

AP-AC20

IP Door Phone

High Performance IP Door Phone Solution



Preliminary Product Overview

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

AddPac

AddPac Technology

Sales and Marketing

www.addpac.com

Contents

- Product Overview
- Product Highlights
- Hardware Specification
- Software Service
- Audio & Voice Service and Features
- OSD Software Features
- Smart Web Manager
- Application Area
- Ordering Information



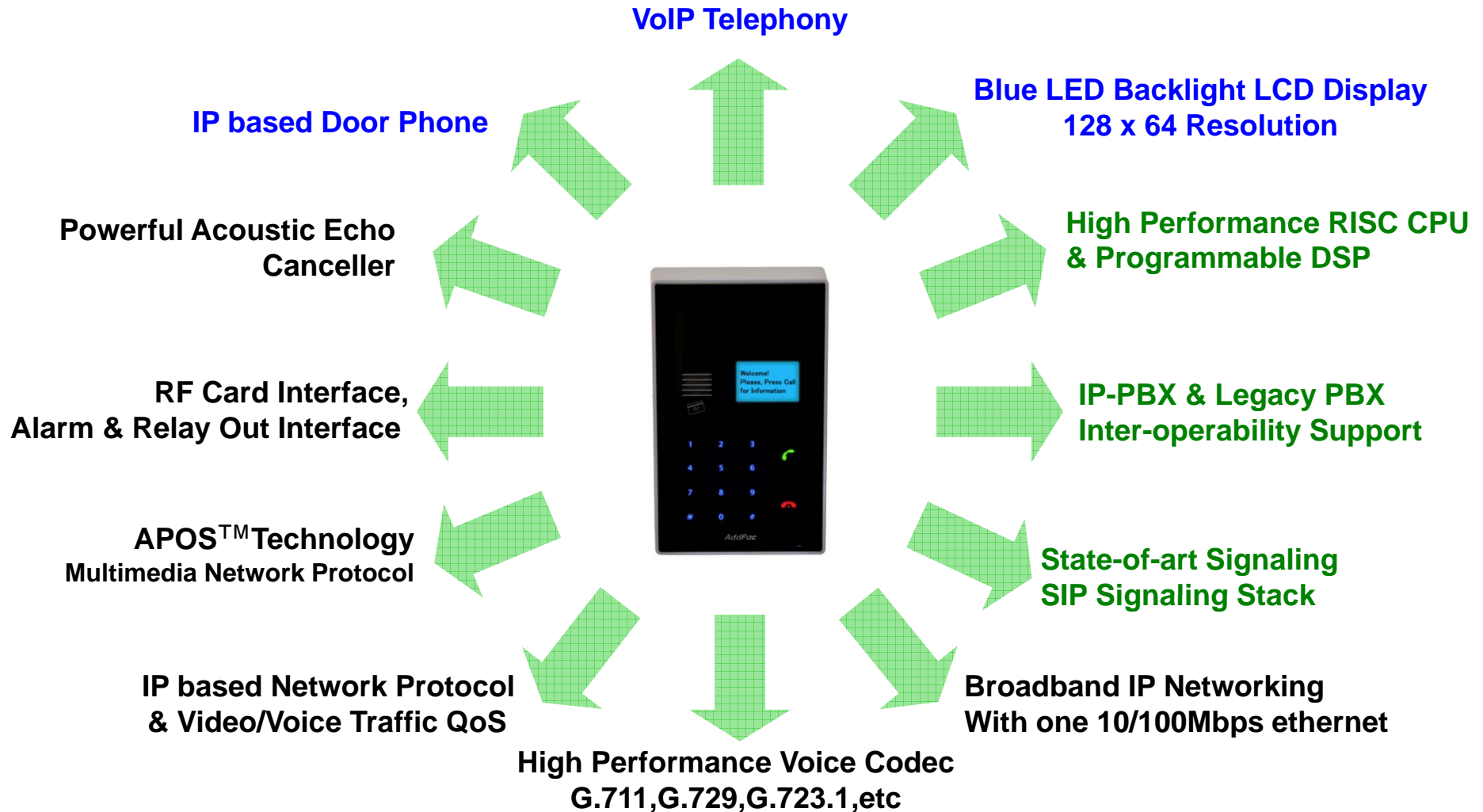
Product Overview

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

Product Highlights

AP-AC20 IP Door Phone



