AP-HCC500
Full HD One(1) Channel Video Conference Codec

High Performance Full HD Video Conference Solution

Preliminary Product Overview

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

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AddPac Technology

Sales and Marketing

AP-HDC100
Full HD
Camera

AP-HCC500
Full HD Video Codec

AP-MP100
AEC Microphone

Contents

- Product Overview
- Benefits and Features
- Hardware Specification
- HD Video Conference Camera
- AEC Microphone
- Multimedia Service
- Software Service
- Network Service and Features
- OSD Software Features
- Application Area
- Ordering Information

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Product Overview

- IP based Video Conference Solution
- High-End Full HD Video Conference Codec Features
- Single Channel Full HD Video Conference Codec
- External Full HD Video Conference Camera (ex: AP-HDC100)
  - CMOS Sensor, 2Mega Pixel Camera
  - Various Video Format Support (ex;1080i/59.94)
  - PAN/TILT/Zoom Housing Features
  - Optical 10 x Zoom, Digital 12 x Zoom Camera
  - Built-in Wide Angle Lens for Video Conference
- External Acoustic Echo Canceller Microphone (AP-MP100)
- High-performance Video, Audio, and Voice Service
- Flexible Videoconferencing Deployment
- Firmware Upgradeable Architecture
- Video Solution with Outstanding Network Service Capability
- Audio/Video Privacy Protection

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Product Highlights

AP-HCC500 Full HD Video Conference Codec

Full High Definition Video Conferencing & V²oIP Telephony

High-quality Image Full HD 1080p , 30fps Up to 12Mbps

Full HD A/V Broadcasting, etc Various Application Service

Excellent Voice Quality G.722l.1/G.722/G.711/G.726 ,etc

High Performance RISC CPU & Programmable DSP

Full HDTV Display Interface, Various I/O Interface

State-of-art Signaling H.323, SIP Dual Stack

APOS™ Technology Multimedia Network Protocol

Video Conference Controller Interworking (IP Phone)

