

# Full HD Video Transmission Codec Solution



Full HD Video Trasmision Codec Solution

- AP-NC3500 HD Video Codec
- AP-NC3000 HD Video Codec
- AP-NC2000 HD Video Codec
- AV3500 HD Video Codec Module

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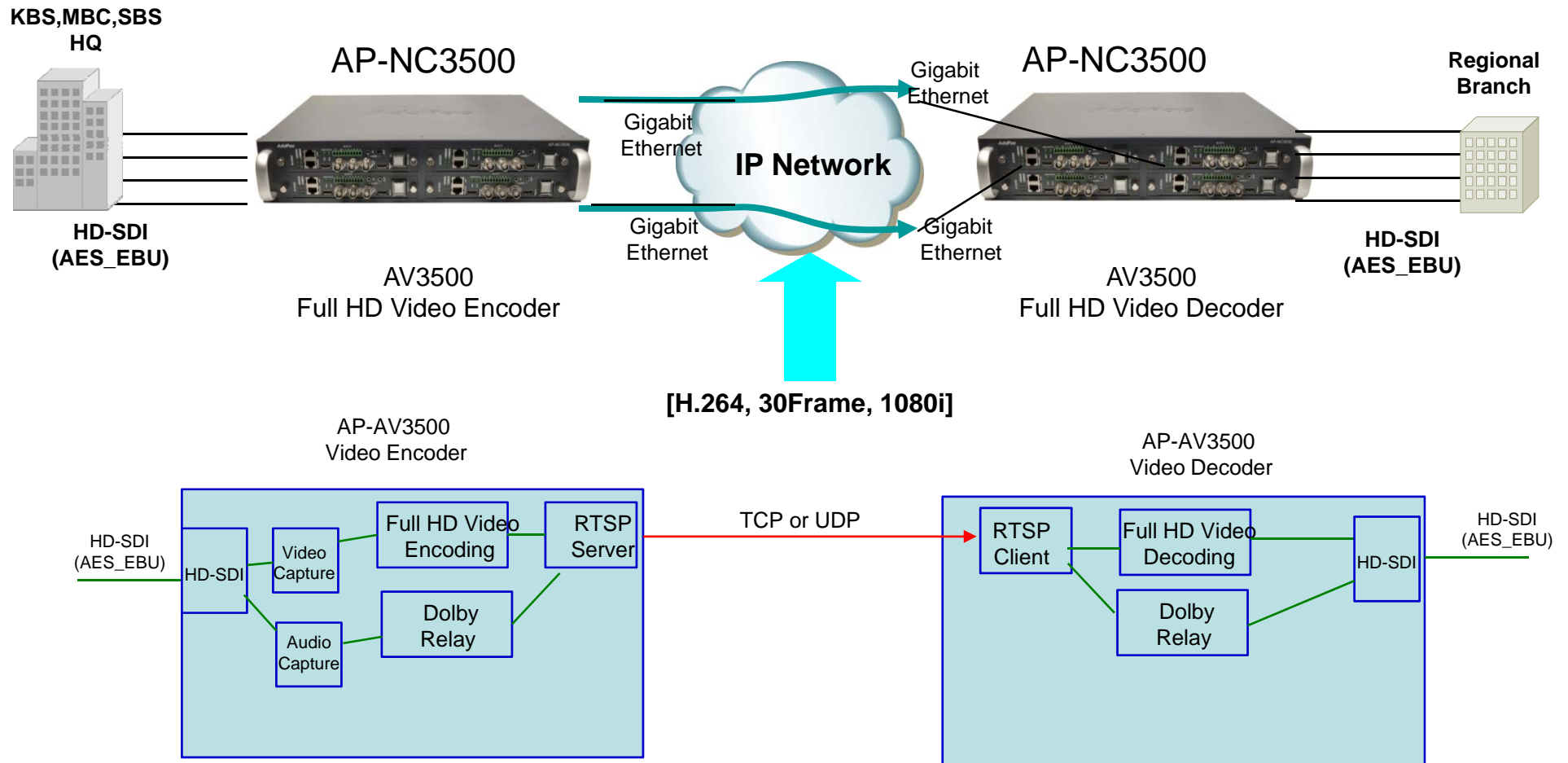
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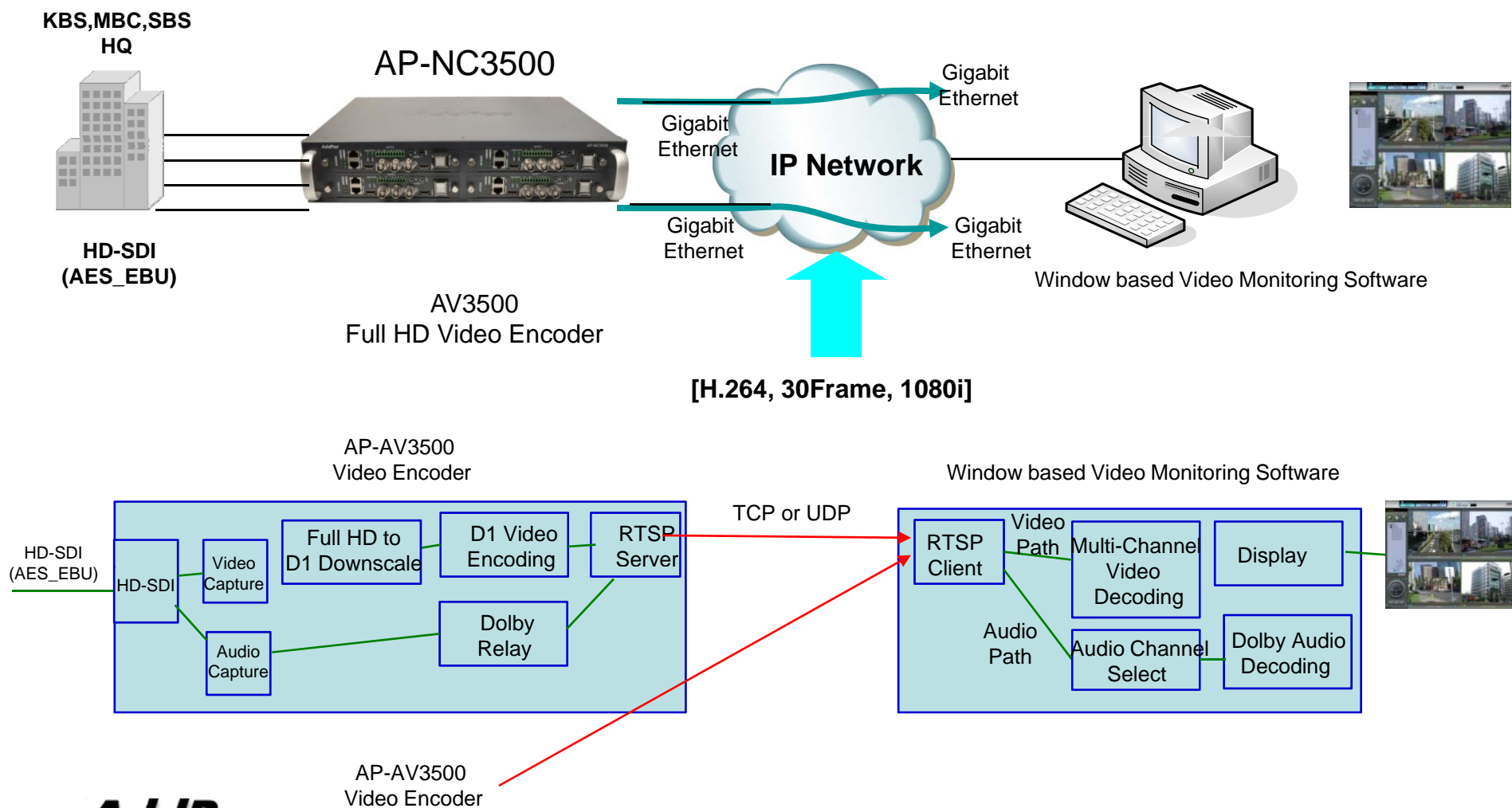
# Contents

