

# AP-VAC70AN

## HD IP Video Intercom

High Performance HD IP Video Intercom Solution



### Preliminary Product Overview

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

***AddPac***

**AddPac Technology**

Sales and Marketing

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

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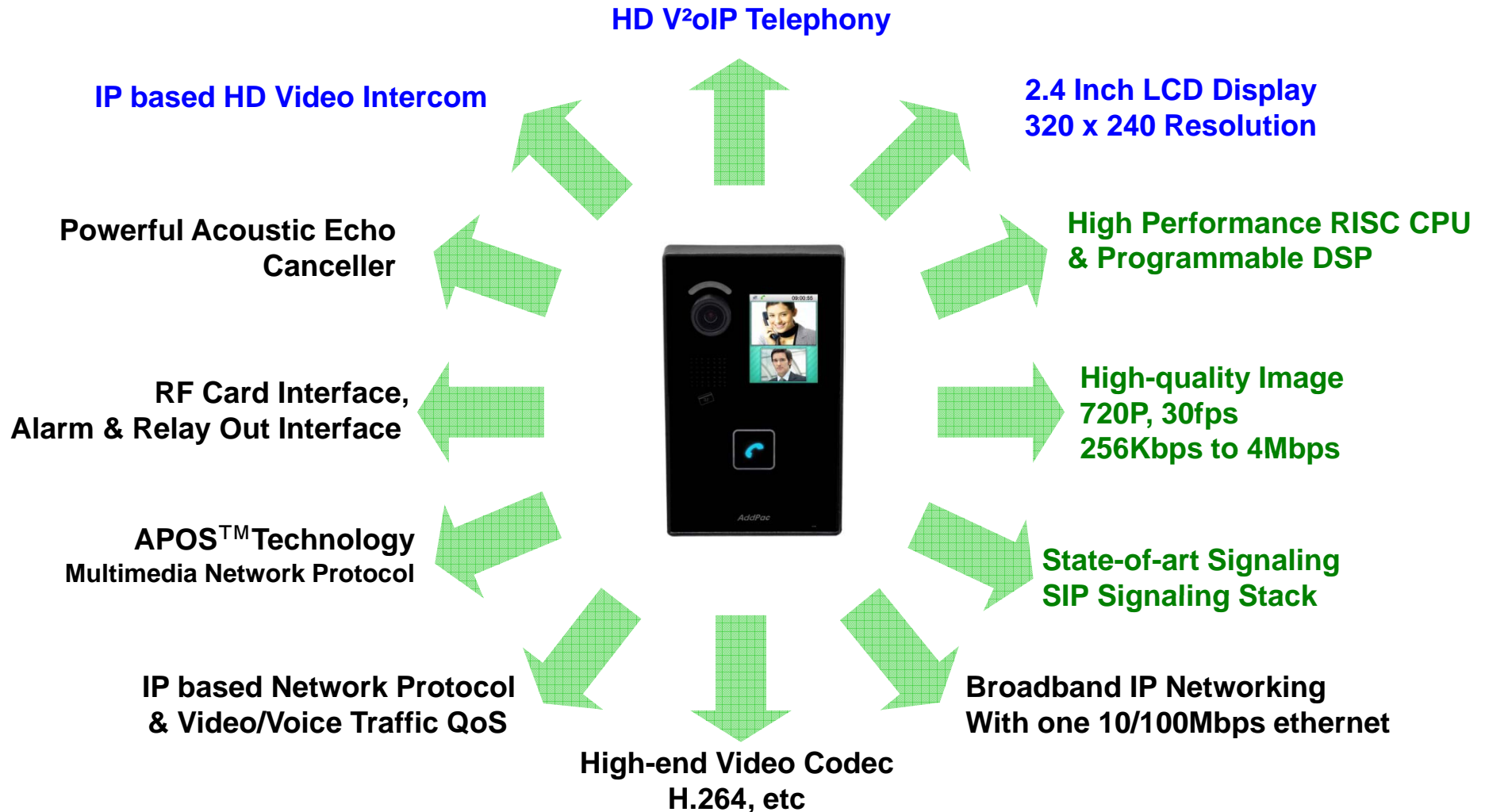
# Product Overview

