

# 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)



AP-HDC100  
Full HD  
Camera

# **AddPac**

## **AddPac Technology**

Sales and Marketing



AP-MP100  
AEC Microphone



AP-HCC500  
Full HD Video Codec

[www.addpac.com](http://www.addpac.com)

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



# Product Overview

## AP-HCC500 Full HD Video Conference Codec

- 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

# Product Highlights

## AP-HCC500 Full HD Video Conference Codec

### Full High Definition Video Conferencing & V<sup>2</sup>oIP Telephony

Full HD A/V Broadcasting, etc  
Various Application Service

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

Excellent Voice Quality  
G.722.1/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

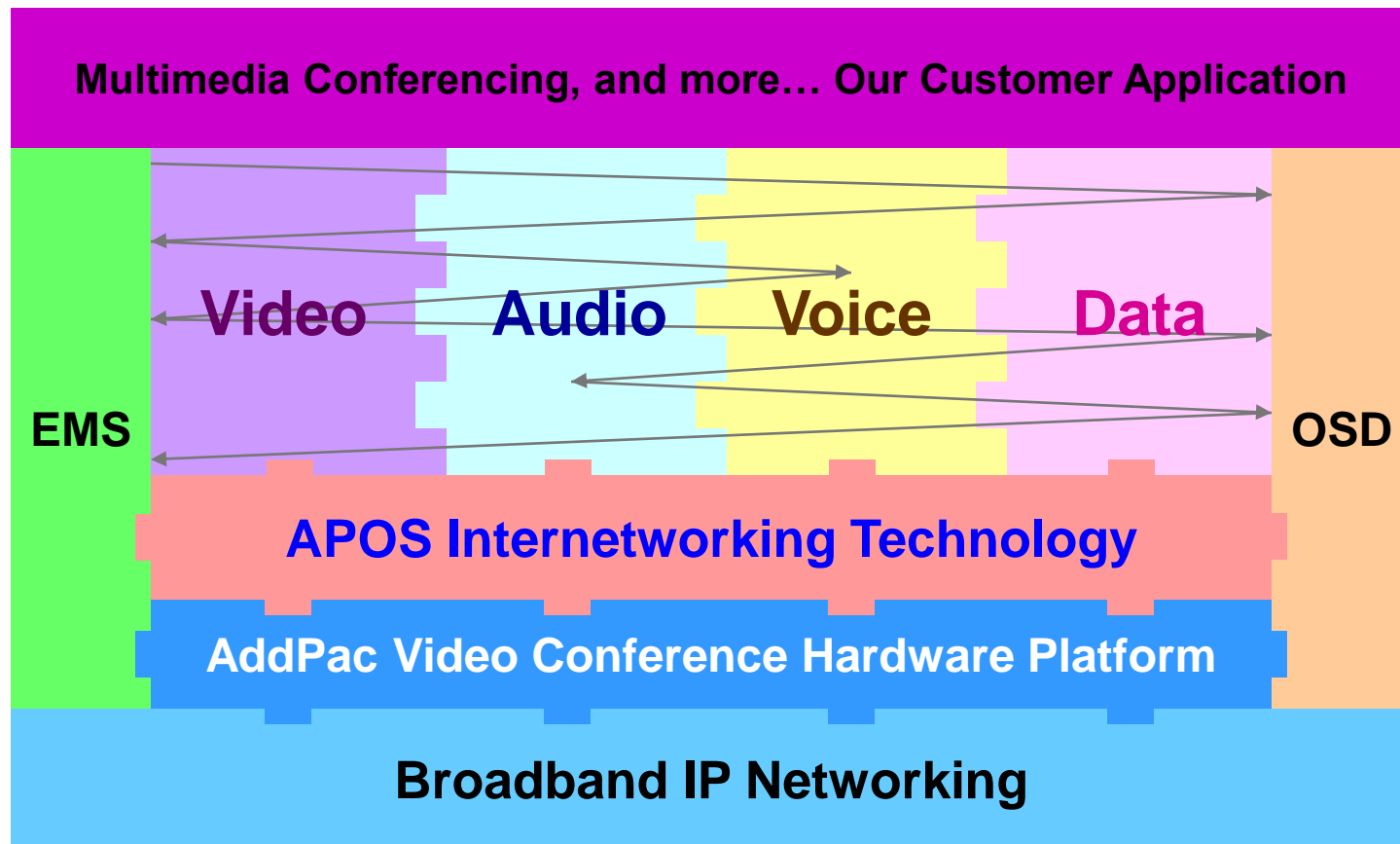
High-end Video Codec  
H.264 , MPEG4, etc