AddPac

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Multimedia Service

AP-AC20 IP Door Phone



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

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

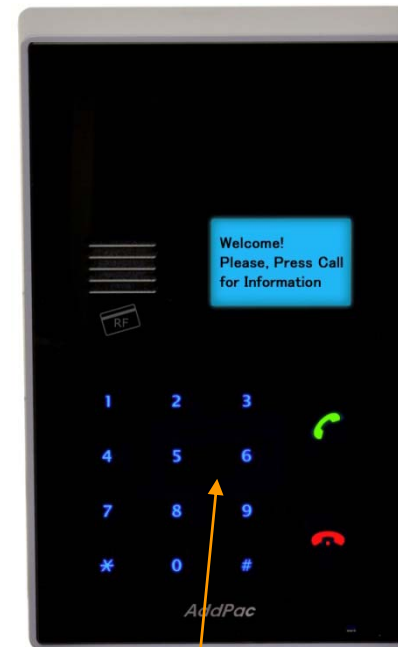
Hardware Specification

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

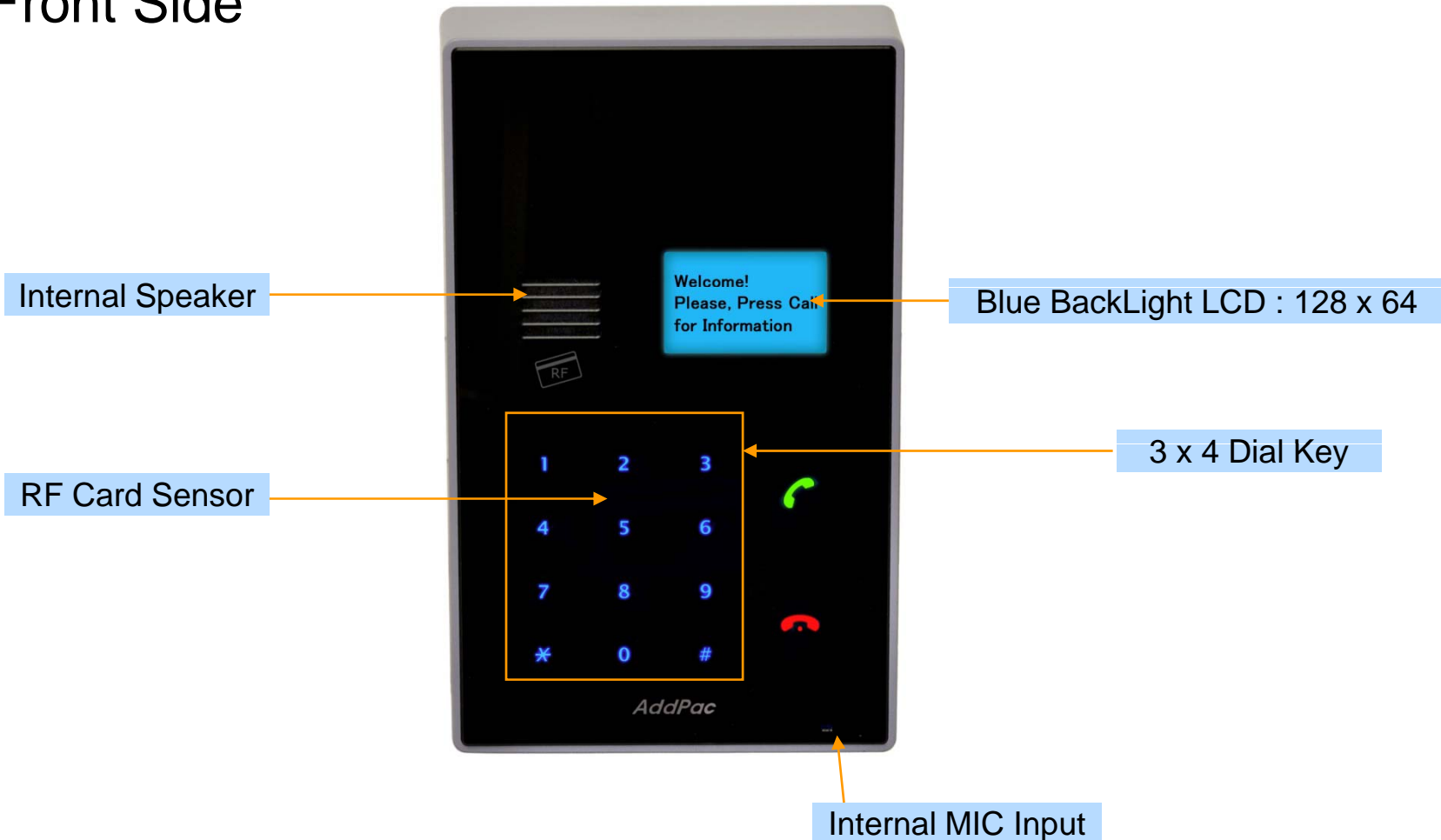
Hardware Specification

AP-AC20 IP Door Phone

RISC
CPU

High-end
DSP

Front Side



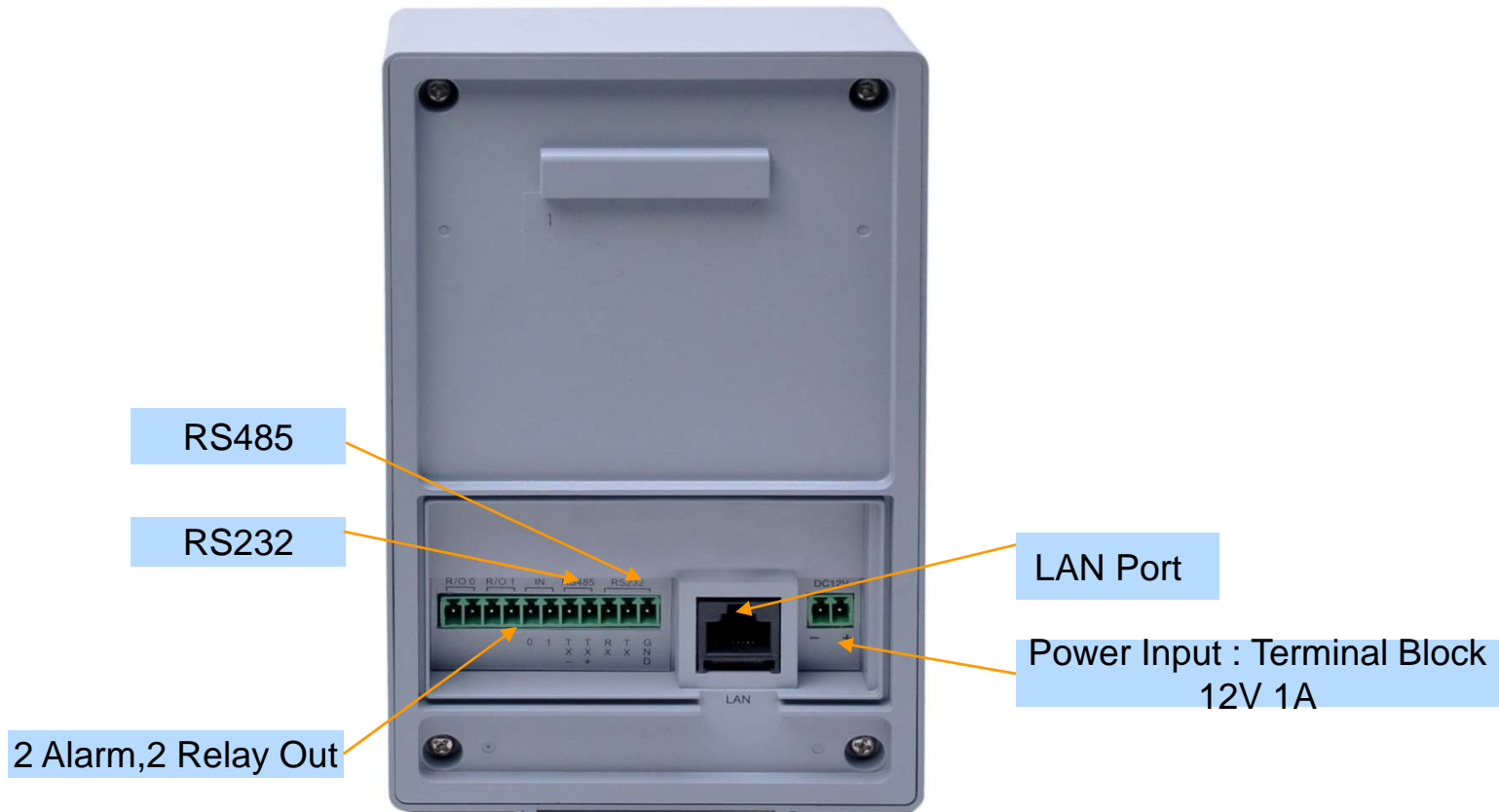
Hardware Specification

AP-AC20 IP Door Phone

RISC
CPU

High-end
DSP

Back Side (WithOut FXO)