## AP-VAC70AN HD IP Video Intercom

- High Performance HD IP Video Intercom Solution
- Call Button, TFT Color LCD, Internal MIC & Speaker
- AutoFocus Digital Wide Dynamic Range MegaPixel Sony CMOS Camera Sensor
- H.264 720P HD Video Codec Support
- High Quality 2.4 Inch LCD, 320 x 240 Video Resolution
- SIP VoIP Signaling Stack Embedded
- High-performance Video/Voice Codec Support
  - H.264, MPEG4, G.711, etc
- One(1) 10/100Mbps Fast Ethernet
- PoE(Power over Ethernet) Support
- High Quality Speaker Phone Features
- Powerful Acoustic Echo Canceller Chip Embedded
- Powerful Network Protocols (PPPoE, DHCP, Static Routing, etc)
- Firmware Upgradeable Architecture
- Advanced Voice QoS Mechanism

# Product Highlights

AP-VAC70AN HD IP Video Intercom

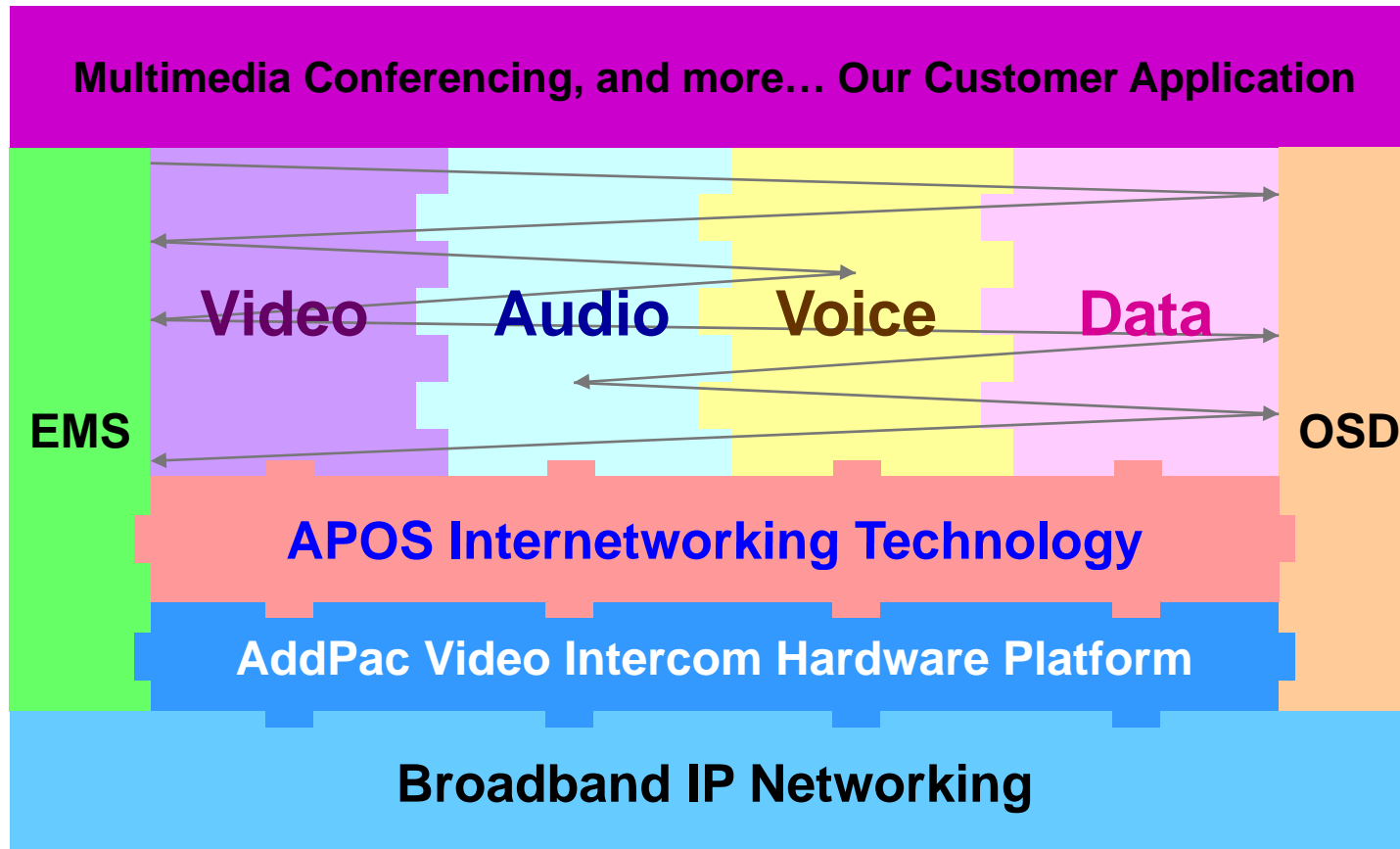


**AddPac**

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

# Multimedia Service

AP-VAC70AN HD IP Video Intercom



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

# Hardware Specification

## AP-VAC70AN HD IP Video Intercom

RISC  
CPU

High-end  
DSP

- RISC+DSP Microprocessor Computing Power
- Audio and Voice Interface
  - Internal MIC
  - Internal Speaker
  - Call Button (Touch Sensor)
- Auto Focus HD Video Camera Image Sensor
- TFT Color LCD Interface
  - 2.4 Inch LCD, 320 x 240 Video Resolution
- Network Interface
  - One(1) 10/100Mbps Fast Ethernet
- RF Card Interface
- Alarm & Relay Out Interface (door open, etc)
- RS232/RS485 Interface
- Power Supply
  - Power over Ethernet (Option)
  - External Power Supply