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**AddPac**

# Multimedia Service

AP-HCC500 Full HD Video Conference Codec



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

# Benefits and Features

## AP-HCC500 Full HD Video Conference Codec

- 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)

# 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



# Hardware Specification

AP-HCC500 Full HD Video Conference Codec

High  
Performance  
**CPU**

High-end  
**DSP**

- 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






# HD Video Conference Camera

AP-HCC500 Full HD Video Conference Codec

- 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

# 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

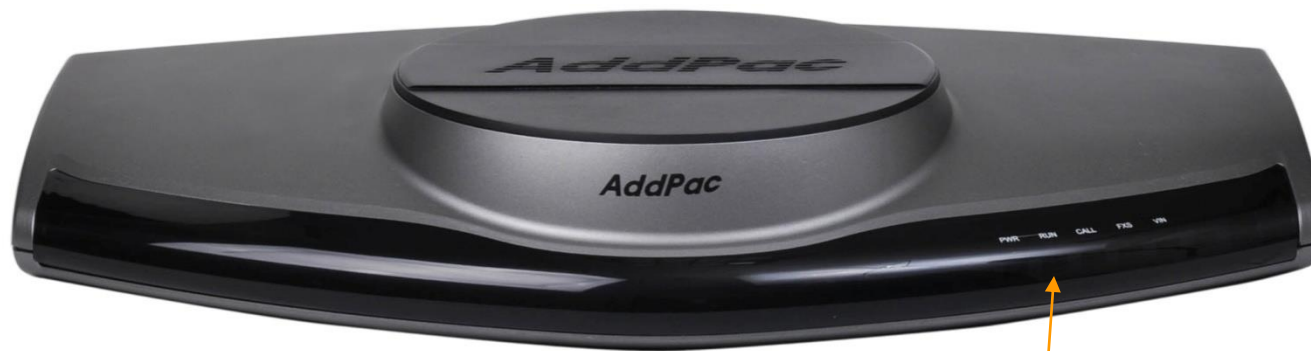
# Hardware Specification

AP-HCC500 Full HD Video Conference Codec