IP based Network Protocol & Video/Voice Traffic QoS

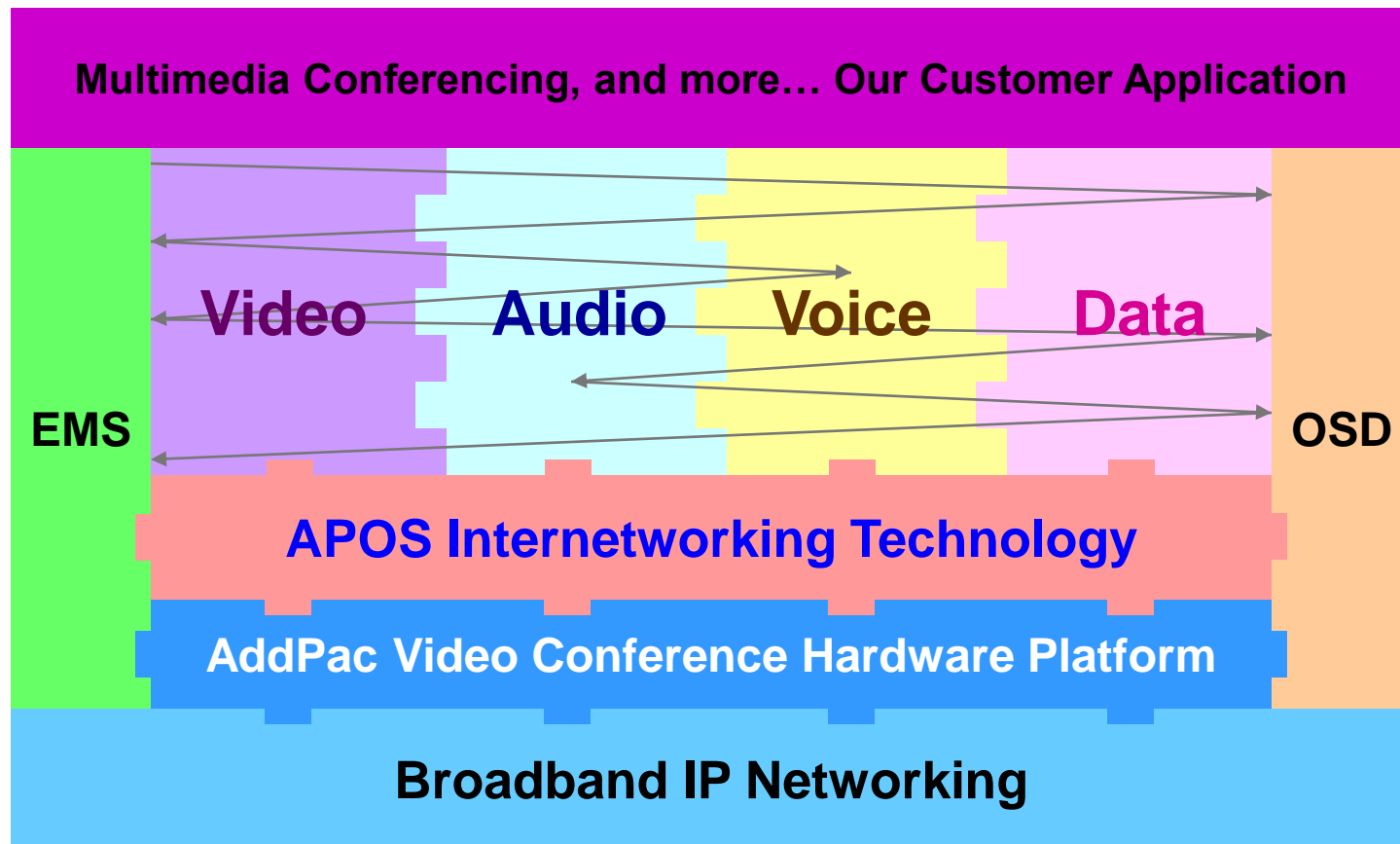**Broadband IP Networking with one(1) 10/100/1000Mbps Gigabit Ethernet**

High-end Video Codec H.264 , MPEG4, etc

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Multimedia Service

Multimedia Conferencing, and more… Our Customer Application

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

EMS

OSD

APOS Internetworking Technology

AddPac Video Conference Hardware Platform

Broadband IP Networking

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

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Benefits and Features

- Various Video Input/Output Interface
  - Composite (RCA) , Component (Y, Pb, Pr), HDMI, HD-SDI
- High-performance Video Codec Support
  - H.264, MPEG4, etc
- Powerful Image Resolution Support
  - CIF(352x288), QVGA(320x240), HVGA(640x240), VGA(640x480), 4CIF(704x576), 720P(1280x720), 1080p(1920x1080)
- Up to 30fps with Full HD-Resolution(H.264)
- Video Conference Call Support (External MCU)
- 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

Hardware Specification (AP-HCC500 Full HD Codec)

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Hardware Specification

AP-HCC500 Full HD Video Conference Codec

High
Performance
CPU

High-end
DSP

- High Performance RISC Computing Power
- High-end Programmable DSP Hardware Architecture
- Video I/O Interface

Video Input	External Full HD Video Camera, Composite RCA, HD-SDI, RGB, HDMI
Video Output	Composite RCA, Component , HDMI
Audio Input	Stereo RCA Type Audio Input
Audio Output	RCA Type Audio Output (Left, Right)
PTZ Control	RS-232C Pan/Tilt/Zoom Control Interface

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Hardware Specification

AP-HCC500 Full HD Video Conference Codec

- Network Interface
  - One(1) 10/100/1000Mbps Giga Ethernet(RJ45)
  - One(1) RS-232C Interface (RJ45) for Console
- USB Interface
  - USB 2.0 Interface for Mouse, etc
- Voice Interface
  - FXS Interface for Analog Phone, Analog Conference Phone, etc
- External Power Input Connector
- External IrDA Connector
- Power On/Off Switch

