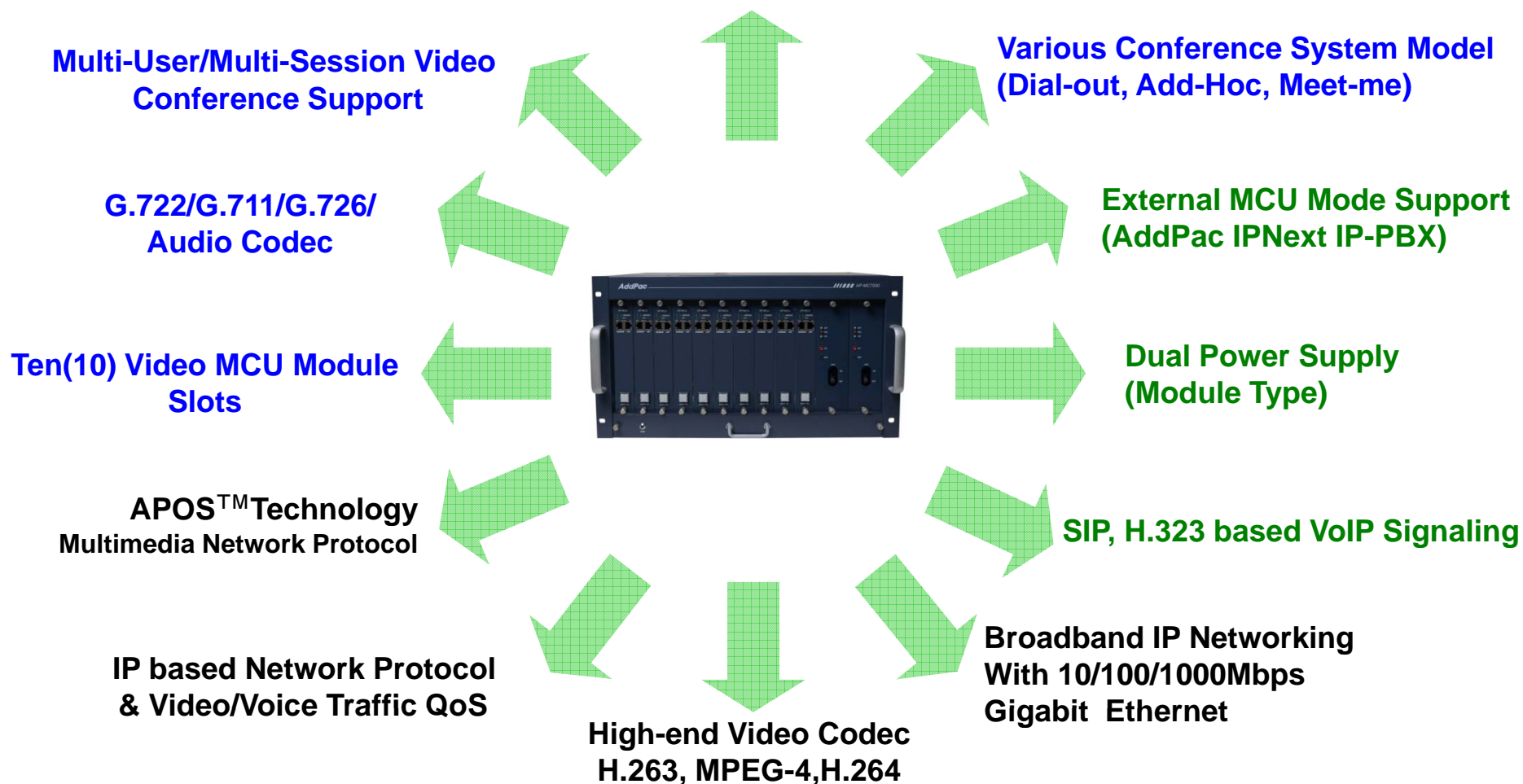- Application Area
- Ordering Information

Product Overview

- IP based Multipoint Audio/Video Mixing Solution
- Support Various Conference System Model
- Scalability and Flexibility
- High-performance Video, Audio, and Voice Service
- Firmware Upgradeable Architecture
- Video Solution with Outstanding Network Service Capability
- Audio/Video Privacy Protection

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Product Highlights

AP-MC7000 Full HD Video MCU

IP based Full HD Multipoint Audio/Video Mixing Solution

Multi-User/Multi-Session Video Conference Support

Various Conference System Model (Dial-out, Add-Hoc, Meet-me)