High  
Performance  
CPU

High-end  
DSP

## Front Side



IR Sensor & Status Indication Area

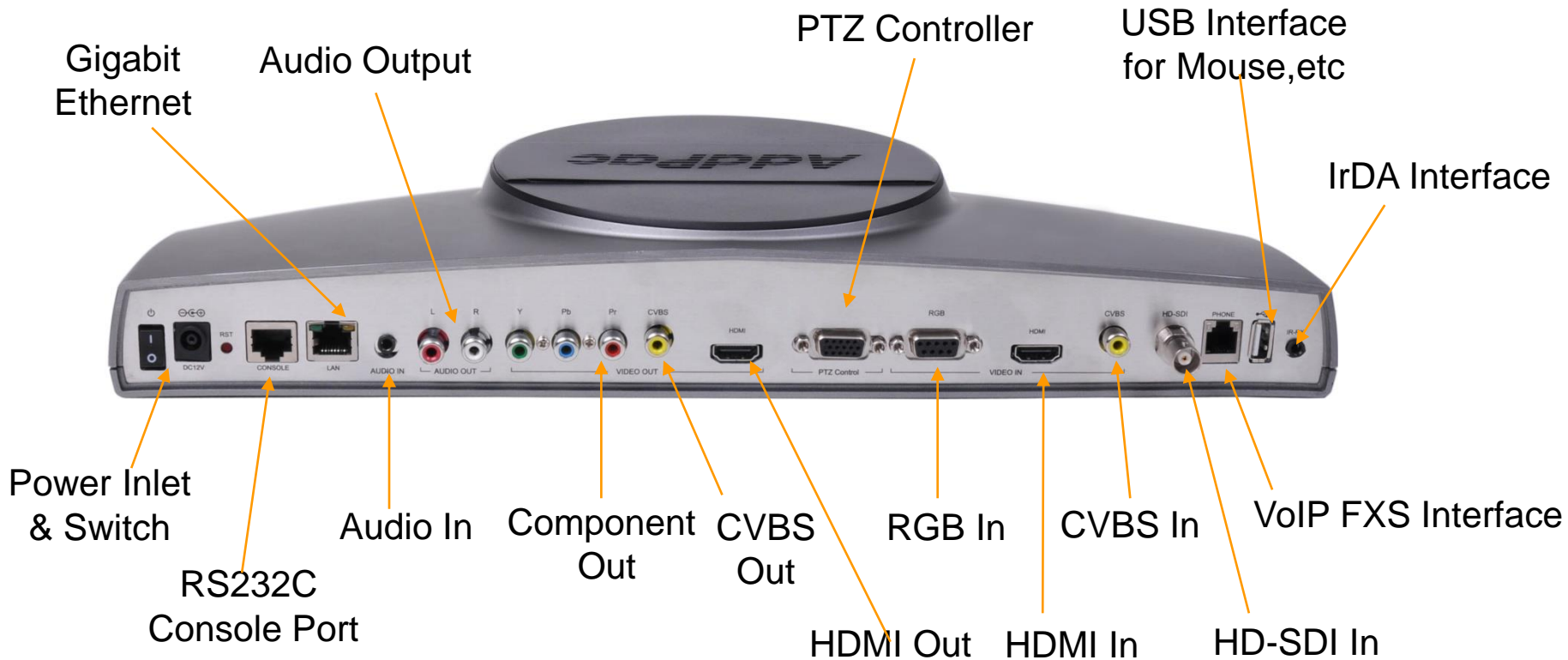
# Hardware Specification

AP-HCC500 Full HD Video Conference Codec

High Performance  
**CPU**

High-end  
**DSP**

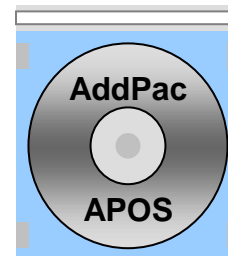
## Back Side



# Software Service

## AP-HCC500 Full HD Video Conference Codec

- 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



# 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

# OSD Software Overview

# 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

# Menu Control Mode

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



Menu Bar Indication  
ICON

Function Key List  
for Soft-key

# Dialing OSD



# Conversation View Mode



Remote Site View

PIP : Local Site View

# Conversation View Mode



Remote Site Full Screen View

