

# AP-VAC20

## IP Video Door Phone

High Performance IP Video Door Phone Solution



Hardware Specification Option

**AddPac**

**AddPac Technology**

Sales and Marketing

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# Product Overview

## AP-VAC20 IP Video Door Phone

- High Performance IP Video Door Phone Solution
- Video Camera, 3x4 Key, Internal MIC & Speaker
- Blue LED Backlight LCD, 128 x 64 Display 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



# Overall Hardware Specification

# Hardware Specification

## AP-VAC20 IP Video Door Phone

RISC  
CPU

High-end  
DSP

- RISC+DSP Microprocessor Computing Power
- Audio and Voice Interface
  - Internal MIC
  - Internal Speaker
  - 3 x 4 key PAD
- Video Camera Interface
- Blue LED Backlight LCD Interface
  - 128 x 64 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

## AP-VAC20 IP Video Door Phone

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-VAC20 IP Video Door Phone

RISC  
CPU

High-end  
DSP

- **LCD Controller**
  - Display Type : FSTN, Positive
  - Built-in Controller : ST7567
  - Blue LED Backlight
  - Active Area : 35.48(W) x 22.38(H)
  - Number of Dots : 128 x 64
- **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

## AP-VAC20 IP Video Door Phone

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



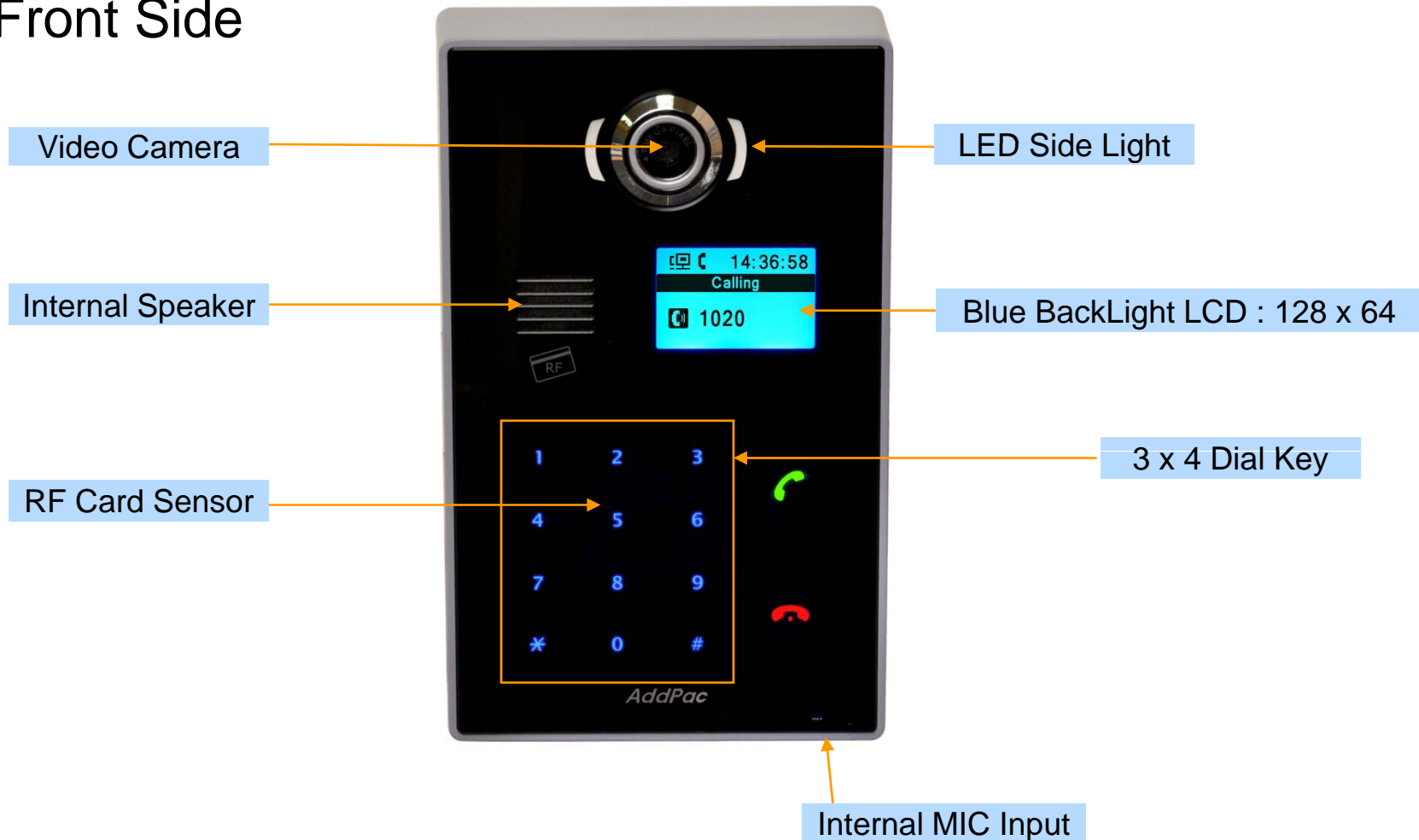
# Hardware Specification

AP-VAC20 IP Video Door Phone

RISC  
CPU

High-end  
DSP

## Front Side



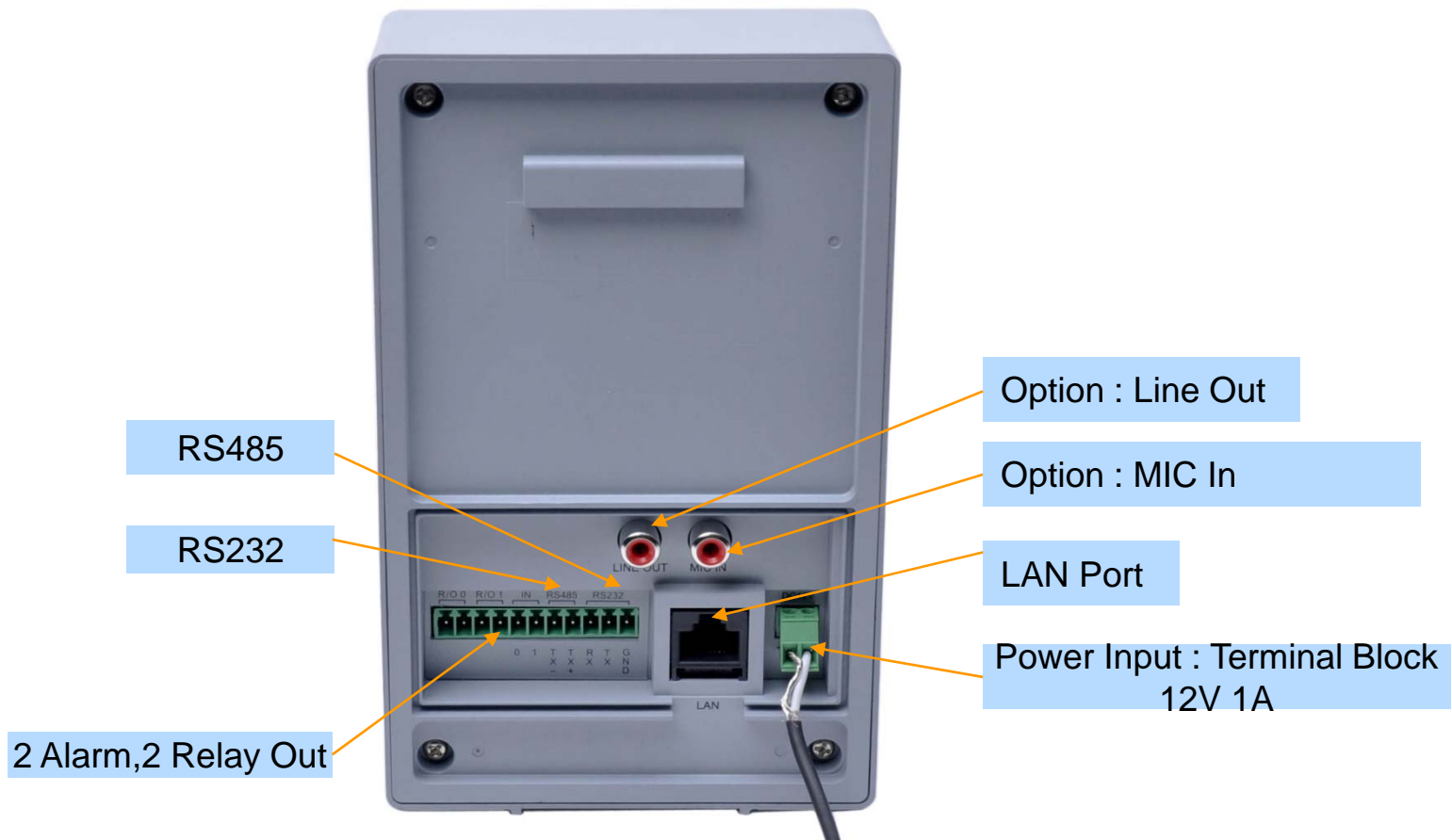
# Hardware Specification

AP-VAC20 IP Video Door Phone

RISC  
CPU

High-end  
DSP

## Back Side



# Hardware Specification

AP-VAC20 IP Video Door Phone

RISC  
CPU

High-end  
DSP

Back Side



Wall Mount Bracket

Rubber Cover for Water Resistant

# Hardware Specification

AP-VAC20 IP Video Door Phone

RISC  
CPU

High-end  
DSP

