



# AP-VAC50

## IP Video Door Phone

High Performance IP Video Door Phone Solution



## Design Concept

**AddPac**

**AddPac Technology**

Sales and Marketing

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- Hardware Specification
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# Hardware Specification

RISC CPU  
+  
Video DSP

- High Performance IP Video Door Phone Solution
- Video Camera, 3x4 Key, TFT Color LCD, Internal MIC & Speaker
- 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

# Hardware Specification

RISC  
CPU

High-end  
Video  
DSP

- RISC+DSP Microprocessor Computing Power
- Audio and Voice Interface
  - Internal MIC
  - Internal Speaker
  - 3 x 4 key PAD
- Video Camera Interface
- 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
- External RCA Audio Line Out and MIC In (back side)
- Power Supply
  - Power over Ethernet (Option)
  - External Power Supply



# Hardware Specification

RISC  
CPU

High-end  
Video  
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

RISC  
CPU

High-end  
Video  
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
- Camera
  - High Sensitivity for low-light operation
  - Output support for Raw RGB, RGB, and YCrCb format
  - Image Size : VGA, QVGA, and any size scaling down from CIF to 40x30
  - Support AEC, AGC,AWB, ABF, ABLC
  - Saturation Level, Edge Enhancement Level, De-noise level Auto adjust

