

# AP-AC20 IP Door Phone

High Performance IP Door Phone Solution



Analog Line FXO Service

***AddPac***

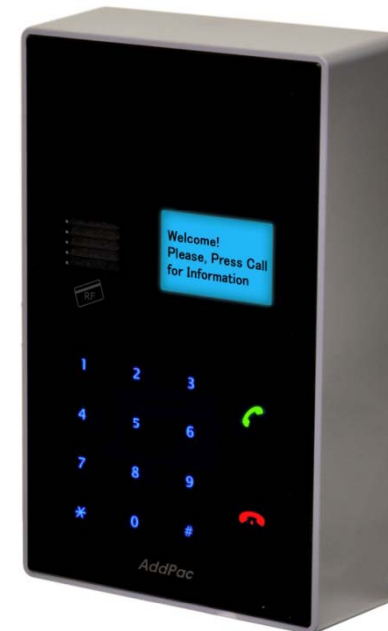
**AddPac Technology**

2015, Sales and Marketing

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

# Contents

- Product Overview
- Product Highlights
- Hardware Specification
- Analog FXO Application



# Product Overview

## AP-AC20 IP Door Phone

- High Performance IP Door Phone Solution
- 3x4 Key, Internal MIC & Speaker
- Blue LED Backlight LCD, 128 x 64 Display Resolution
- SIP VoIP Signaling Stack Embedded
- High-performance Voice Codec Support
  - G.711, G.729, G.723.1, etc
- One(1) 10/100Mbps Fast Ethernet
- Option : **One(1)-Port FXO** or FXS Interface for Analog PSTN connection
- Option : PoE(Power over Ethernet) Support
- Option : RF Card Interface
- High Quality Speaker Phone Features
- Powerful Network Protocols (PPPoE, DHCP, Static Routing, etc)
- Firmware Upgradeable Architecture
- Advanced Voice QoS Mechanism

# Hardware Specification

## AP-AC20 IP 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
- 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
- **Option : FXO Interface (back side)**
- Power Supply
  - Power over Ethernet (Option)
  - External Power Supply

# Hardware Specification

## AP-AC20 IP Door Phone

RISC  
CPU

High-end  
DSP

- **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
- **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