# Display Layout Control Mode





# Keypad Menu for Dialing Number



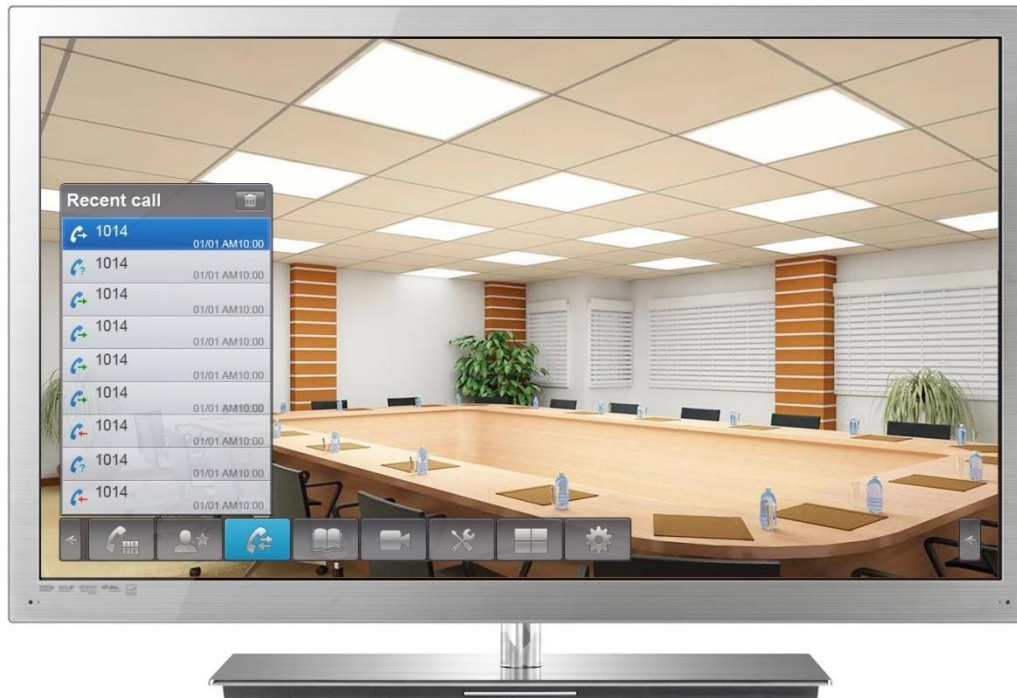
# Phone Book OSD Menu



# Phone Book OSD Menu : New Contact



# Recent Call OSD Menu



# Tools OSD Menu



# Codec Configuration



# Status Indication Bars OSD

Status Bars

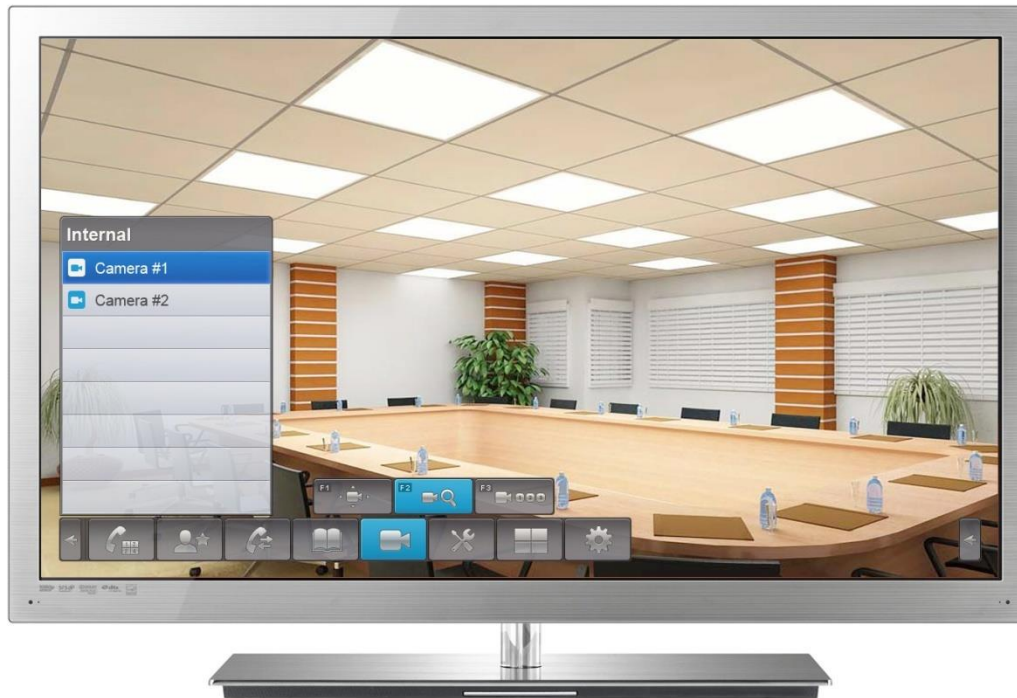


# PTZ Control : Camera #1





# PTZ Control : Camera Select



# PTZ Control : Preset Setting



# AP-HCC500 Full HD Video Conference Codec

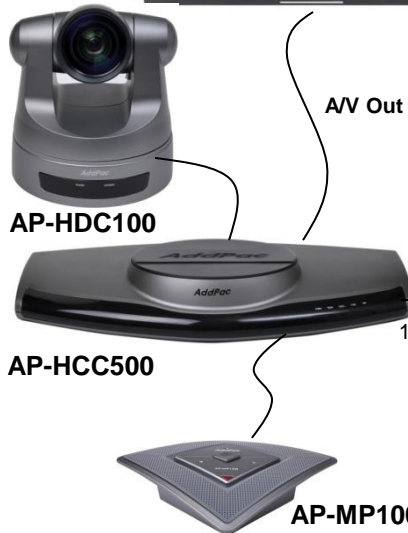
## Application Area

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

# Video Telephony Application

## AP-HCC500 Full HD Video Conference Codec

H.264, 1080p, 30frame



AP-HDC100

AV Out

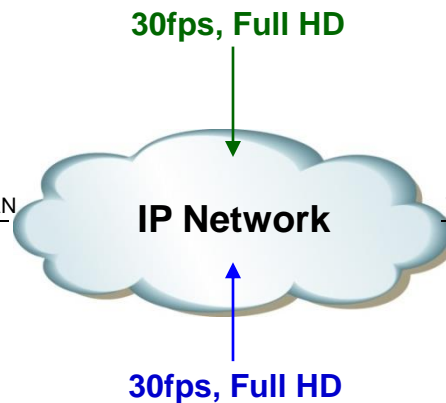
AP-HCC500

AP-MP100

LAN  
10/100/1000M [Router]

VoIP Service  
(H.323, SIP)