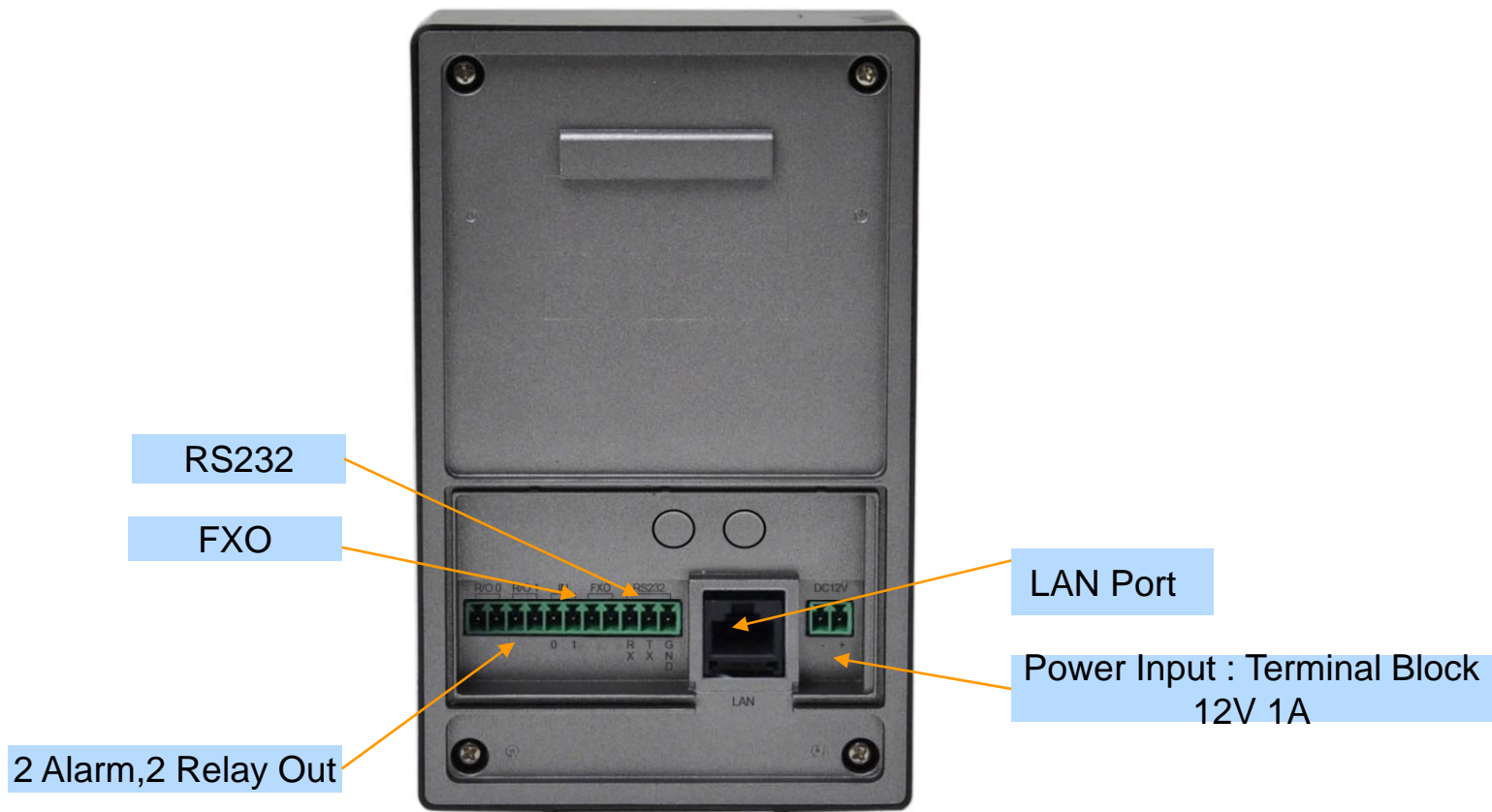
Hardware Specification

AP-AC20 IP Door Phone

RISC
CPU

High-end
DSP

Back Side (With FXO)



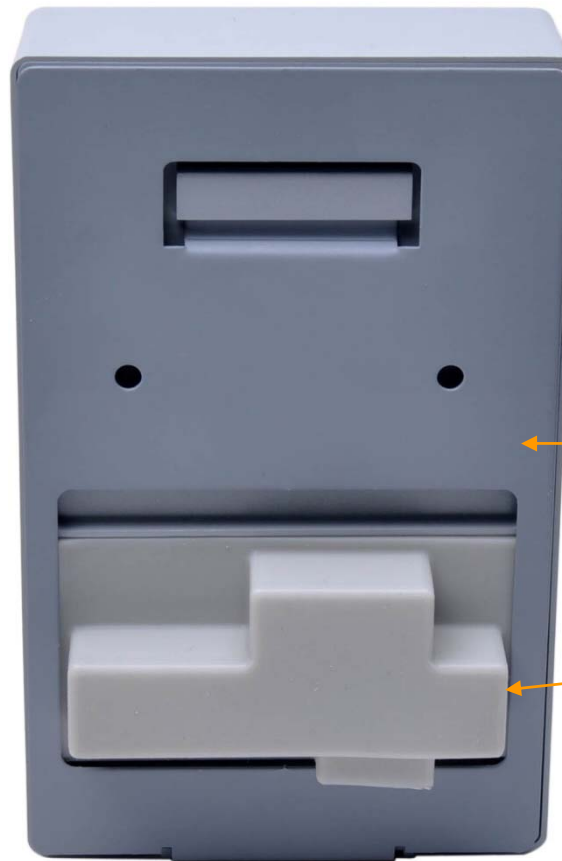
Hardware Specification

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

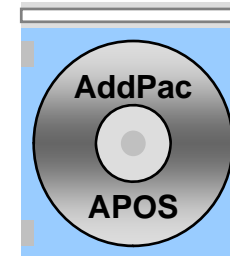
Example



Software Service

AP-AC20 IP Door Phone

- **Built-in AddPac APOS Internetworking Software**
 - Scalability, Functionality, and Stability Features
 - Video Traffic QoS Control
- **Programmable Audio, and Voice Services**