- Full HD Video Transmission Network Diagram
  - Full HD Video Transmission
  - Full HD Video Line Monitoring
- Full HD Video Transmission Codec Module
  - AV3500 Video Codec Module
- Full HD Video Transmission Hardware Platforms
- Full HD Video Transmission Protocols
  - RTSP Service Network Diagram
  - RTSP Service Features

# Network Diagram (Full HD Video Line Extension)



# Network Diagram (Full HD Video Line Monitoring)



# Full HD Video Transmission Codec Module (AP-AV3500)



# Main Features

## AV3500 Full HD Video Codec Module

- Full HD (1080i) Video Encoding/Decoding Service Features
- Video Codec : H.264 HP/MP/BP
- Video Input Interface : HDMI, HD-SDI, Analog (NTSC, PAL)
- Video Output Interface : HDMI, HD-SDI, Analog (NTSC, PAL)
- RTSP/RTP, TCP/UDP Protocol Support
- AES\_EBU HD-SDI Audio Service Support
- IP based Dolby Relay Support
- IP based Full HD Video Transmission Solution
- High-performance Video, Audio, and Voice Service
- Firmware Upgradeable Architecture
- Video Solution with Outstanding Network Service Capability
- Web based Management Service
- AP-NC2000, AP-NC3000, AP-NC3500, AP-NC5000 Platform Available

# Hardware Specification

## AV3500 Full HD Video Codec Module



- RISC + Video Processor Computing Power
- AV3500 Video Module
  - Network Interface
    - One(1) 10/100/1000Mbps Gigabit Ethernet
  - Video Interface
    - One(1) Channel HD-SDI Input
    - One(1) Channel HDMI Input
    - One(1) Channel CVBS Input or Output (selected by DIP Switch)
    - One(1) Channel HD-SDI Output
    - One(1) Channel HDMI Output
  - One(1) RS-232 Console Interface (RJ45)
  - Camera Control Interface
    - One(1) RS-232C, RS485 Interface
  - I/O Interface
    - Two(2) Alarm Input /One(1) Relay Out