G.722/G.711/G.726/ Audio Codec

External MCU Mode Support (AddPac IPNext IP-PBX)

Ten(10) Video MCU Module Slots

Dual Power Supply (Module Type)

APOS™ Technology Multimedia Network Protocol

SIP, H.323 based VoIP Signaling

IP based Network Protocol & Video/Voice Traffic QoS

Broadband IP Networking With 10/100/1000Mbps Gigabit Ethernet

High-end Video Codec H.263, MPEG-4, H.264

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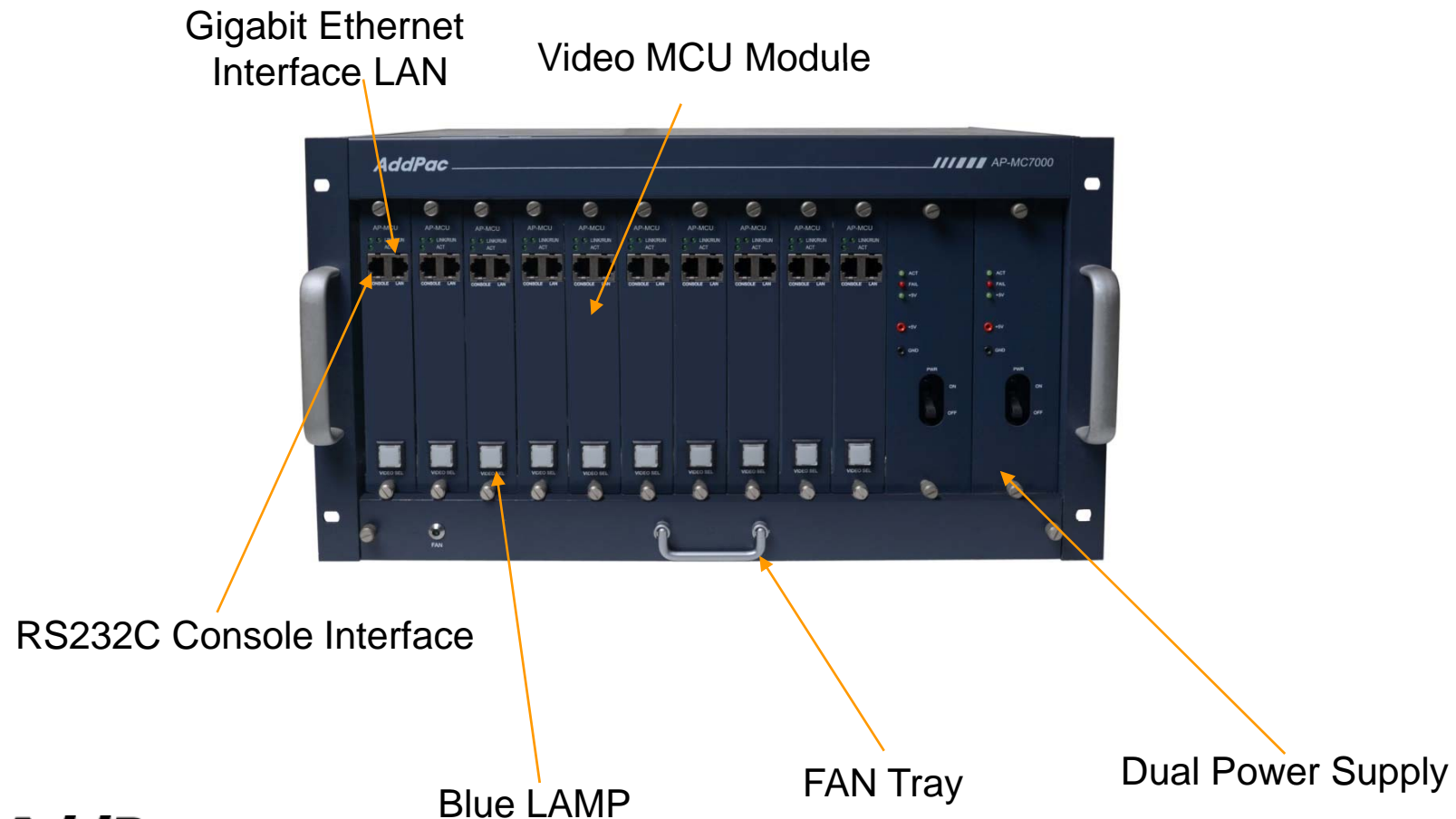
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Hardware Specification