 - Audio, and Voice Codec
- **Firmware Upgradeable DSP Architecture**
- **OSD (On-screen Display) Function Support**
- **Industry Standard IP based Network Protocol Features**



Audio & Voice Service and Features

AP-AC20 IP Door Phone

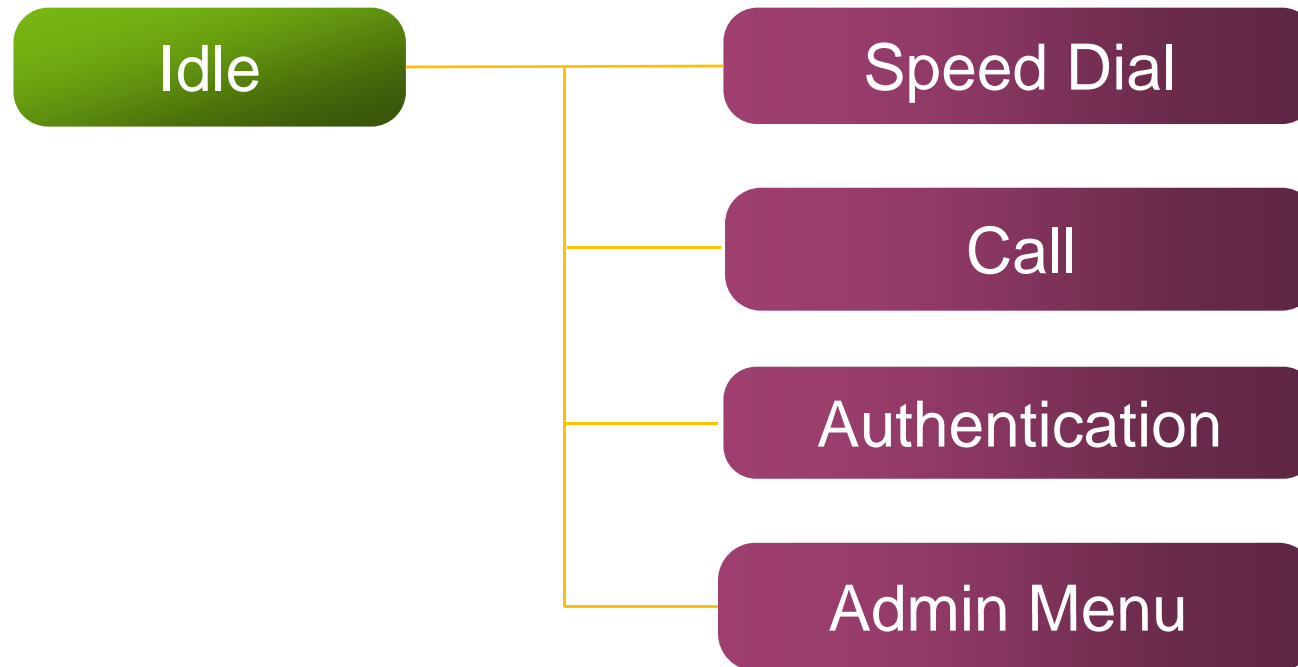
- **VoIP based Signaling Protocol Support**
 - H.323, SIP Signaling Protocol Stack
- **High-performance Audio & Voice Codec Support**
 - G.711, G.729, G.726,G.723.1 Audio Codec
- **Enhanced QoS Management Features for Voice Traffics**