# Hardware Specification

RISC  
CPU

High-end  
Video  
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



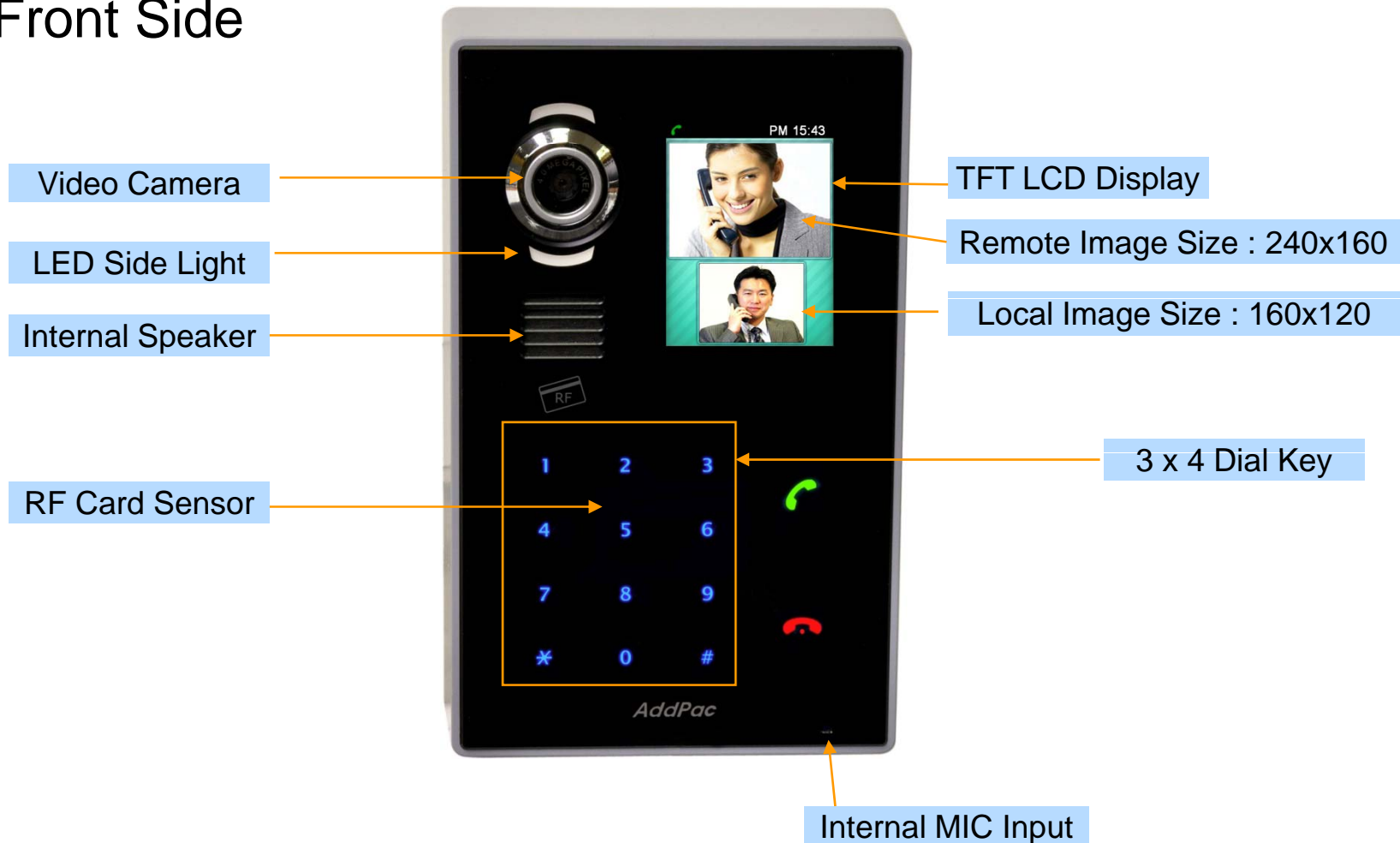
RF Card Sensor

# Hardware Specification

RISC  
CPU

High-end  
Video  
DSP

## Front Side



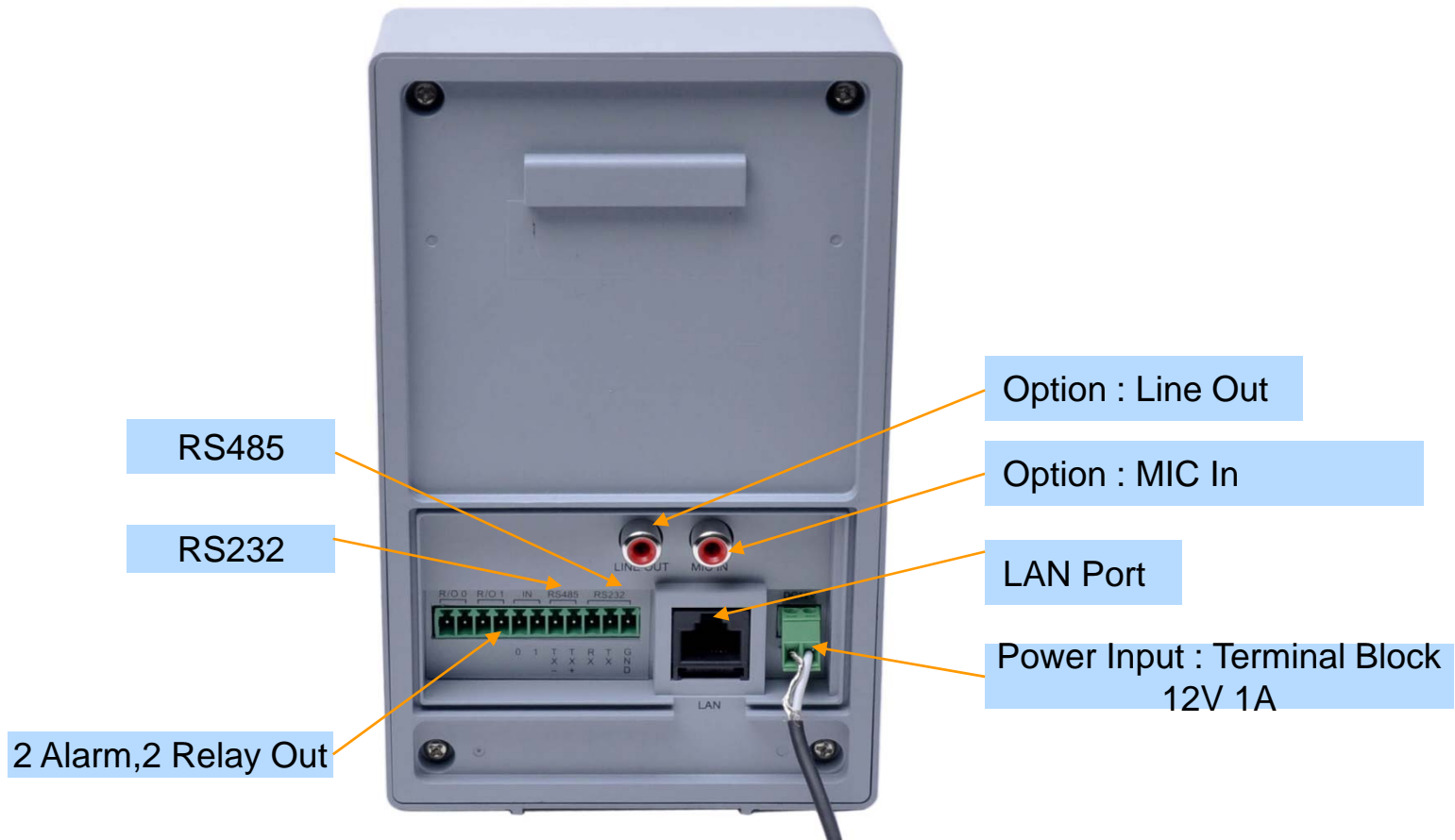


# Hardware Specification

RISC  
CPU

High-end  