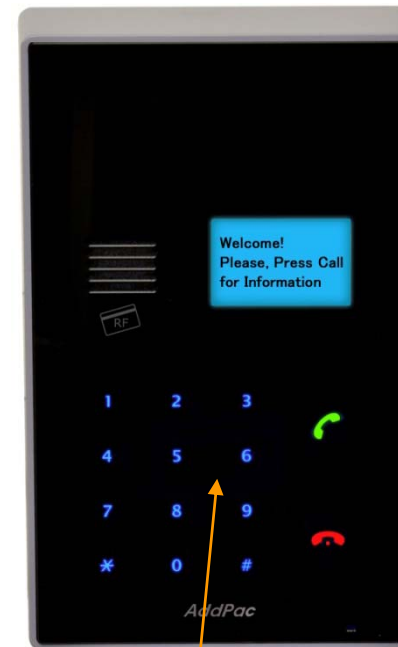
# Hardware Specification

## AP-AC20 IP 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

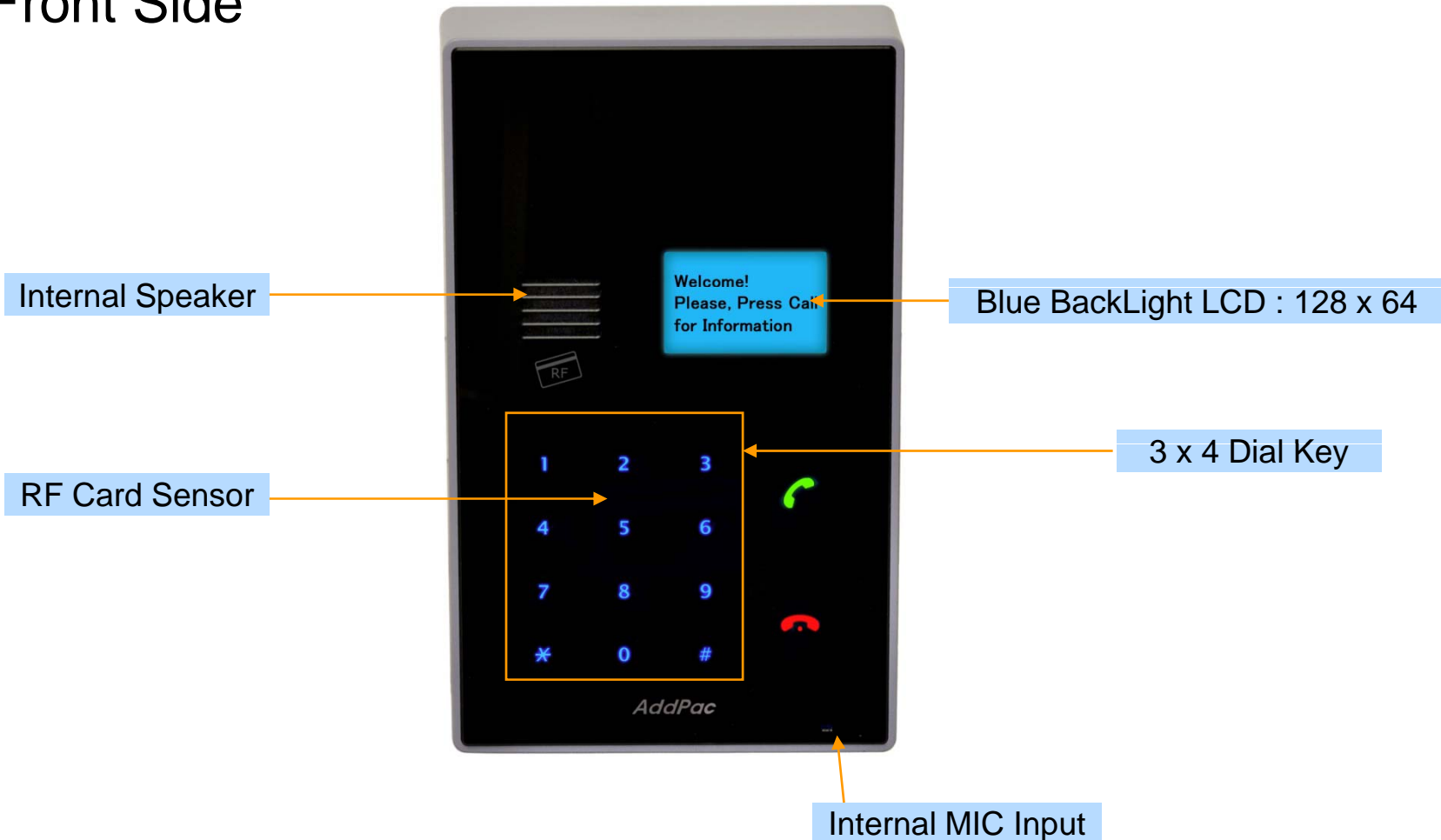
# Hardware Specification

AP-AC20 IP Door Phone

RISC  
CPU

High-end  
DSP

## Front Side



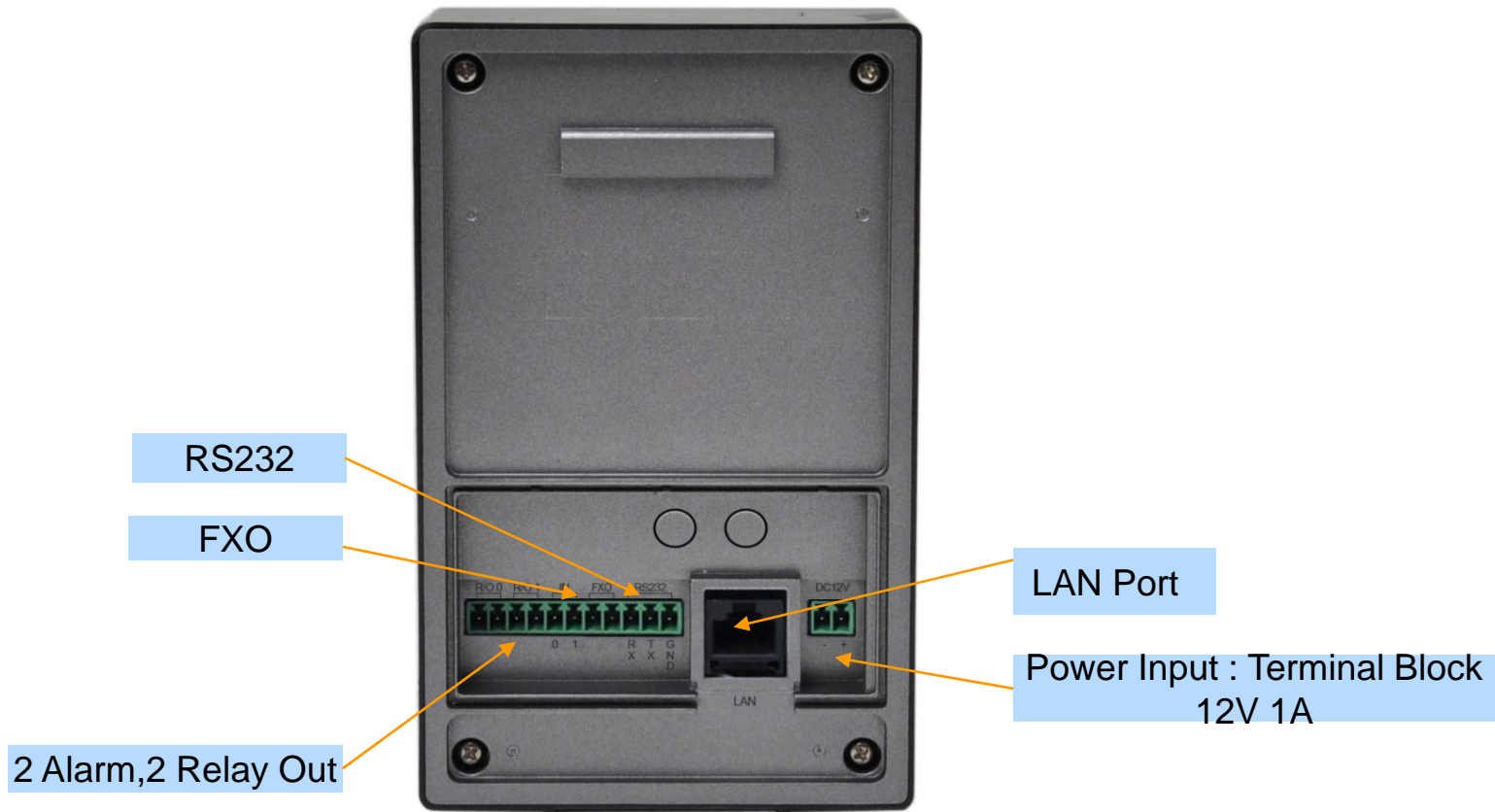
# Hardware Specification

AP-AC20 IP Door Phone

RISC  
CPU

High-end  
DSP

## Back Side (With FXO)





# Hardware Specification

AP-AC20 IP Door Phone

RISC  
CPU

High-end  
DSP