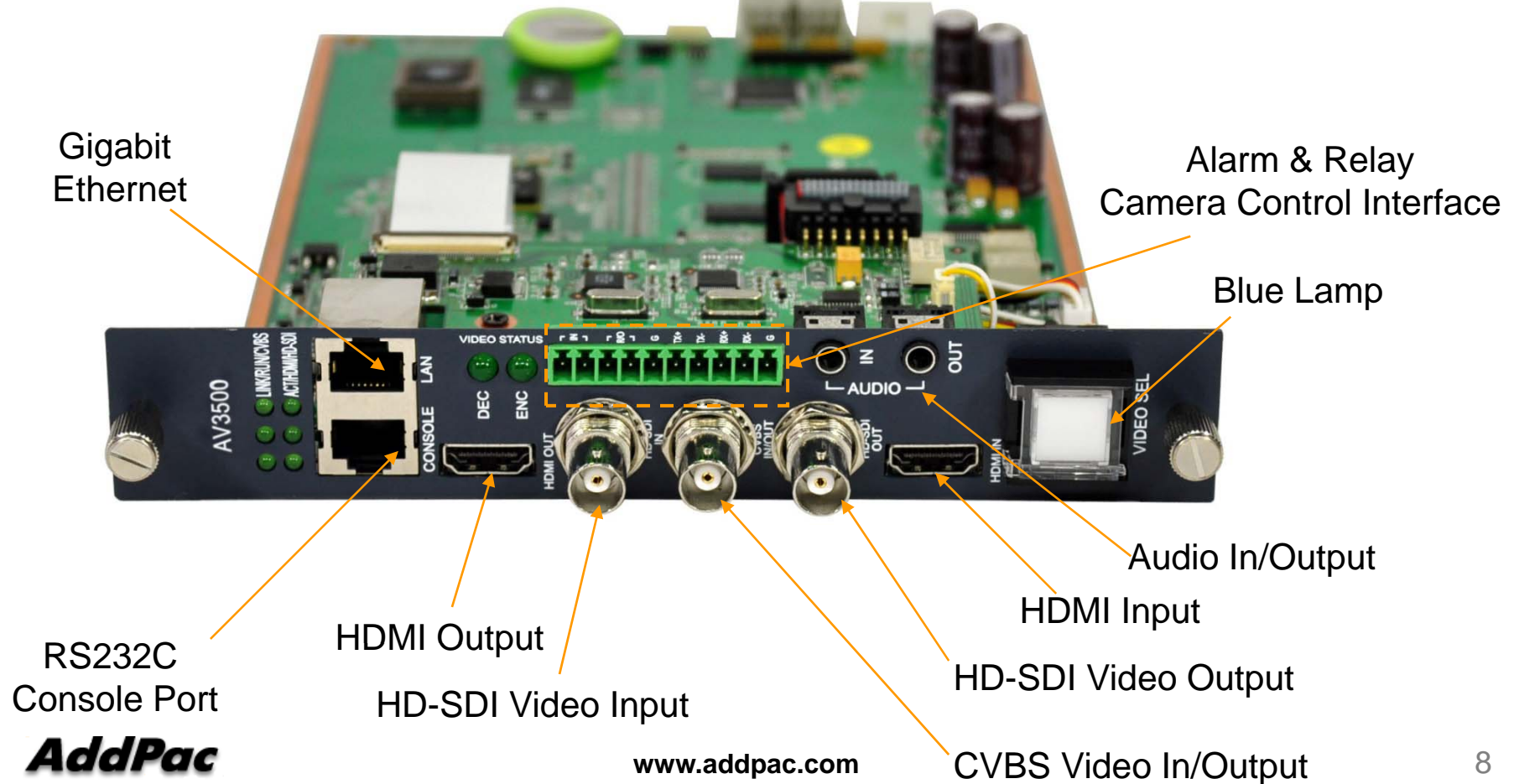
# Hardware Specification

## AV3500 Full HD Video Codec Module

RISC  
CPU

High-End  
VP

AV3500 HD Video Encoder/Decoder Module(H.264)