OSD Software Feature

OSD Software Features

AP-AC20 IP Door Phone



OSD Software Features

AP-AC20 IP Door Phone

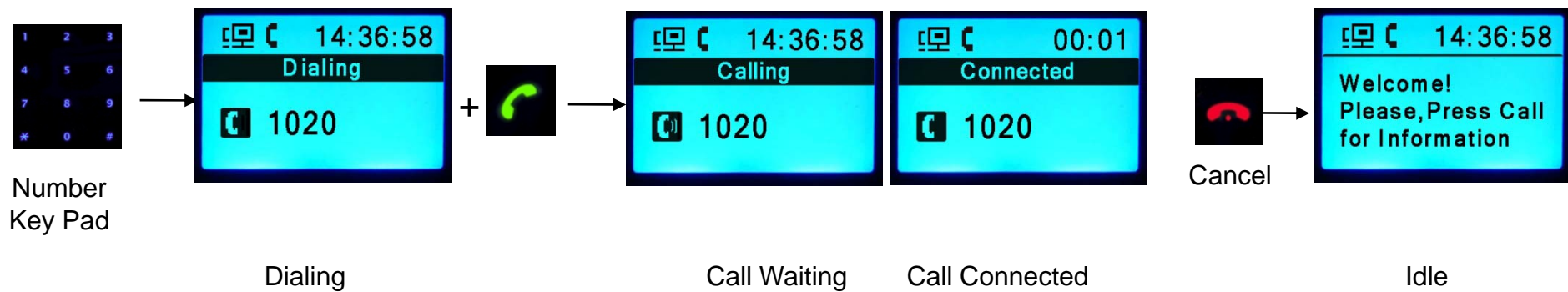
Speed Dial



OSD Software Features

AP-AC20 IP Door Phone

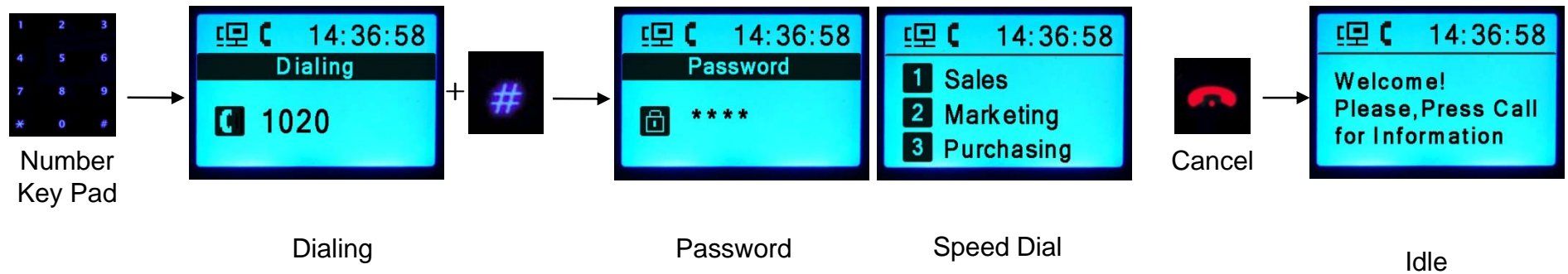
Call



OSD Software Features

AP-AC20 IP Door Phone

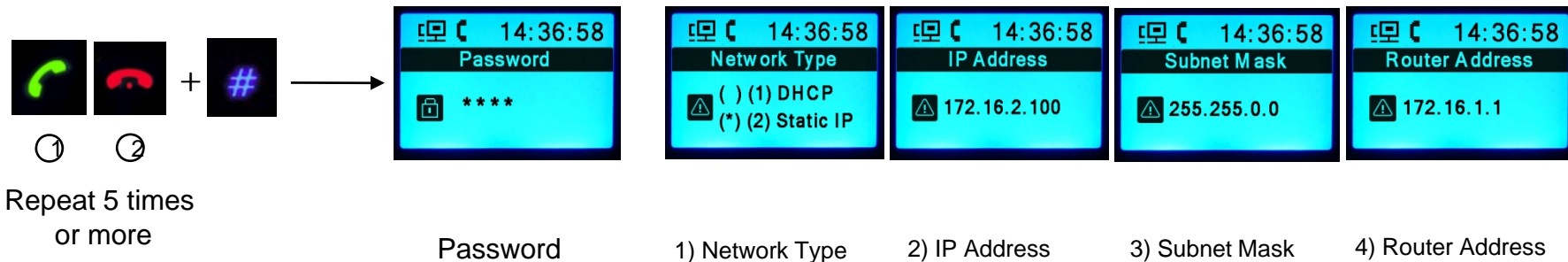
Authentication



OSD Software Features

AP-AC20 IP Door Phone

Admin. Menu





Smart Web Manager (Example)