Full HD Video Conference Camera

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HD Video Conference Camera

- ## Full HD Camera Specification
  - High-end CMOS Camera Sensor
  - 2Mega Pixel
  - HD : 1080i/59.94, 1080i/50, 720p/59.94, 720p/50, etc
  - Auto Focus 10 x Optical Zoom, 12 x Digital Zoom
  - Wide Angle Lens for Video Conference Application
  - PELCO-D Control Protocol
  - Position Preset

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HD Video Conference Camera

AP-HCC500 Full HD Video Conference Codec

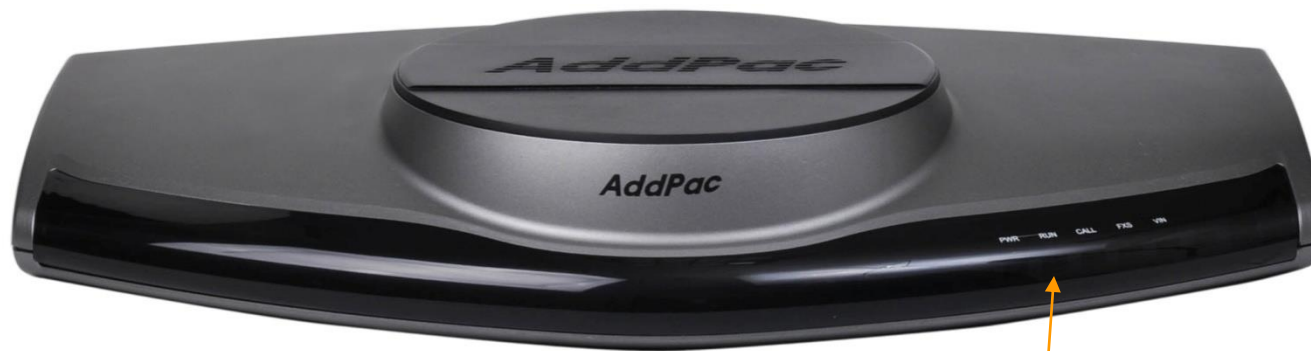| Product	AP-HDC50	AP-HDC100	AP-HDC200	AP-HDC300	AP-HDC350
Sensor	CCD	CMOS	CCD	CMOS	CMOS
Optical Zoom	x18	x10	x18	x10	x20
Video Resolution	HD 720P(1280x720)	Full HD 720P, 1080i	HD 720P(1280x720)	Full HD 720P, 1080i	Full HD 720P, 1080i, 1080p
Video Output	HDMI, HD-SDI, Component, RCA	HDMI, HD-SDI, Component, RCA	HDMI, HD-SDI, Component, RCA	HDMI, HD-SDI, Component, RCA	HDMI, HD-SDI, Component, RCA
PTZ Control	Support	Support	Support	Support	Support
PTZ Control Interface	RS232/RS485	RS232/RS485	RS232/RS485	RS232/RS485	RS232/RS485
Power	External Power Adaptor	External Power Adaptor	External Power Adaptor	External Power Adaptor	External Power Adaptor