# Hardware Specification

AP-VAC70AN HD IP Video Intercom

RISC  
CPU

High-end  
DSP

- **Acoustic Echo Canceller**
  - Full-duplex operation during double-talk situations
  - One channel AEC, one channel LEC up to 256ms shared
  - Cancels echoes with up to 10dB echo return
  - Advanced noise reduction(up to 20dB)
- **Speaker**
  - Impedance : 8 +-15%ohm at 1kHz, 1.0 Vrms
  - Sound Pressure : 90 +- 3dB at 0.1W/10 CM  
at 800Hz, 1.0kHz, 1.2kHz, 1.5kHz
  - Resonance Level : 550Hz +- 20%Hz at Fo Hz, 1.0Vrms
  - Frequency Range : Fo Hz ~20kHz
  - Input Power : Normal : 1.0 W, Max : 2.0W
- **Audio Amplifier**
  - 1-W BTL Output(5V, 0.11 % THD+N)
  - Uncompensated Gains of 2 to 20 (BTL Mode)
  - Thermal and Shot-circuit Protection
  - High Supply Ripple Rejection Ratio
- **PoE(Power over Ethernet)**
  - IEEE802.3af compliant
  - Input voltage range 36V to 57V
  - Short-circuit Protection

# Hardware Specification

AP-VAC70AN HD IP Video Intercom

RISC  
CPU

High-end  
DSP

- LCD Controller
  - One-Chip Solution for amorphous TFT-LCD
  - Support resolution up to 240xRGBx320
  - Built-in 172800 bytes internal RAM
  - 6,8,16, and 18-bit RGB Interface
  - Resize Function ( x ½, x ¼)
  - On-Chip Power Management System
- HD Video Camera
  - 1/2.9" 2.1 MegaPixel Sony CMOS Sensor
  - Min.illumination of 0.0001 Lux (Sens-up)
  - 1080P@30fps, [AHD2.0 / 720P@30fps](#), AHD1.0
  - True Day & Night, D-WDR : Digital Wide Dynamic Range
  - 2+3 DNR (Digital Noise Reduction) Function
  - Sens-Up : x2~x30
  - Auto Focus Lens