## Power Supply

Terminal Block



12V 1A Power Adaptor

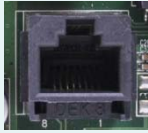

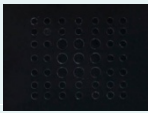


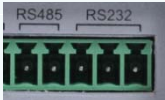
Example





# Hardware Option

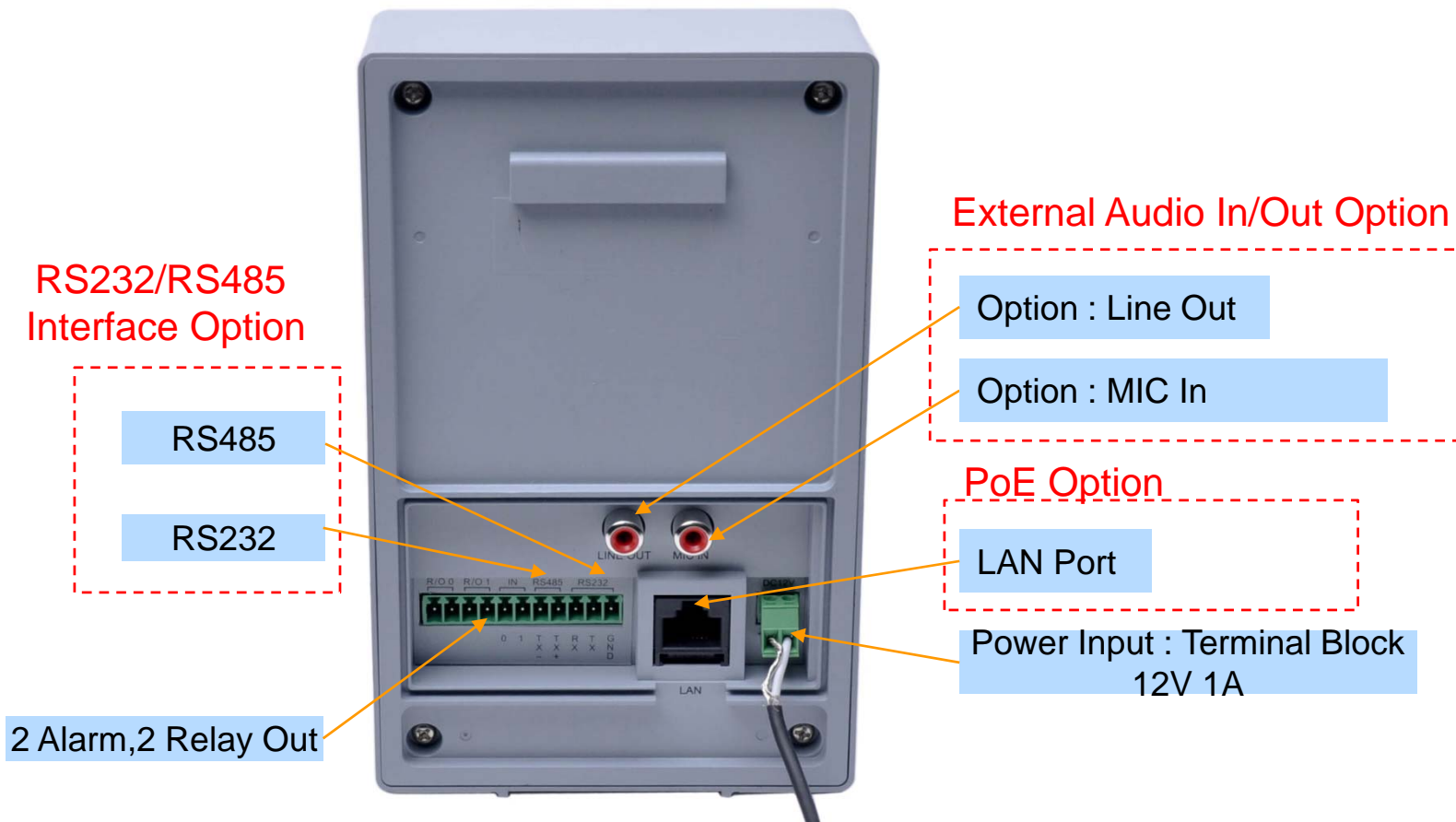
# Hardware Option Table

Option	Explanation	Figure	Selection
PoE	Power over Ethernet		
RFID	ID tag card for entrance		
Water Resistant	For outdoor application, AP-VAC20 support water resistant function basically.		
External Audio IN/OUT	For loud street application, AP-VAC20 support external Audio In/Out basically.		
RTC	Real Time Clock		
RS232/RS485	This interface can be used for external device connection such as finger print recognition system, etc.		

# RS232/RS485 Option

## External Audio Interface Option

### PoE Option



# Water Resistant Function Option





# RFID Card Interface Option





# Thank you!

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