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Hardware Specification

High
Performance
CPU

High-end
DSP

Front Side

IR Sensor & Status Indication Area

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Hardware Specification

AP-HCC500 Full HD Video Conference Codec

Back Side

- PTZ Controller
- USB Interface for Mouse,etc
- Gigabit Ethernet
- Audio Output
- IrDA Interface
- Power Inlet & Switch
- Audio In
- Component Out
- CVBS Out
- RGB In
- CVBS In
- VoIP FXS Interface
- RS232C Console Port
- HDMI Out
- HDMI In
- HD-SDI In
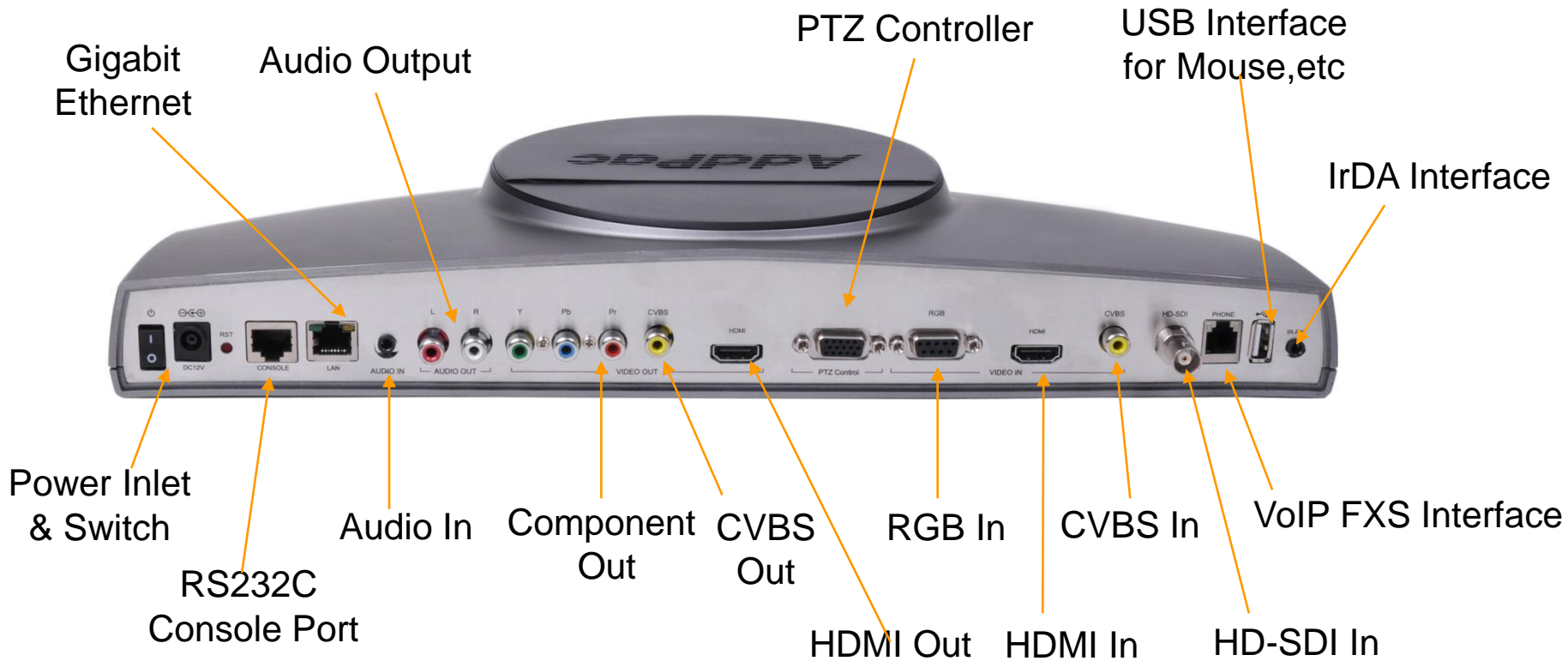
Software Service

- Built-in 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
- OSD (On-screen Display) Function Support
- Industry Standard IP based Network Protocol Features

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APOS

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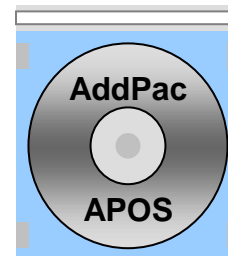
Network Service and Features

AP-HCC500 Full HD Video Conference Codec

- **Basic Routing**
  - Static Routing (IPv4)
  - Static / DHCP / PPPoE
  - VRRP (Virtual Redundancy Routing Protocol)

- **Network Management**
  - SNMPv2/SNMPv3 Support
  - Standard & Enterprise SNMP MIB Support
  - Web Based Management using HTTP/HTTPS
  - Console / Telnet / Rlogin / SSH Interface

- **Security Function**
  - 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