# Hardware Specification

AP-VAC70AN HD IP Video Intercom

RISC  
CPU

High-end  
DSP

- RF Card Sensor
  - Protocol Supported
    - ISO14443A/B all bit rates
      - > 106,212,424 and 848 kbps
    - Compatible to MiFare Classic
    - ISO15693 all modes
      - > 1.65/6.6 & 26.5 kbps
      - > Uplink 1 & 2 sub-carrier
  - Receiver
    - Rx Sensitivity down to 1mVrms
    - Rx Automatic Gain Control
    - Accept external baseband signal from external circuitry for frame level processing
    - Integrated signal strength indicator (SSI)
    - On-Chip Framing handler for supported standard
  - Transmitter
    - Typical proximity operating distance up to 100mm.
    - Software configurable modulation index
    - Maximum driving current up to 200 mA/PIN @ 5V
    - Accept external baseband signal for RF modulation
    - Wide Transmitter driver supply range from 2.7~7.0V



RF Card Sensor

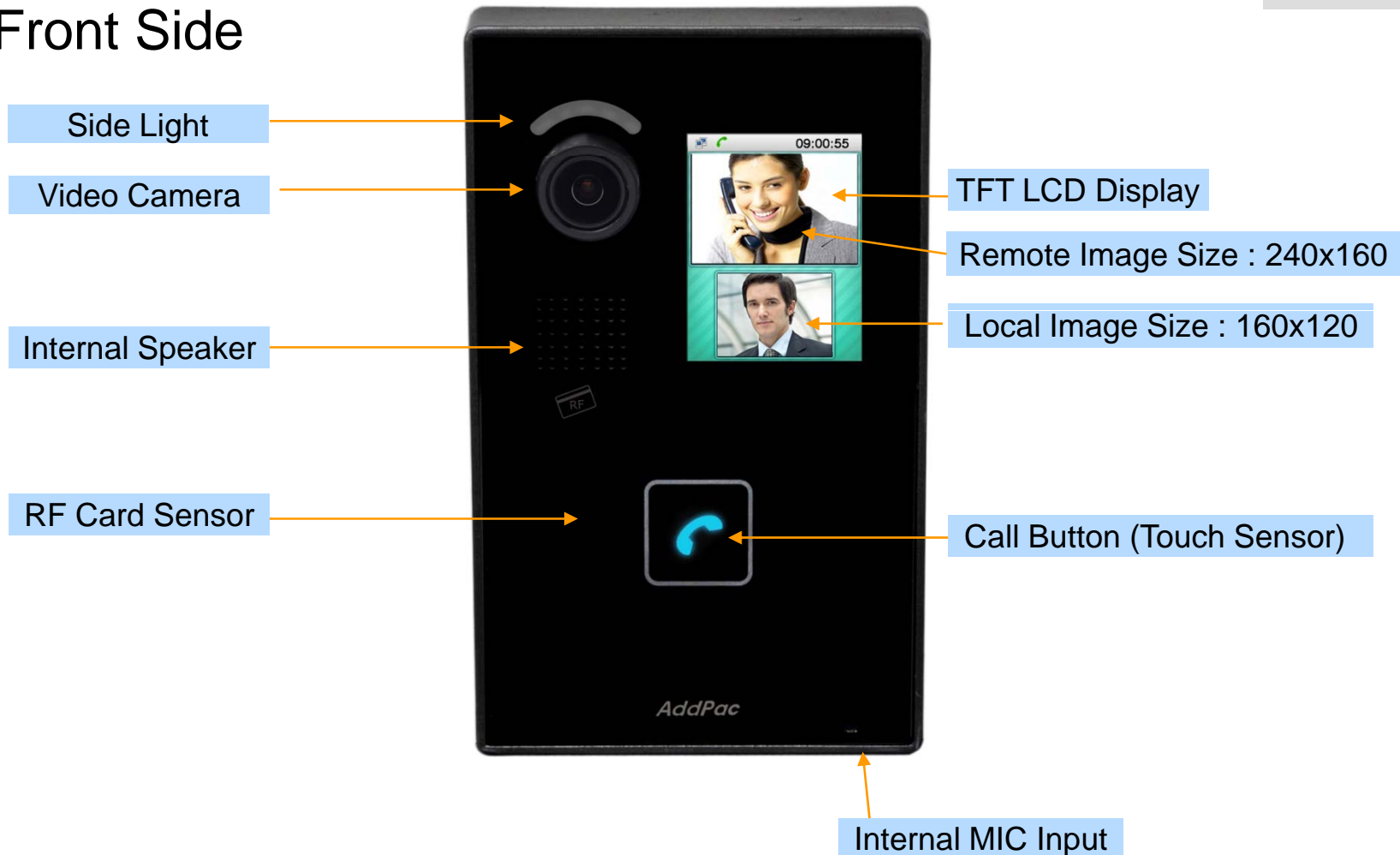
# Hardware Specification

AP-VAC70AN HD IP Video Intercom

RISC  
CPU

High-end  
DSP

## Front Side



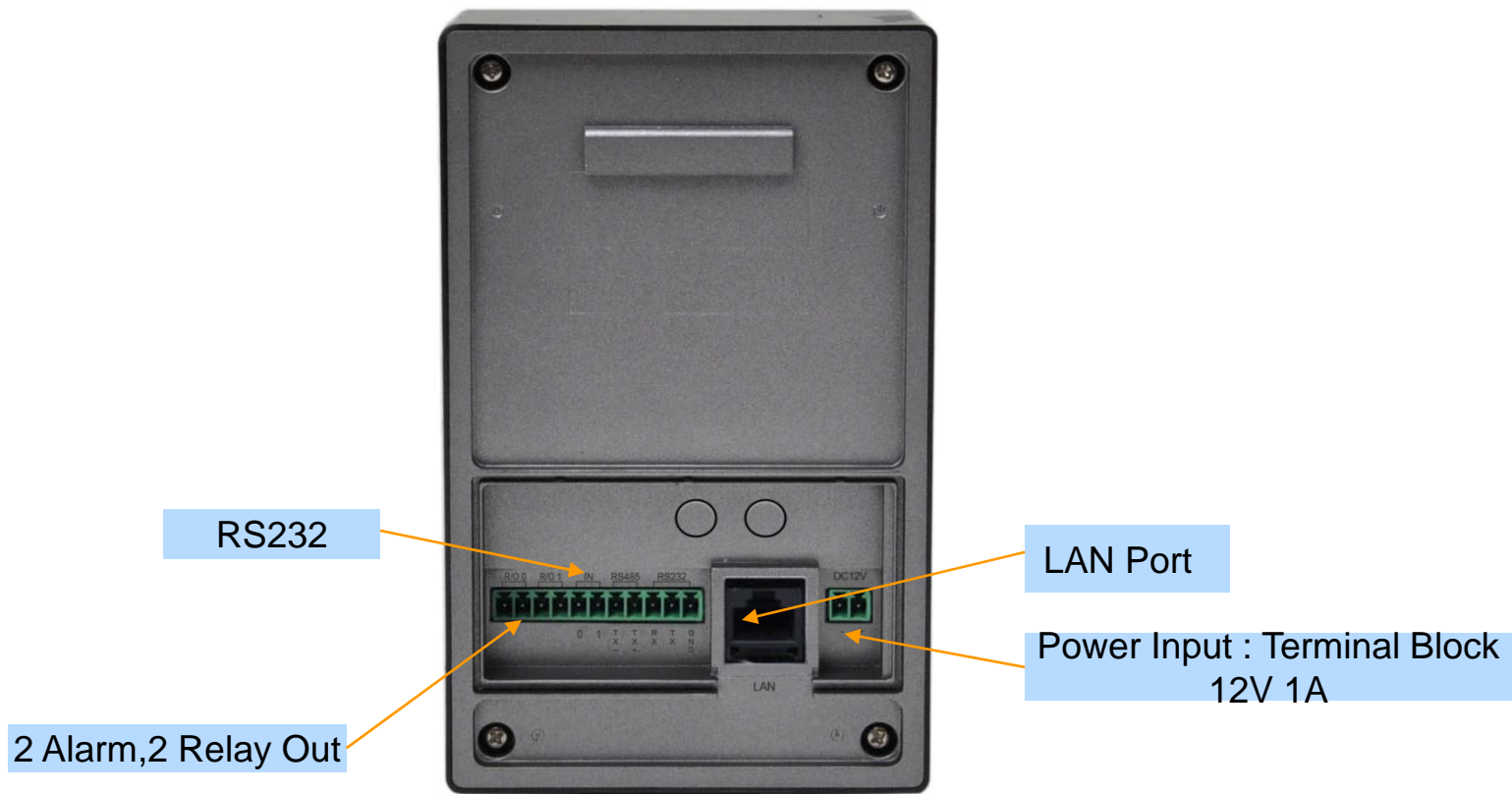
# Hardware Specification

AP-VAC70AN HD IP Video Intercom

RISC  
CPU

High-end  
DSP

## Back Side



# Hardware Specification

AP-VAC70AN HD IP Video Intercom

RISC  
CPU

High-end  
DSP

Back Side



Wall Mount Bracket

Rubber Cover for light waterproof

# Hardware Specification

AP-VAC70AN HD IP Video Intercom

RISC  
CPU

High-end  
DSP

## Power Supply

Terminal Block