# AV3500 Technical Specification

## AV3500 Full HD Video Codec Module

RISC  
CPU

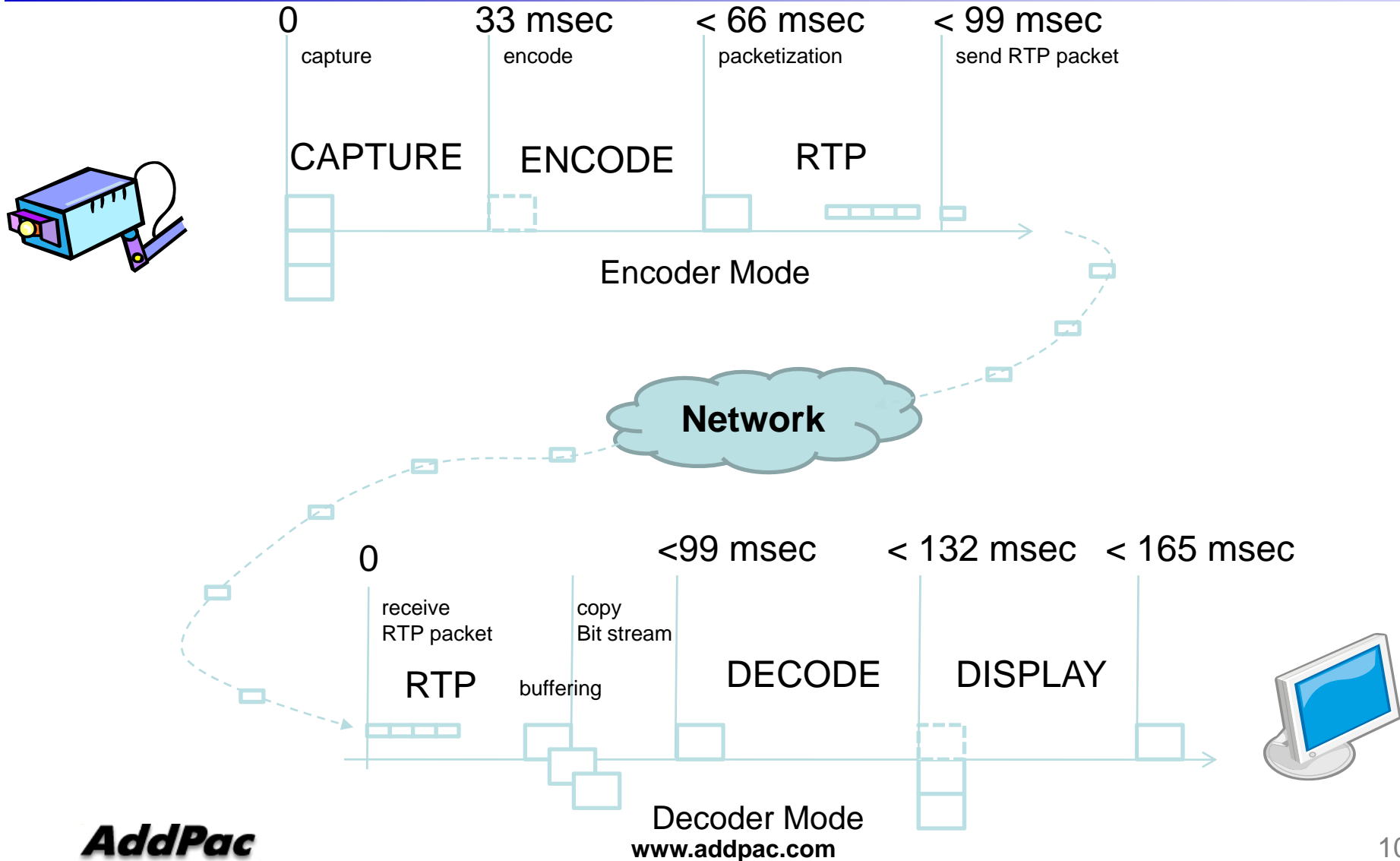
High-End  
VP

### AV3500 Specification

Video	Input	HD-SDI, HDMI, Analog CVS
	Output	HD-SDI, HDMI, Analog CVS
	Format	1080i, 720P, D1(NSTC, PAL)
	Coding	H.264 (HP/MP/BP)
Audio	Input	4 x AES pair in HD-SDI(AES_EBU), 1 x Analog Stereo Pair
	Output	4 x AES pair in HD-SDI(AES_EBU), 1 x Analog Stereo Pair
	Coding	Dolby Pass-Thru(Relay), G.711, G.726, etc
Network Interface		1 x 10/100/1000Mbps Gigabit Ethernet, 1 x RS232 Interface for Console
Protocol		RTSP (TCP, UDP), RTP

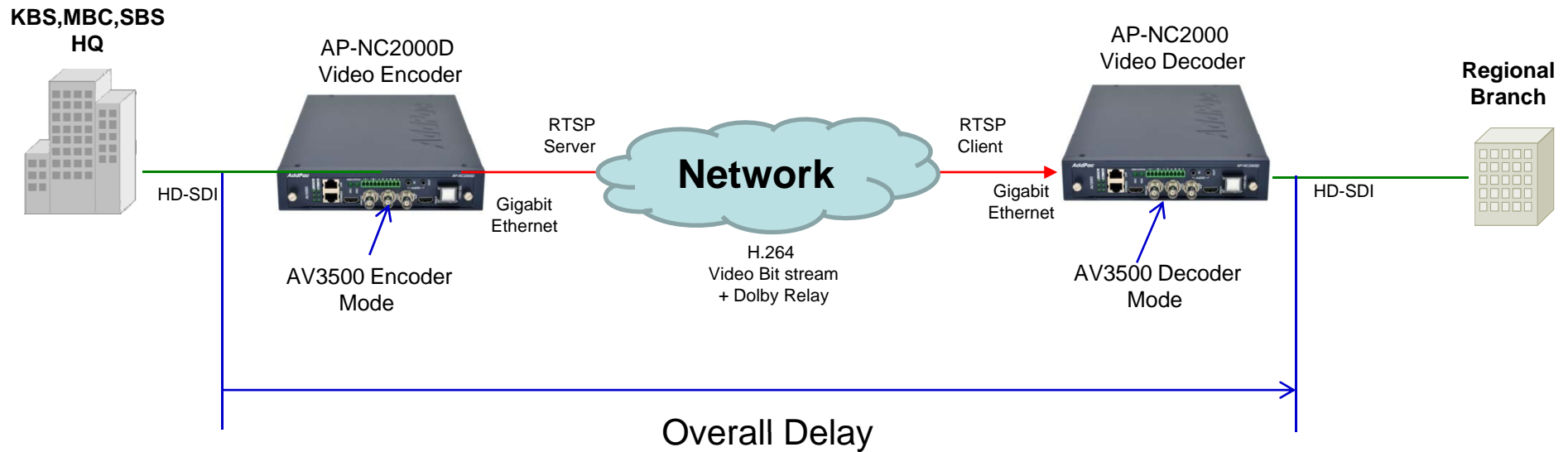
# AV3500 IP Video Codec Latency

AV3500 Full HD Video Codec Module



# AV3500 IP Video Codec Latency

## AV3500 Full HD Video Codec Module







Overall Delay =< 165msec + Network Delay + RTP Rx Buffering Delay



# Full HD Video Transmission Codec Module Hardware Platform

# Hardware Platform for AV3500

## AV3500 Full HD Video Codec Module

	AP-NC2000	AP-NC3000	AP-NC3500	AP-NC5000
Model				
Module Slot	1 Module Slot	2 Module Slot	4 Module Slots	10 Module Slots
Power Supply	Internal Power Module(AC)	Internal Power Module (AC)	Internal Power Module (AC)	Internal Power Module (AC)
Power Type	Built-In	Built-In	Built-In	Module Type