- **High Performance Computing Power**

- **Programmable DSP Hardware Architecture**

- **Main Chassis**

  - **Ten(10) Module Slots for MCU Module**

  - **DSP based MCU Module**

    - One(1) 10/100/1000Mbps Gigabit Ethernet

    - One(1) RS-232C Console (RJ45)

    - On AIR Blue LAMP

  - **Dual Power Supply (Module Type)**

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Hardware Specification

Front Side

Gigabit Ethernet Interface LAN

Video MCU Module

RS232C Console Interface

Blue LAMP

FAN Tray

Dual Power Supply

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Hardware Specification

Back Side

Power Input   FAN

Software Service

- **Built-in AddPac APOS Internetworking Software**
  - Scalability, Functionality, and Stability Features
  - Video Traffic QoS Control
- **Programmable Video, Audio, and Voice Services**
  - Video Codes, Audio, and Voice Codec
- **Firmware Upgradeable Architecture**
- **Function Support**
- **Industry Standard IP based Network Protocol Features**
- **SIP, H.323 VoIP Signaling Support**
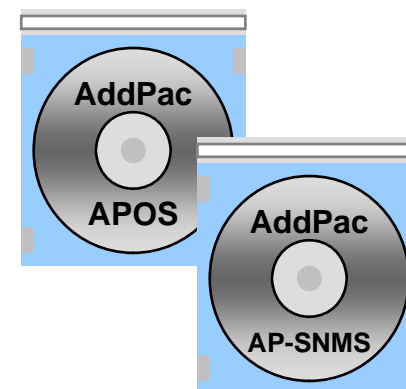
Video Service and Features

- **High-performance Video Codec Support**
  - H.263, MPEG-4,H.264

- **Powerful Image Resolution Support**
  - QCIF(176x144), CIF(352x288), QVGA(320x240), and VGA(640x480), HD (1280x720), Full HD (1920x1080), etc

- **Up to 30fps/60fps with Full HD -Resolution(H.264)**

- **256Kbps to 15Mbps Operating Video Traffic Bandwidth**

- **Various Conference Layout**

- **Multi-Session/Multi-Party Support**

- **Rate Control for Video Traffic QoS**

  - Ensuring Optimized Quality

  - Frame Rate with Limited Bandwidth

- **High-end Error Resilient Against Various Packet Error**

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Audio & Voice Service and Features

- **VoIP based Signaling Protocol Support**
  - SIP, H.323 based VoIP Signaling Protocol Stack

- **High-performance Audio & Voice Codec Support**
  - G.722, G.711,G.726, etc, Audio Codec

- **Enhanced QoS Management Features for Voice Traffics**

Network Service and Features (cont..)

- **Network Managements**
  - SNMPv2/SNMPv3 Support
  - Standard & Enterprise SNMP MIB Support
  - Web Based Management using HTTP/HTTPS
  - Console / Telnet / Rlogin / SSH Interface
- **Security Functions**
  - Standard & Extended IP Access List
  - HTTPS / SSH Interface
  - Auto-disconnect Telnet/Console Session
  - Access Control for Local Service (FTP/Telnet/HTTP.)
  - Enable/Disable Network Services
  - Multi-Level User Account Management

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Network Service and Features

- **Operation & Managements**
  - Configuration Backup & Restore for APOS Managements
  - Use Multiple APOS™ and Configuration
  - Auto Upgrade via HTTP/HTTPS
  - Debugging, System Auditing, and Diagnostics Support
  - FTP/TFTP/Telnet/SSH Server and Client
  - HTTP Server
  - RADIUS Authentication / Account

- **Other Scalability Features**
  - Network time Protocol(NTP) Support
  - Cisco Style Command Line Interface (CLI)
  - DHCP Server & Relay Functions
  - DNS Server