12V 1A Power Adaptor

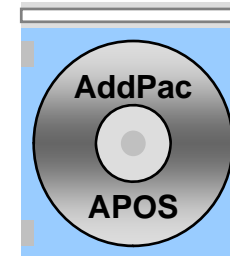
Example



# Software Service

AP-VAC70AN HD IP Video Intercom

- **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 DSP Architecture**
- **OSD (On-screen Display) Function Support**
- **Industry Standard IP based Network Protocol Features**



# Video Service and Features

AP-VAC70AN HD IP Video Intercom

- **High-performance Video Codec Support**
  - H.264, MPEG4, etc
- **Image Resolution Support**
  - Local Display : 160 x 120
  - Remote Display : 240 x 160
  - Video Encoding : 720P(1280x720), VGA(640x480), QVGA(320x240)
- **Up to 30fps with HD Resolution**
- **256Kbps to 4Mbps Operating Video Traffic Bandwidth**
- **Rate Control for Video Traffic QoS**
  - Ensuring Optimized Quality
  - Frame Rate with Limited Bandwidth
- **High-end Error Resilient Against Various Packet Error**

# Audio & Voice Service and Features

AP-VAC70AN HD IP Video Intercom

- **Audio & Voice Networking Interface**
  - External Audio Line-Out Interface (RCA Connector)
  - External Audio MIC-In Interface (RCA Connector)
- **VoIP based Signaling Protocol Support**
  - SIP Signaling Protocol Stack
- **High-performance Audio & Voice Codec Support**
  - G.711, G.726 Audio Codec
- **Enhanced QoS Management Features for Voice Traffics**





# Smart Web Manager (Example)

# Smart Web Manager

AP-VAC70AN HD IP Video Intercom

- Main Screen
- System
  - Language
  - LAN Setup
  - DACS
  - Display