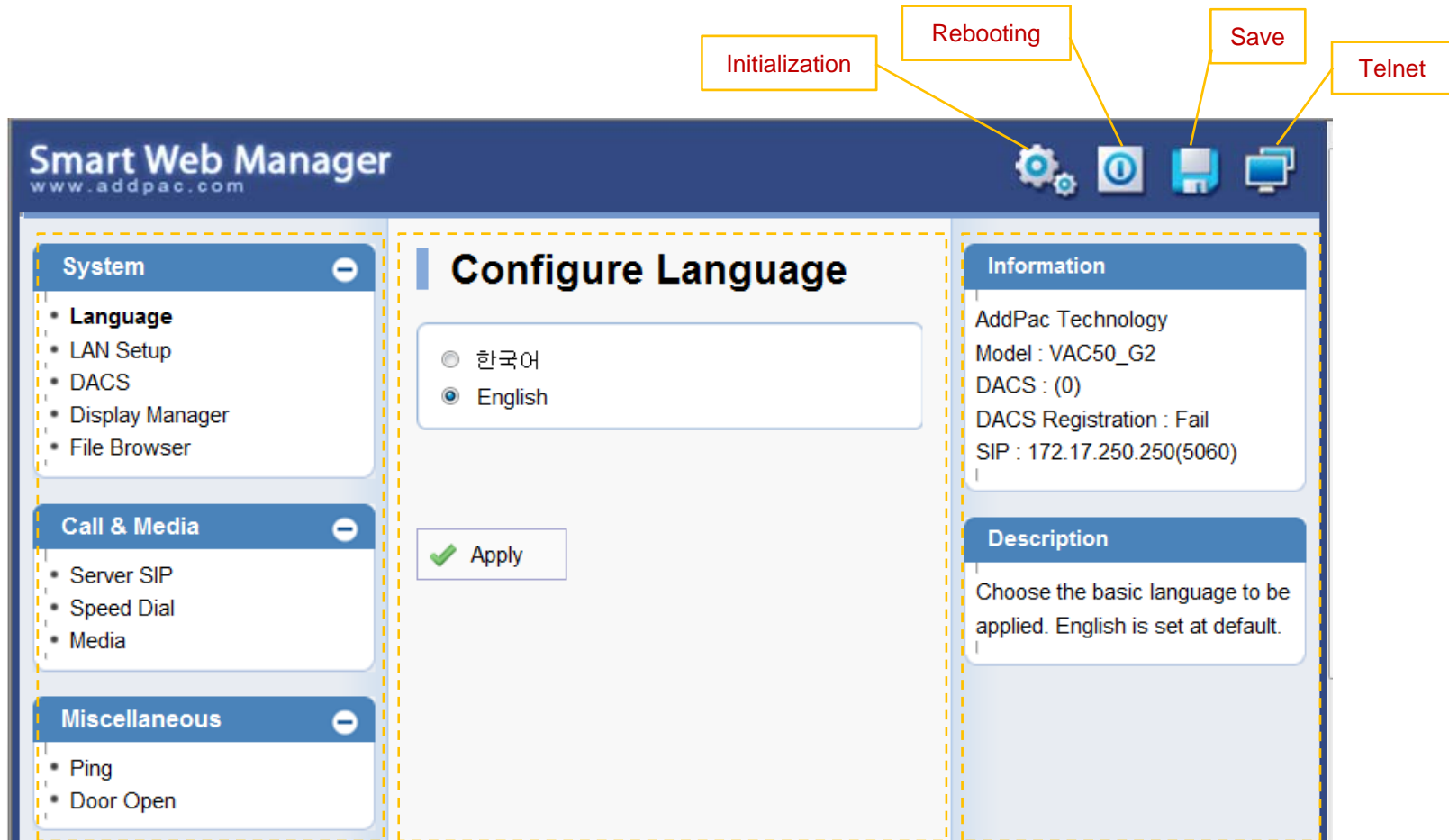
Smart Web Manager

AP-AC20 IP Door Phone

- 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-AC20 IP Door Phone



Menu Tree

Output Screen after
Menu Select

System Information and
Help Message

Smart Web Manager : SIP configuration

AP-AC20 IP Door Phone

SIP (Session Initiation Protocol)

SIP server check if exist.