Conference Service and Features (cont..)
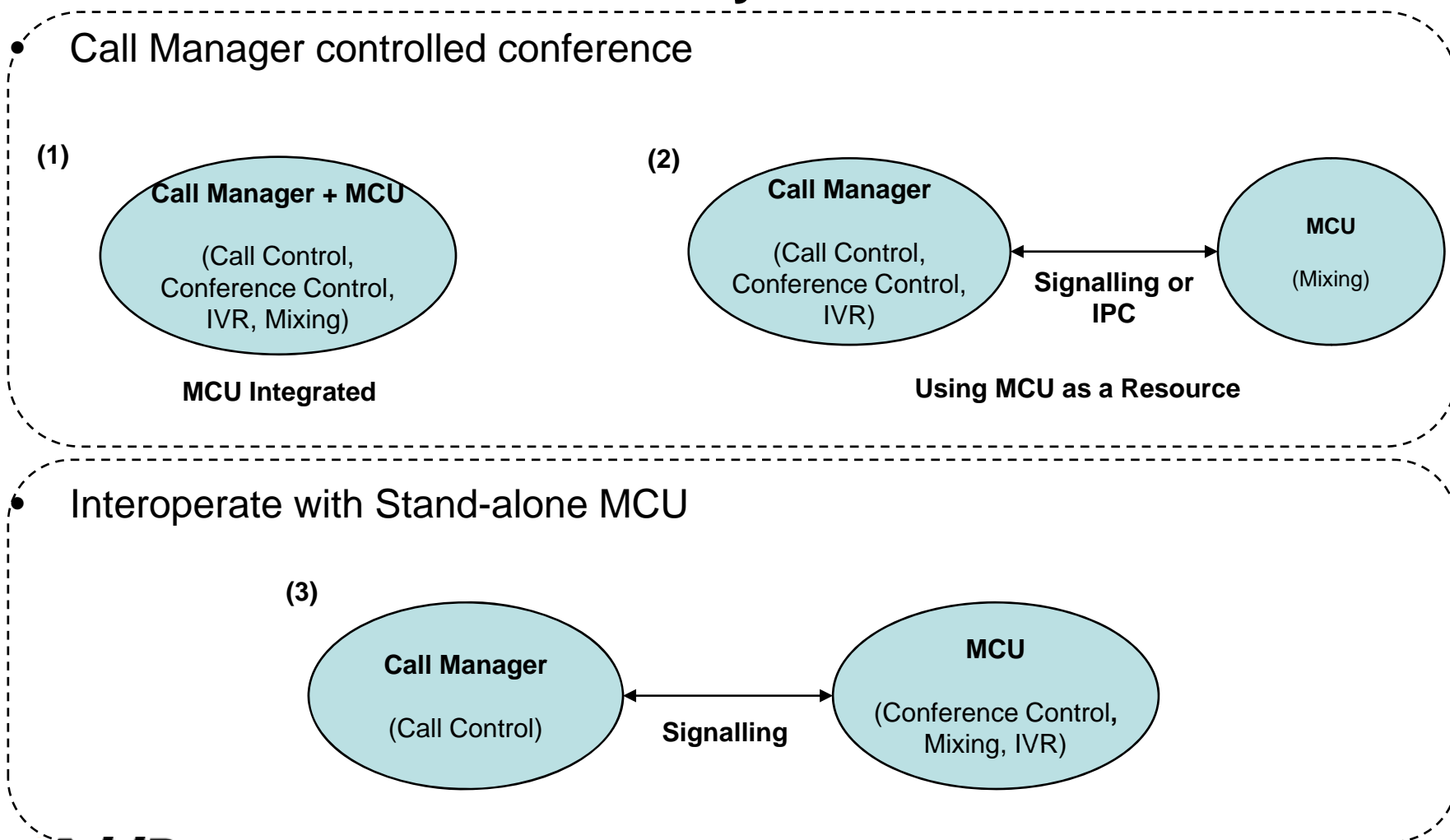
- Type of Conference
  - Meet-Me (Dial-In) Conference
    - Require that a *range of directory numbers* be allocated for exclusive use of the conference
  - Ad Hoc (On-Demand) Conference
    - using Conference and Join soft key
  - Scheduled Conference
    - Through compatible third-party scheduling applications

- View Mode Configuration

Conference Service and Features (cont..)

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Conference System Model

- Call Manager controlled conference

(1)

Call Manager + MCU

(Call Control,
Conference Control,
IVR, Mixing)

MCU Integrated

(2)

Call Manager

(Call Control,
Conference Control,
IVR)

⟷ **Signalling or IPC**

MCU

(Mixing)

Using MCU as a Resource

- Interoperate with Stand-alone MCU

(3)

Call Manager

(Call Control)

⟷ **Signalling**

MCU

(Conference Control,
Mixing, IVR)

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Conference Service and Features (cont..)