  - File Browser
- SIP Call & Media
  - SIP (Session Initiation Protocol)
  - Speed Dial
  - Media
- Miscellaneous
  - Door Control and Test
  - Network Test



# Smart Web Manager : Main Screen

AP-VAC70AN HD IP Video Intercom

The screenshot displays the Smart Web Manager interface for the AP-VAC70AN HD IP Video Intercom. The top navigation bar includes the title 'Smart Web Manager' and the URL 'www.addpac.com'. On the right side of the navigation bar, there are four icons: a gear for 'Initialization', a power button for 'Rebooting', a floppy disk for 'Save', and a computer monitor for 'Telnet'. The main content area is divided into three sections:

- Menu Tree (Left):** A sidebar with three expandable sections: 'System' (Language, LAN Setup, DACS, Display Manager, File Browser), 'Call & Media' (Server SIP, Speed Dial, Media), and 'Miscellaneous' (Ping, Door Open).
- Configure Language (Center):** The active configuration page. It features two radio buttons: '한국어' (unselected) and 'English' (selected). Below the buttons is a green 'Apply' button with a checkmark icon.
- System Information and Help Message (Right):** A panel with two sub-sections: 'Information' and 'Description'. The 'Information' section lists: 'AddPac Technology', 'Model : VAC50\_G2', 'DACS : (0)', 'DACS Registration : Fail', and 'SIP : 172.17.250.250(5060)'. The 'Description' section contains the text: 'Choose the basic language to be applied. English is set at default.'