SIP Basic Information Display

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

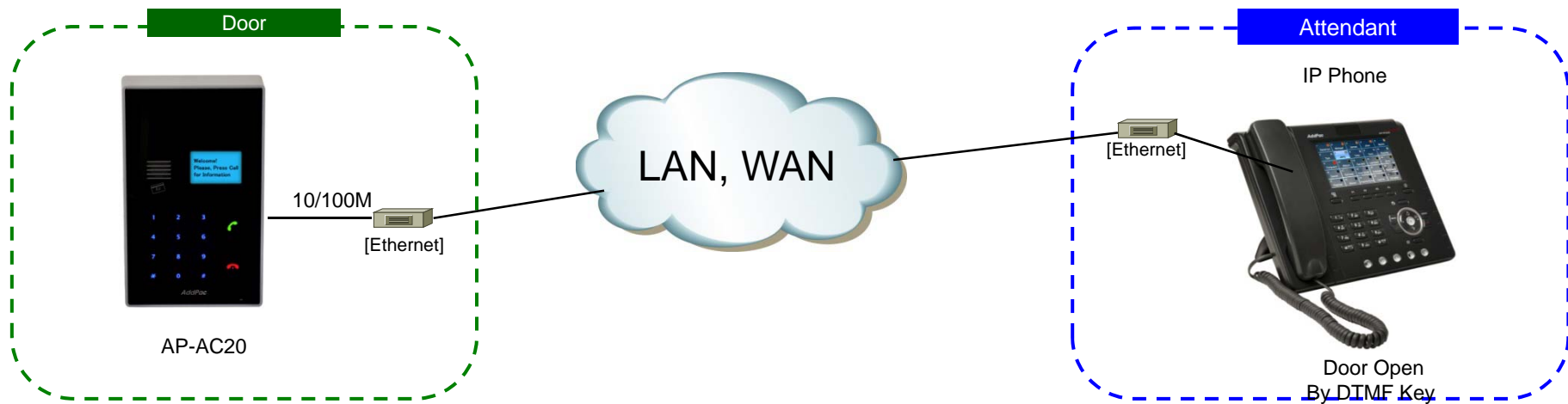
Use SIP Server	<input checked="" type="radio"/> Yes <input type="radio"/> No
Primary SIP Server	<input type="text" value="172.17.250.250"/> <input type="text" value="5060"/> Server address and Port (default 5060)
Secondary SIP Server	<input type="text"/> <input type="text" value="5060"/> Server address and Port (default 5060)
Local Domain Name	<input type="text"/> (SIP userpart of authentication)
SIP Signaling Port	<input type="text" value="5060"/> (default 5060, between 1 to 65535)
Register Expiration	<input type="text" value="60"/> (in seconds, default 60, between 10 to 86400)
Session Re-Fresh	<input checked="" type="radio"/> INVITE <input type="radio"/> UPDATE
Session Expire Time	<input type="text" value="1800"/> (in seconds, default 1800, between 30 to 86400, 0 = disable)
Min-SE	<input type="text" value="1800"/> (in seconds, default 1800, between 30 to 86400)
Extension	<input type="text" value="1020"/> <input type="text"/> Extension Number, Password

AP-AC20 IP Door Phone

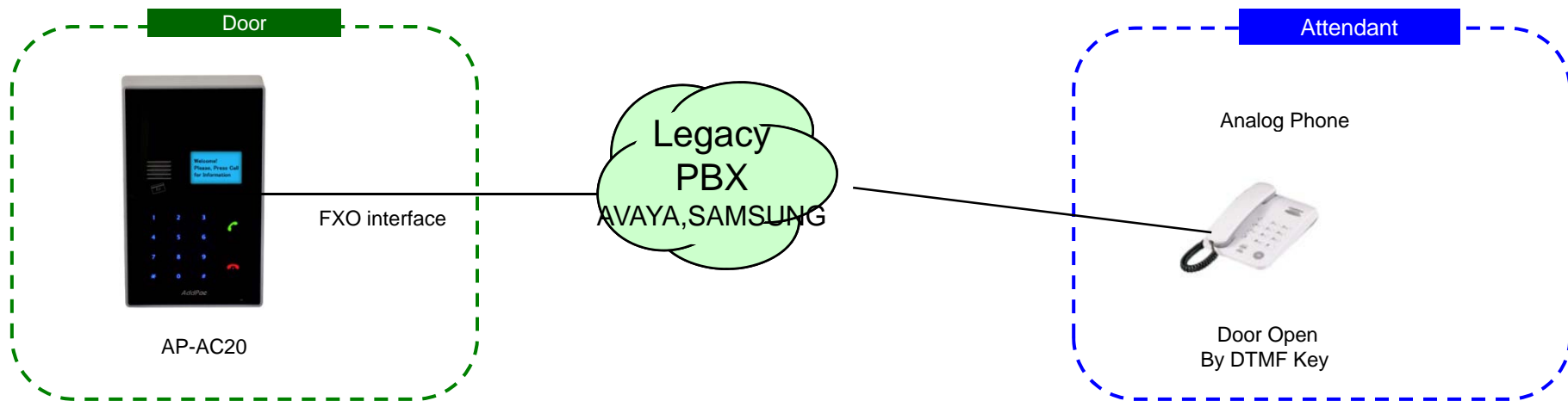
Application Area

- Point-to-Point Application (Simple Application)
 - All IP Environment
 - Legacy PBX Environment (FXO Interface)
 - Hot-Line (FXS Interface)
- Point-to-Multipoint Application
 - All AddPac Solution
(Call Manager + Door Access Control Server)
 - Legacy PBX Environment
 - Legacy IP-PBX Environment
 - Analog Line Service Environment (FXO, VoIP Gateway, IP-PBX, etc)