Back Side



Wall Mount Bracket

Rubber Cover for light waterproof

# Hardware Specification

AP-AC20 IP Door Phone

RISC  
CPU

High-end  
DSP

## Power Supply

Terminal Block



12V 1A Power Adaptor

Example



# Analog FXO Line Interface

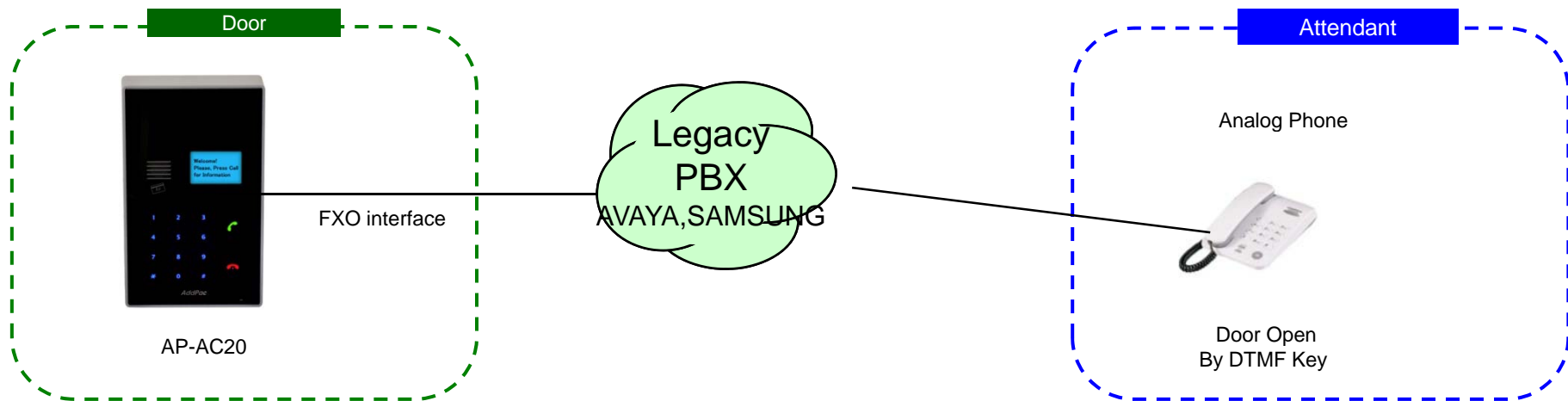
## Application Area

- Point-to-Point Application (Simple Application)
  - Legacy PBX Environment (FXO Interface)
- Point-to-Multipoint Application
  - Analog Line Service Environment (FXO, VoIP Gateway, IP-PBX, etc)