Network Service and Features

AP-HVC500 Full HD Video Conference Codec

- **Operation & Management**
  - 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
  - Remote logging using Syslog
  - Local System Logging (Local HDD model)
  - RADIUS Authentication / Account
- **Other Scalability Features**
  - Network time Protocol (NTP) Support
  - Cisco Style Command Line Interface (CLI)
  - DHCP Server & Relay Functions
  - DNS Server

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OSD Software Overview

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Contents

- Menu Control Mode
- Dial Mode
- Conversation View Mode
- Display Layout Call Mode
- Key Pad Mode for Dialing Number
- Phone Book OSD
- Phone Book : New Contact
- Recent Call OSD
- Tools OSD Mode
- Codec Configuration : IP address, etc
- Status Bars OSD
- PTZ Control OSD

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Menu Control Mode

Keypad, Phonebook, Recent Call, PTZ Control, Tools, Layout, Configuration

Menu Bar Indication ICON

Function Key List for Soft-key

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Dialing OSD

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Conversation View Mode

Remote Site View

PIP : Local Site View

Conversation View Mode

Remote Site Full Screen View

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Display Layout Control Mode

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KeyPad Menu for Dialing Number

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Phone Book OSD Menu

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Phone Book OSD Menu : New Contact

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Recent Call OSD Menu

Tools OSD Menu

Codec Configuration

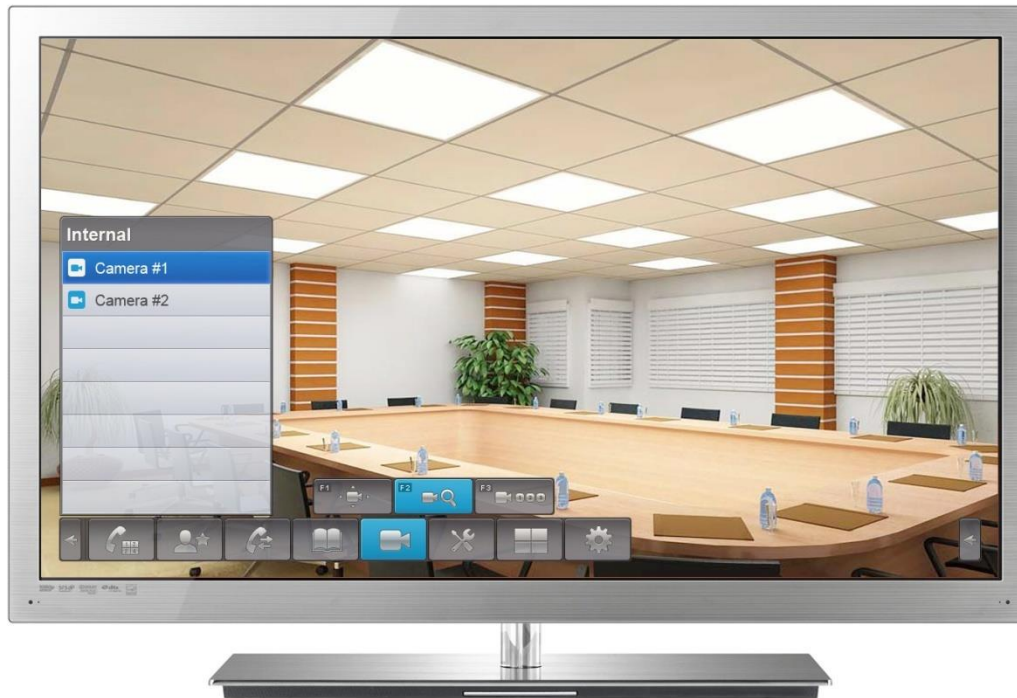# Status Indication Bars OSD

Status Bars

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PTZ Control : Camera #1

PTZ Control : Camera Select

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PTZ Control : Preset Setting