AP-MC7000 Full HD Video MCU

Call Manager

Conference Application
- Meet-me
- Ad-hoc

PBX Application

| Transfer |
| Forward |
| Call Pickup |
| Call Park |

Media Service

Call Control

Media Resource
| Player | Detector |
| Recorder | Mixer |

Protocol
| H.323 | SIP | ATAPI | ACCP |

SIP / H.323

Using MCU as a Resource

MCU

Call Control

Protocol
| H.323 | SIP |

Media Resource
| Mixer |

ATAPI

ACCP

AP-IP200

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Smart Messenger

AP-VP300

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AP-HCC1000

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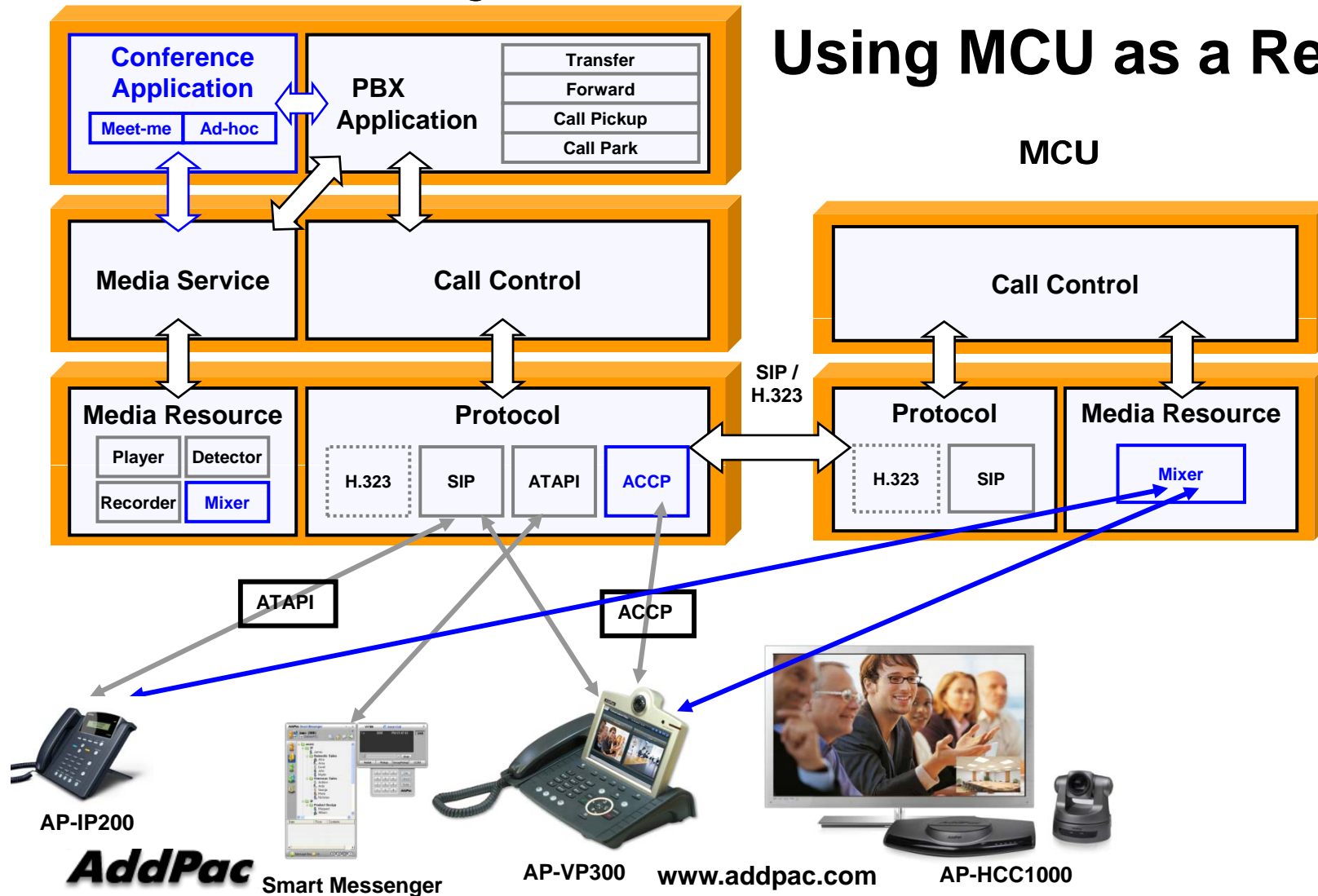
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Network Diagram for Video Conference

AP-MC7000 Full HD Video MCU(Mixer)

SIP Call Manager, H.323 GK

WAN

IP Network

LAN 10/100M   WAN   [Router]

WAN   [Router]   LAN 10/100M

AP-HCC1000

AP-HCC1000

WAN [Router]

WAN [Router]