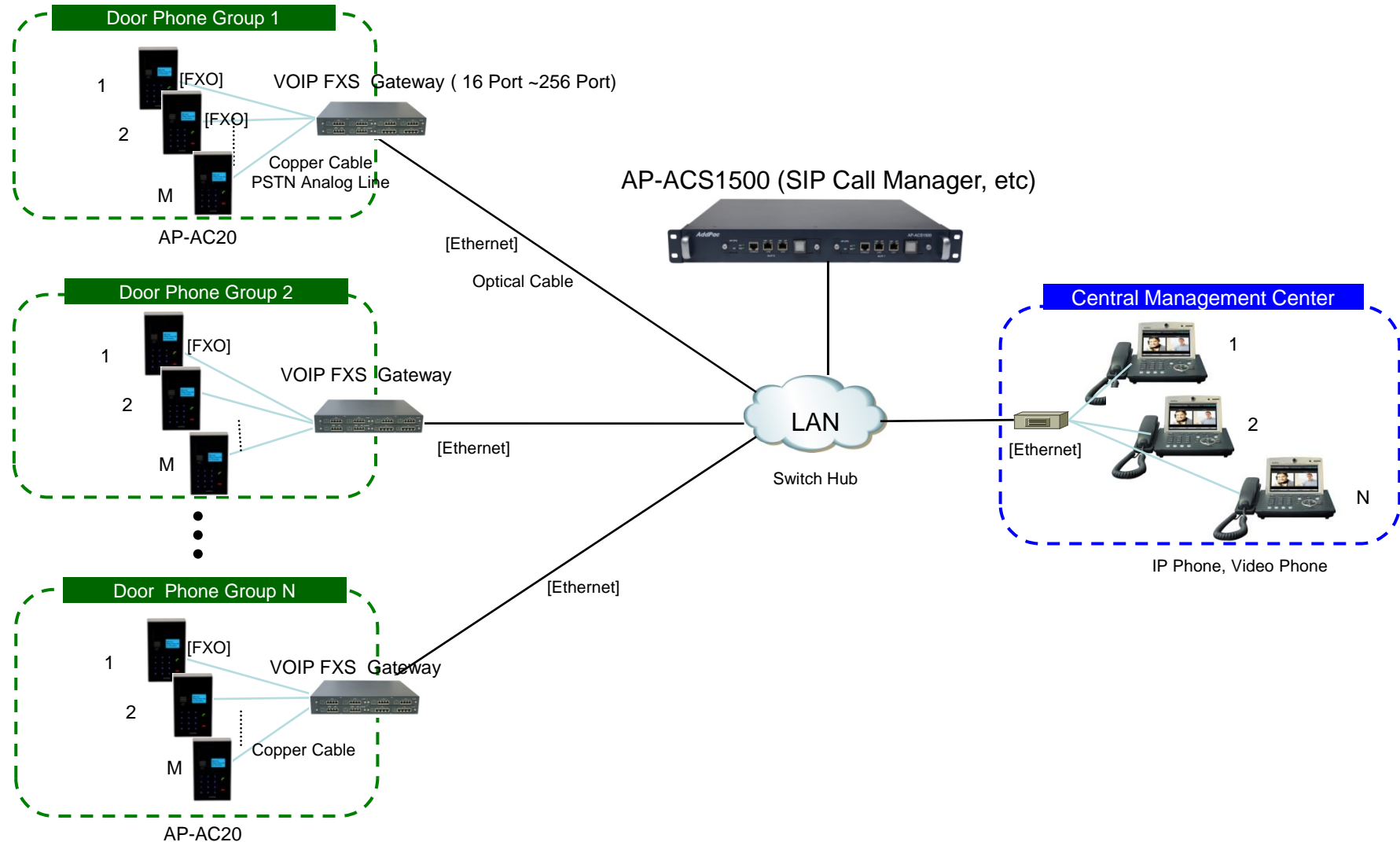
# Point-to-Point Connection (Simple Appl.)



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



# Analog Line Service Environment





# 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)