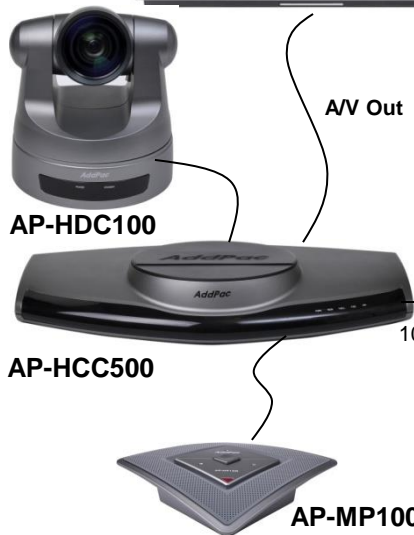# AP-HCC500 Full HD Video Conference Codec

Application Area

- Audio/Video Real-time Broadcasting
- Video Telephony
- Video Conference

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Video Telephony Application

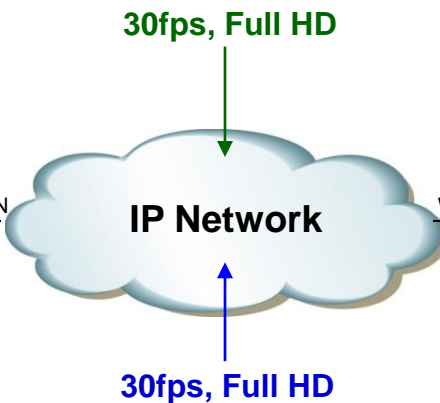## AP-HCC500 Full HD Video Conference Codec

H.264, 1080p, 30frame

H.264, 1080p, 30frame

Point-to-Point Video Service
(symmetric video quality)

A/V Out

A/V Out

30fps, Full HD

AP-HDC100

AP-HDC100

IP Network

LAN

WAN

WAN

LAN

10/100/1000M [Router]

[Router] 10/100/1000M

AP-HCC500

AP-HCC500

VoIP Service
(H.323, SIP)

VoIP Service
(H.323, SIP)

30fps, Full HD

AP-MP100

Multimedia Service
(Video, Audio/Voice, and more…)
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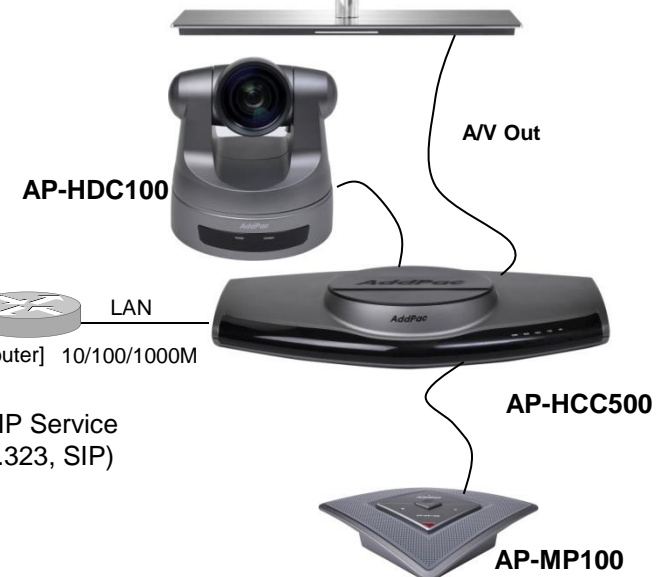
AP-MP100

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Video Conference

Multipoint Video Service
(Video, Audio/Voice, and more…)

AP-MC5000 Video MCU

WAN

LAN
10/100M

WAN

[Router]

AP-HCC500

WAN

[Router]

WAN

IP Network

WAN

[Router]