# Hardware Platform for AV3500 (Example)

## AV3500 Full HD Video Codec Module

AP-NC2000 Front View



AV3500 Full HD Video Module



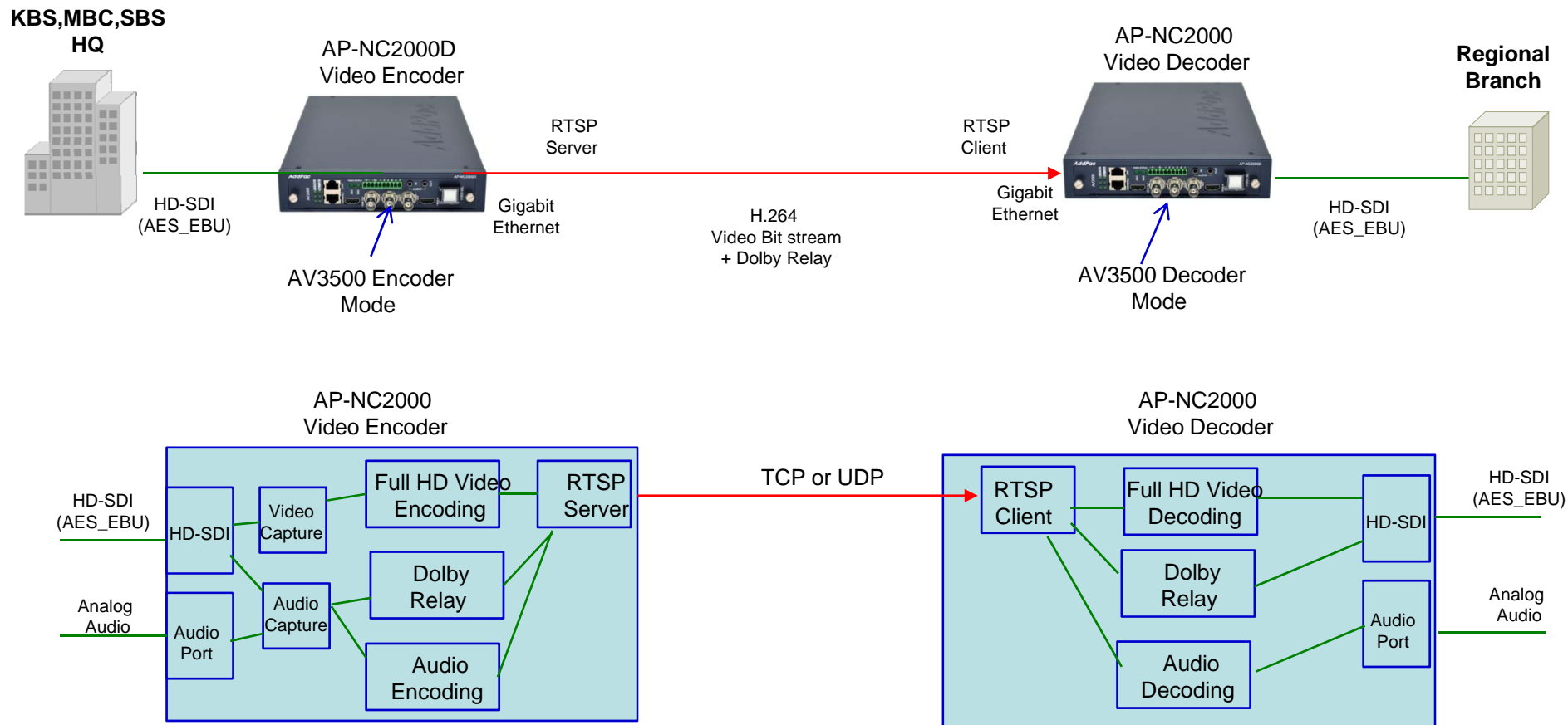
AC Power Input

Power On/Off Switch



# Full HD Video Transmission Protocol

# RTSP Service Network Diagram





# RTSP Service Features

- AV3500 Video Encoder Mode
  - RTSP Server Mode
  - Multi-Channel RTSP Server Mode
  - RTSP, TCP Protocol Support for Error Robust Service
- AV3500 Video Decoder Mode
  - RTSP Client Mode
  - RTSP/TCP or RTSP/UDP Mode Support



# Thank you!

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