LAN 10/100M   ······   LAN 10/100M

AP-HCC1000

AP-HCC1000

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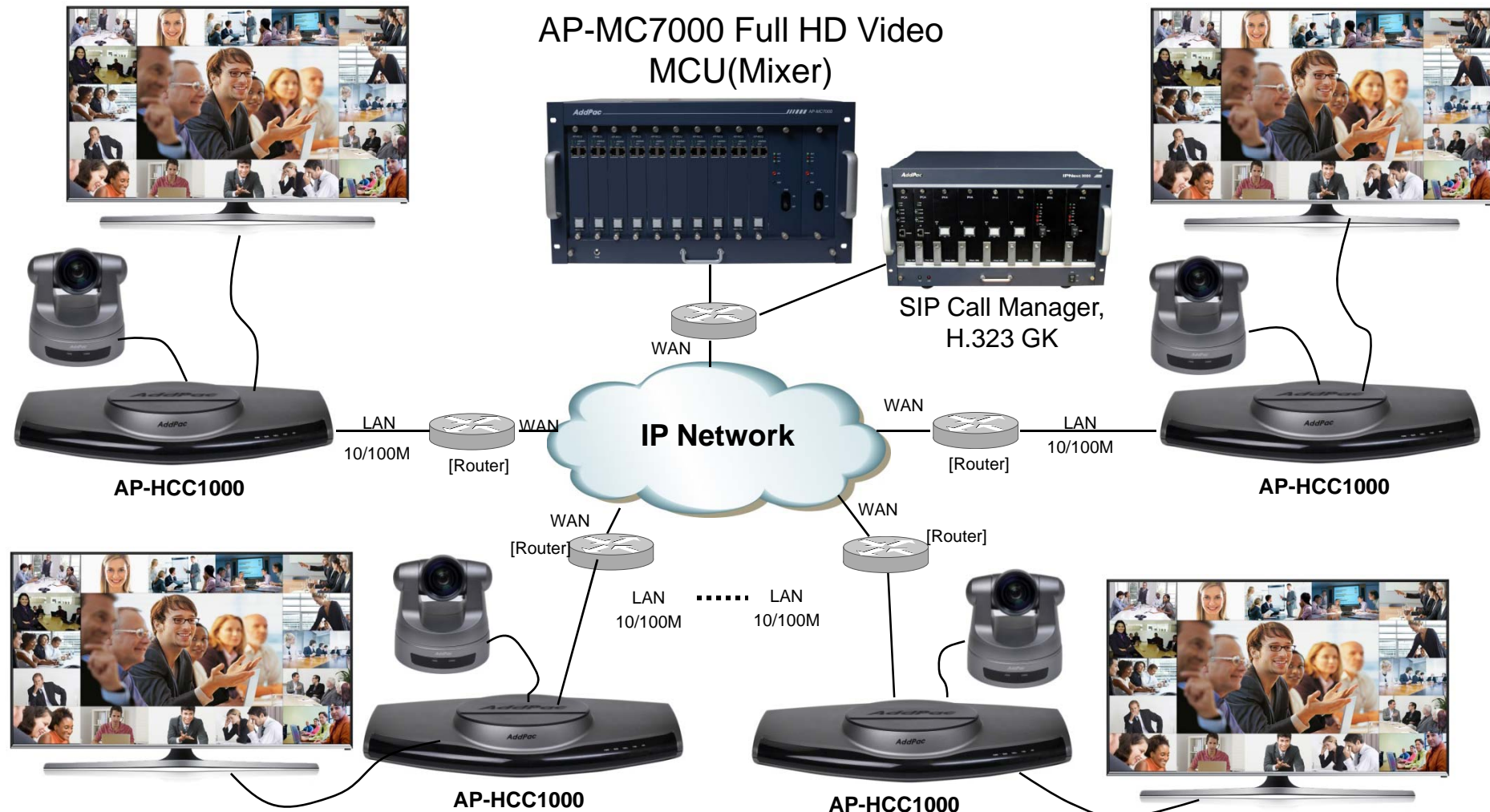
Ordering Information

- **AP-MC7000 Full HD Video MCU Hardware**
  - AP-MC7000 Video MCU Main Body
  - Ten(10) Video MCU Module Slots for Scalability
  - Dual Power Supply (Module Type)
  - Module Type FAN Tray for Maintenance
  - Easy H/W Maintenance
  - Including Network Cable Set
- **Built-in APOS Internetworking Software for AP-MC7000**
- **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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