Video  
DSP

## Back Side



# Hardware Specification

RISC  
CPU

High-end  
Video  
DSP

Back Side



Wall Mount Bracket

Rubber Cover for light waterproof

# Hardware Specification

RISC  
CPU

High-end  
Video  
DSP

## Power Supply

Terminal Block

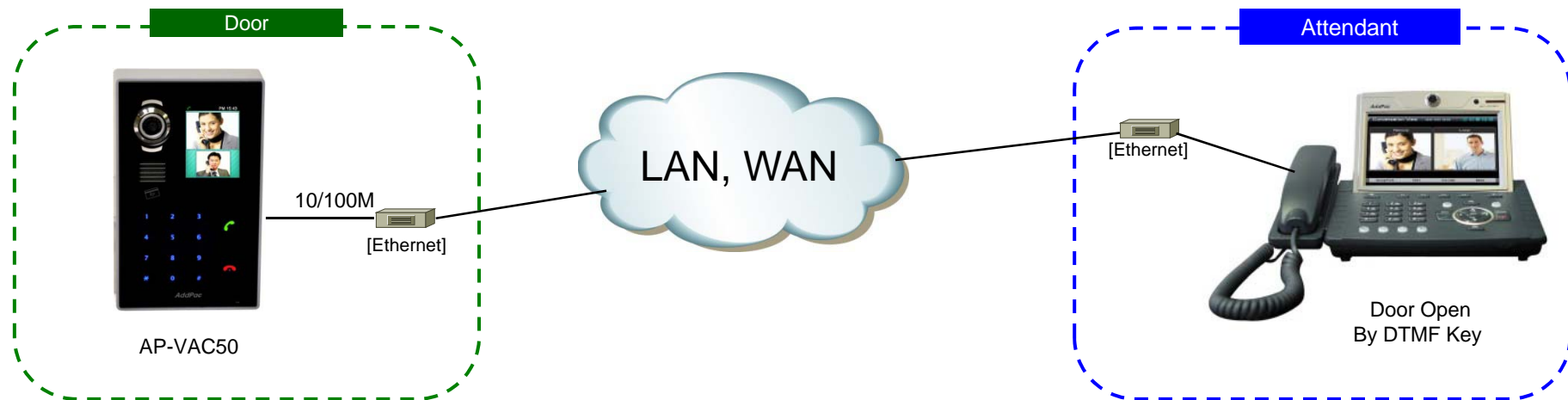


12V 1A Power Adaptor

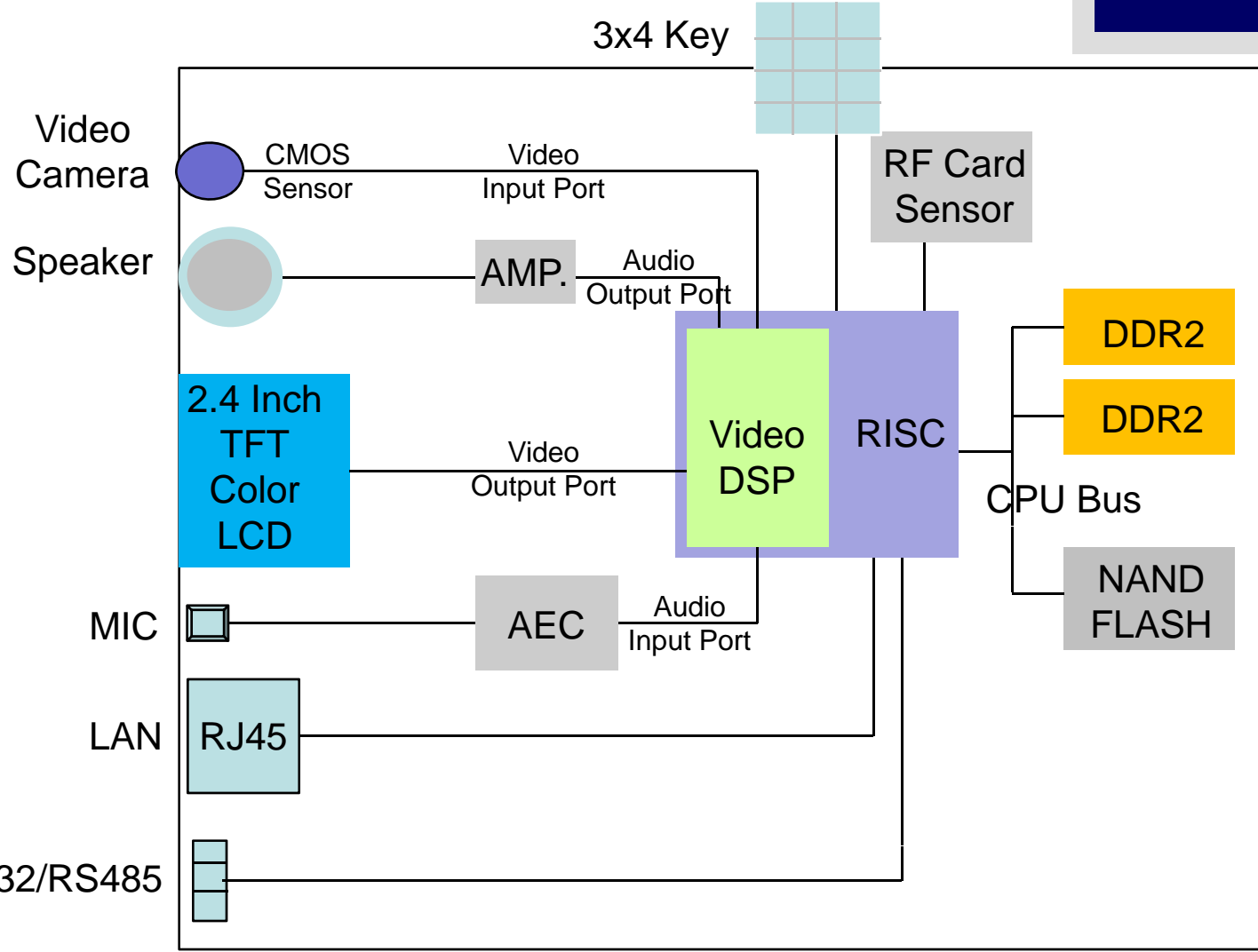
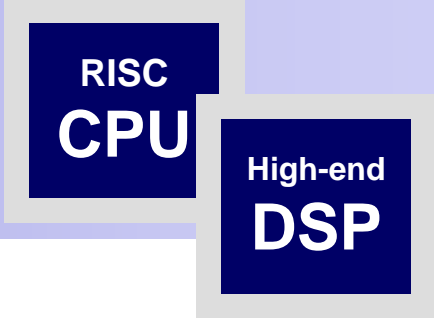
Example



# Network Service Diagram



# Hardware Block Diagram



**AddPac**

# IP Video Door Phone Series

# Thank you!

**AddPac Technology Co., Ltd.**  
Sales and Marketing

Phone +82.2.568.3848 (KOREA)

FAX +82.2.568.3847 (KOREA)

E-mail [sales@addpac.com](mailto:sales@addpac.com)