LAN
10/100M

AP-HCC500

LAN
10/100M

LAN
10/100M

WAN

[Router]
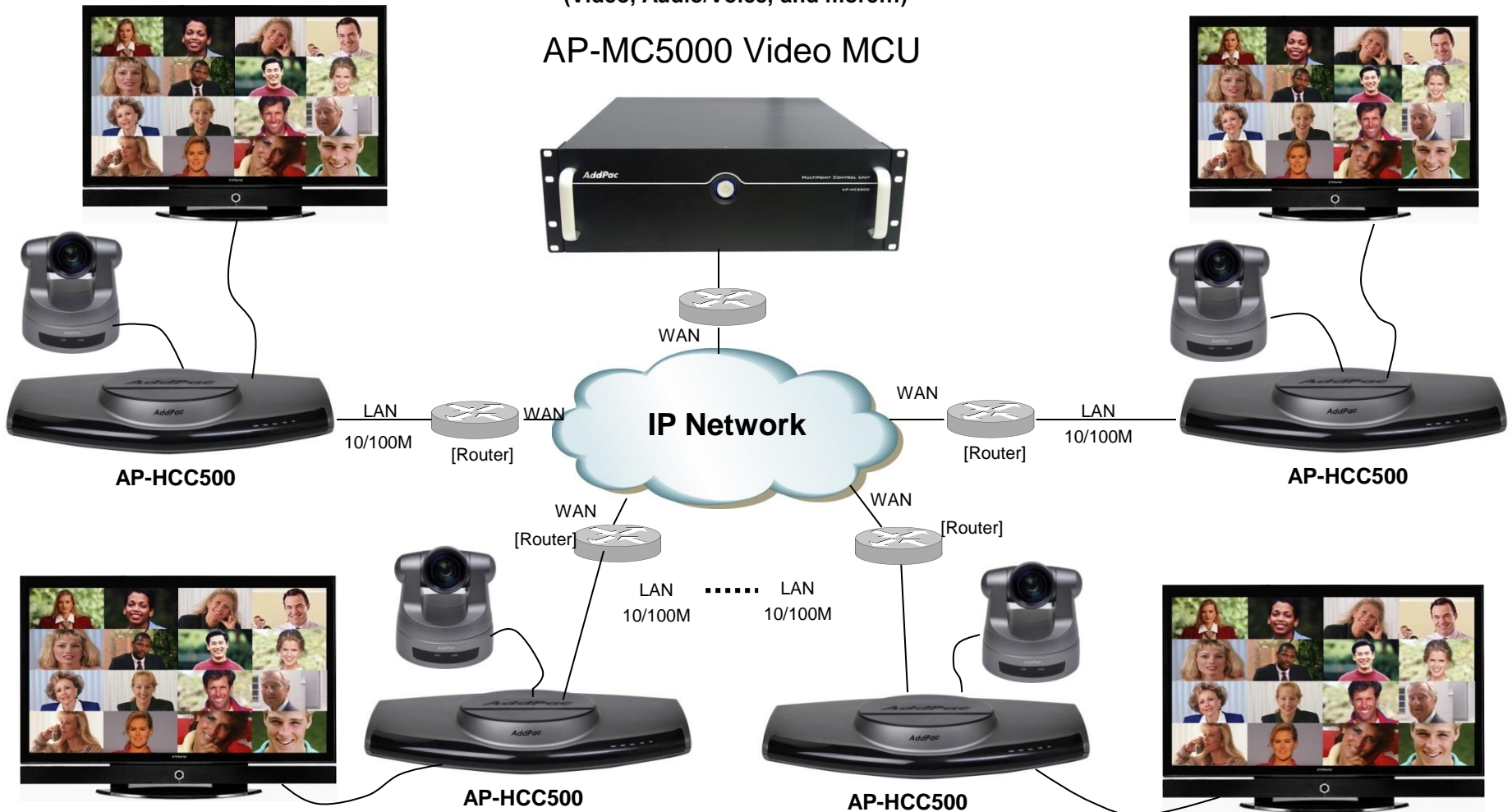
AP-HCC500

AP-HCC500

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Ordering Information

- AP-HCC500 Full HD Video Conference Codec
    - AP-HCC500 Full HD Video Conference Codec
    - Including Network Cable Set & Power Supply Cable, etc.
    - Option : Video Conference HD Camera, Microphone
- Built-in APOS Internetworking Software for AP-HCC500
- 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

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Thank you!

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Sales and Marketing

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