Menu Tree

Output Screen after  
Menu Select

System Information and  
Help Message

# Smart Web Manager : SIP configuration

AP-VAC70AN HD IP Video Intercom

## SIP (Session Initiation Protocol)

SIP server check if exist.

Use SIP Server

Yes  No

SIP Basic Information Display

Primary SIP Server

172.17.250.250 5060 Server address and Port (default 5060)

Secondary SIP Server

5060 Server address and Port (default 5060)

Local Domain Name

(SIP userpart of authentication)

SIP Signaling Port

5060 (default 5060, between 1 to 65535)

Register Expiration

60 (in seconds, default 60, between 10 to 86400)

Session Re-Fresh

INVITE  UPDATE

Session Expire Time

1800 (in seconds, default 1800, between 30 to 86400, 0 = disable)

Min-SE

1800 (in seconds, default 1800, between 30 to 86400)

Extension

1020 Extension Number, Password

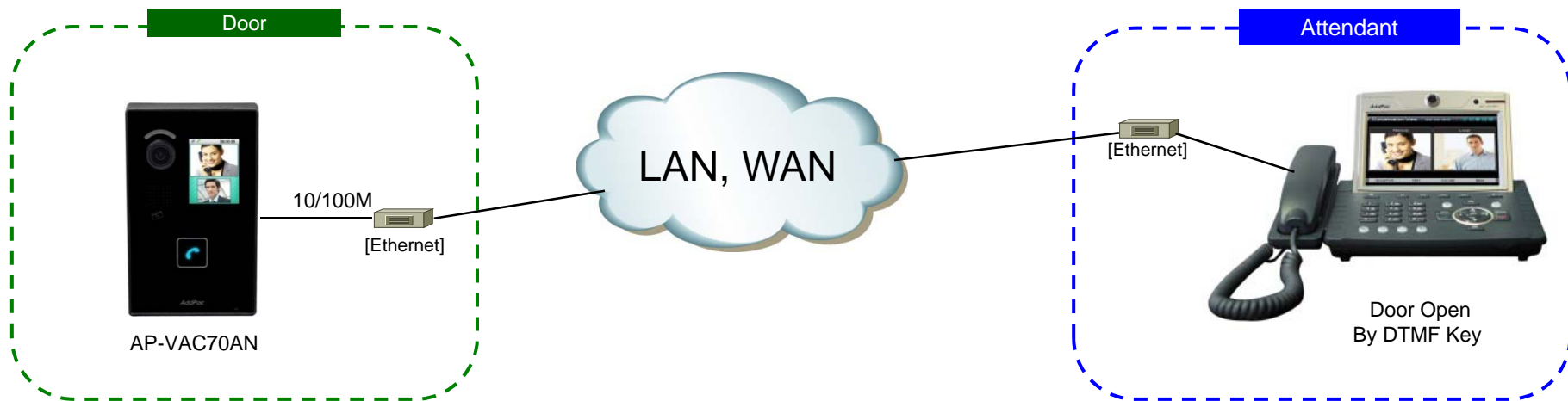
Telephone Line Number and Password Configuration Same Information is used when DACS is connected