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



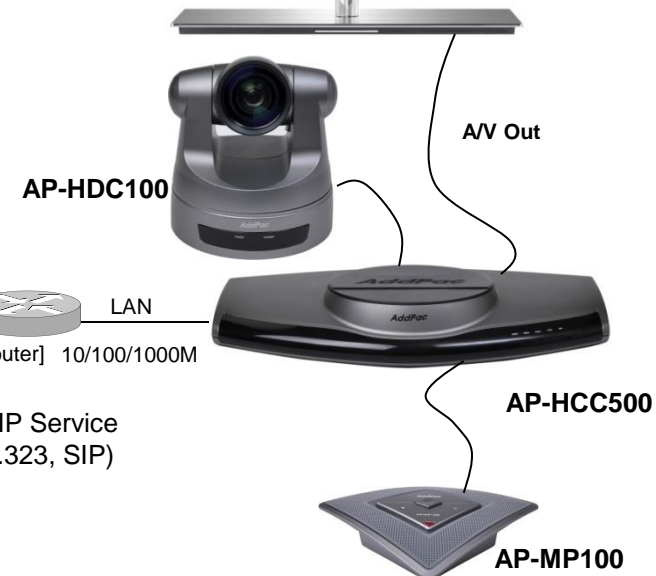
30fps, Full HD

IP Network

30fps, Full HD

**Multimedia Service**  
(Video, Audio/Voice, and more...)  
[www.addpac.com](http://www.addpac.com)

H.264, 1080p, 30frame



AP-HDC100

AV Out

AP-HCC500

AP-MP100

WAN [Router] LAN  
10/100/1000M

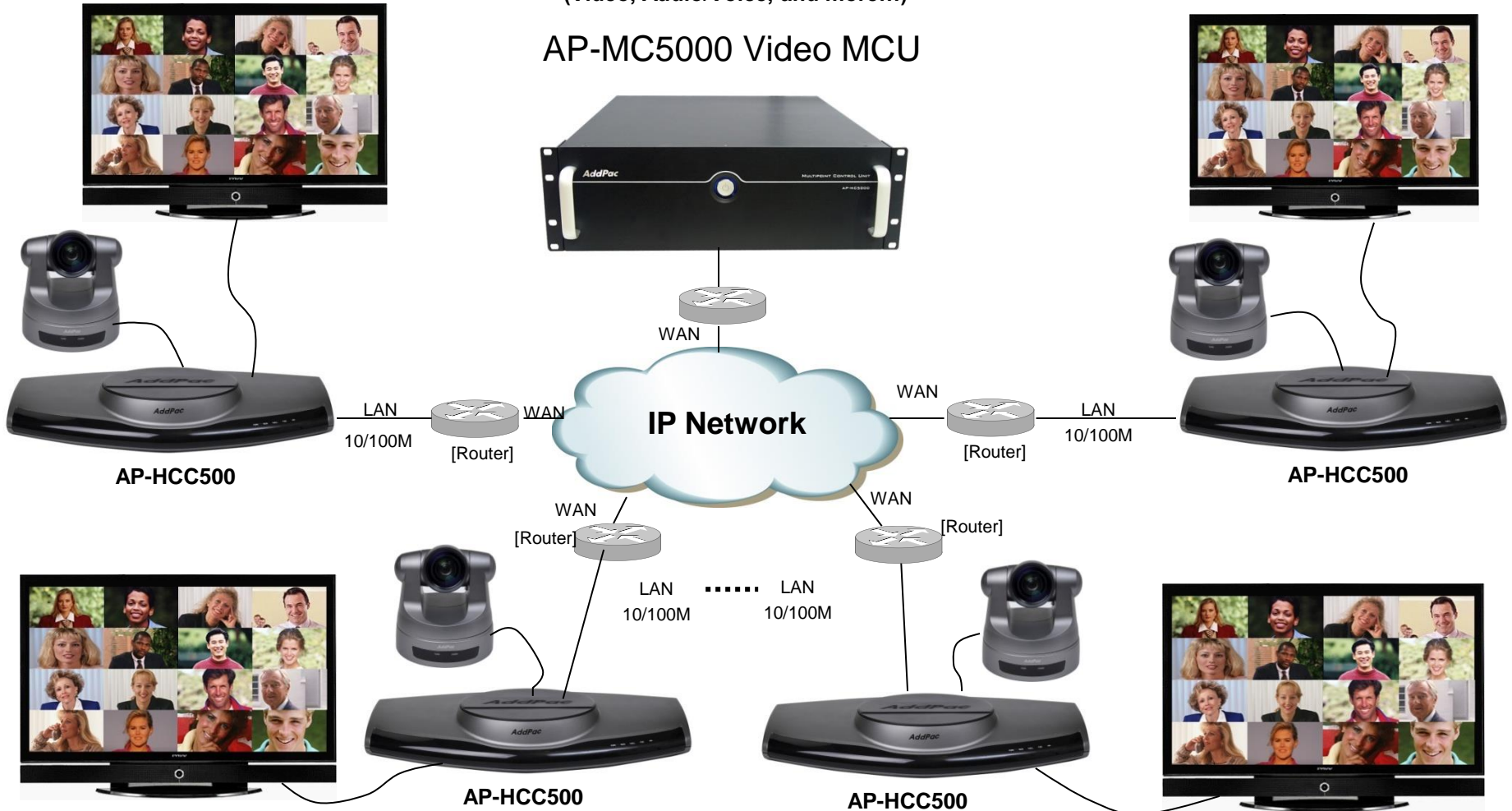
VoIP Service  
(H.323, SIP)

# Video Conference

AP-HCC500 Full HD Video Conference Codec

**Multipoint Video Service**  
(Video, Audio/Voice, and more...)

AP-MC5000 Video MCU



# 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](http://www.addpac.com)

# Thank you!

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Sales and Marketing

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