# AP-VAC70AN HD IP Video Intercom

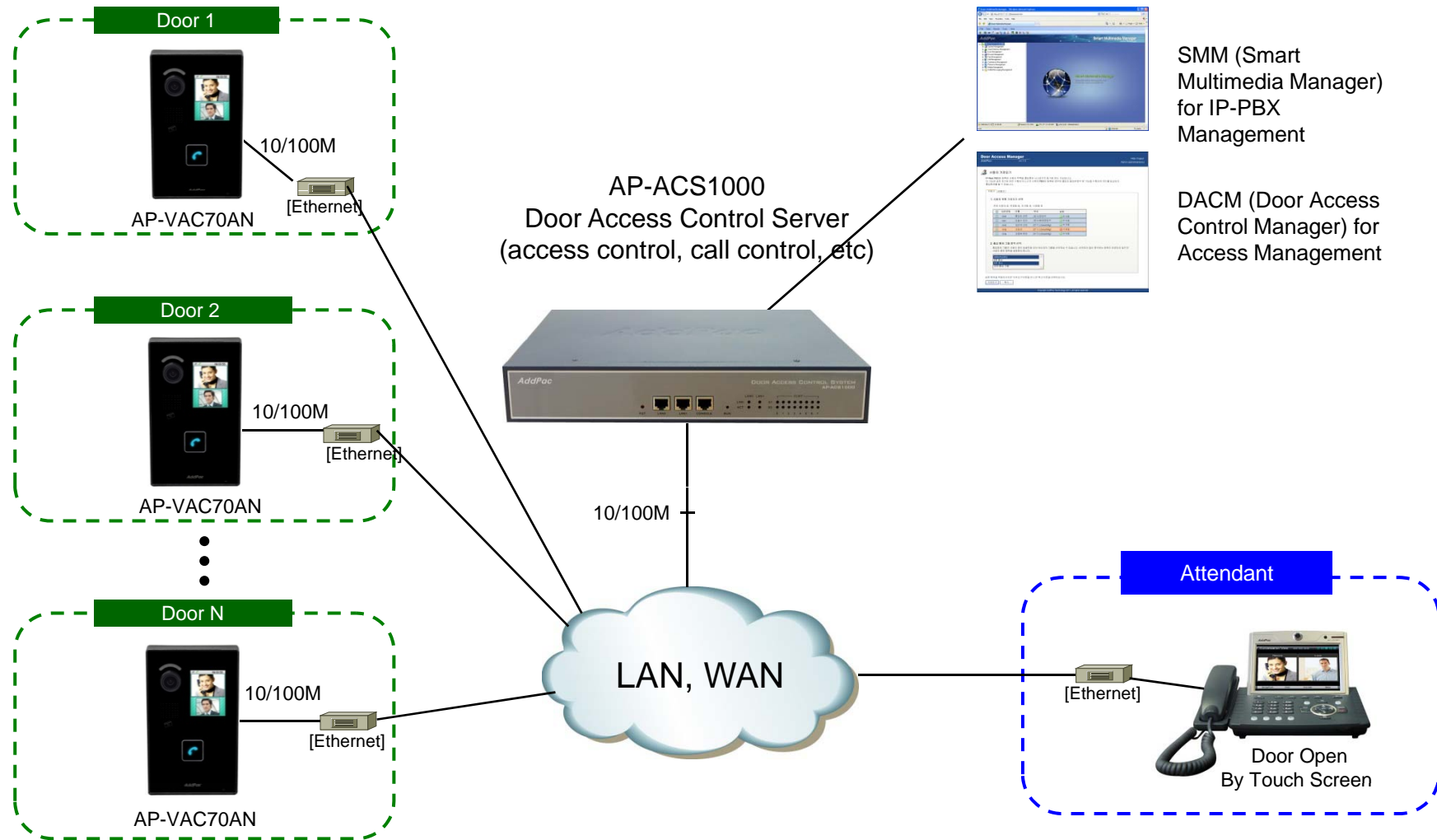
## Application Area

- Point-to-Point Application (Simple Application)
- Point-to-Multipoint Application
  - All AddPac Solution  
(Call Manager + Door Access Control Server)

# Point-to-Point Connection (Simple Appl.)



# Integrated Door Access Control and Call Control (All AddPac Solution)



# Ordering Information

- **AP-VAC70AN HD IP Video Intercom Hardware**
  - AP-VAC70AN HD IP Video Intercom Main Body
  - RISC Microprocessor with High-end Programmable DSP Architecture
  - 2.4 Inch LCD, Built In AutoFocus HD Camera
  - Internal MIC, Internal Speaker
  - 1-ports 10/100Mbps Fast Ethernet
  - PoE Interface (Option)
  - Including Network Cable Set & Ext. Power Supply, etc.
- **Built-in APOS Internetworking Software for AP-VAC70AN**
- **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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