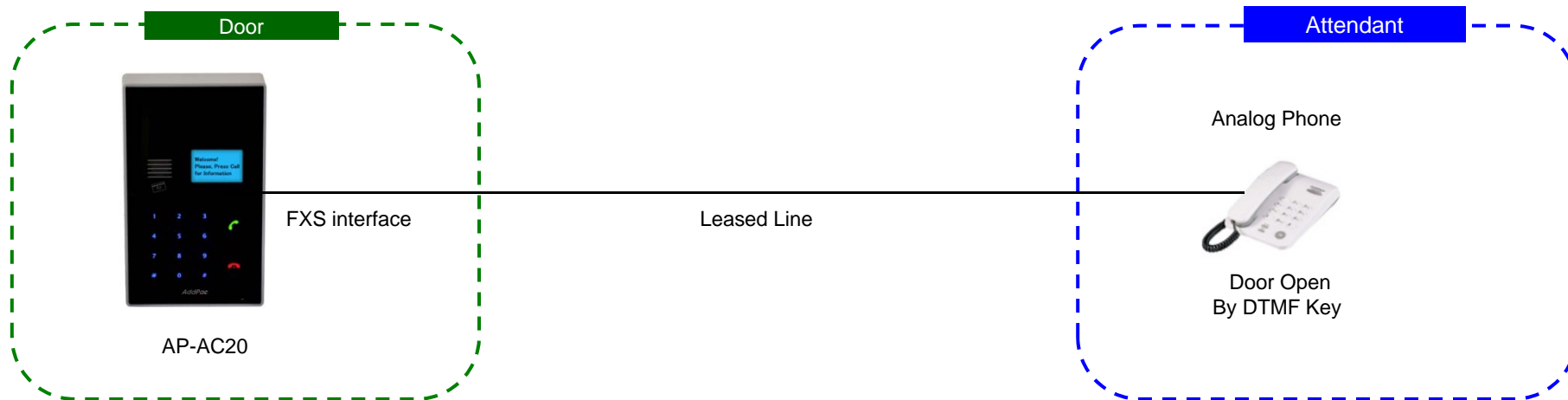
Point-to-Point Connection (Simple Appl.)



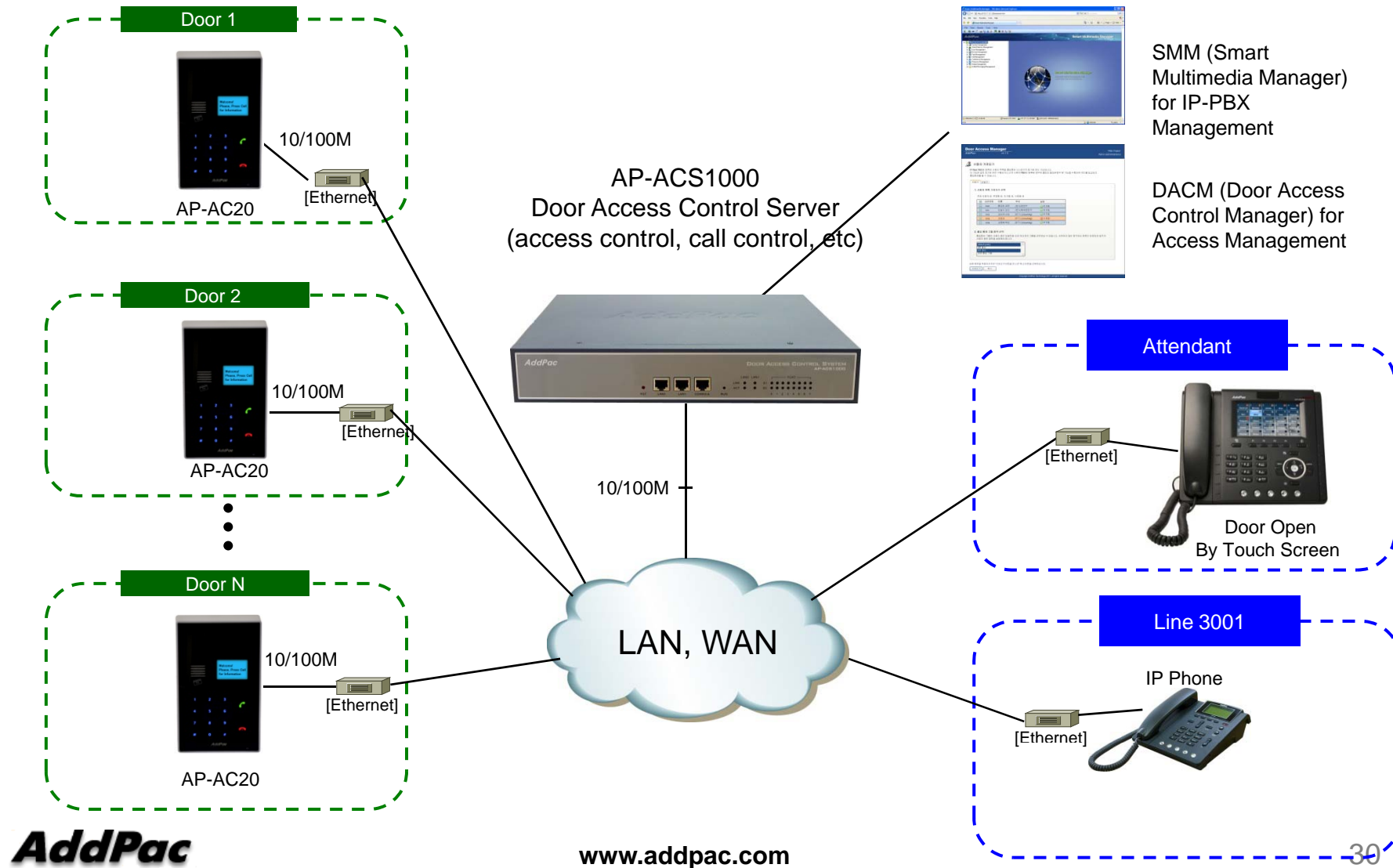
Point-to-Point Connection (Simple Appl.)



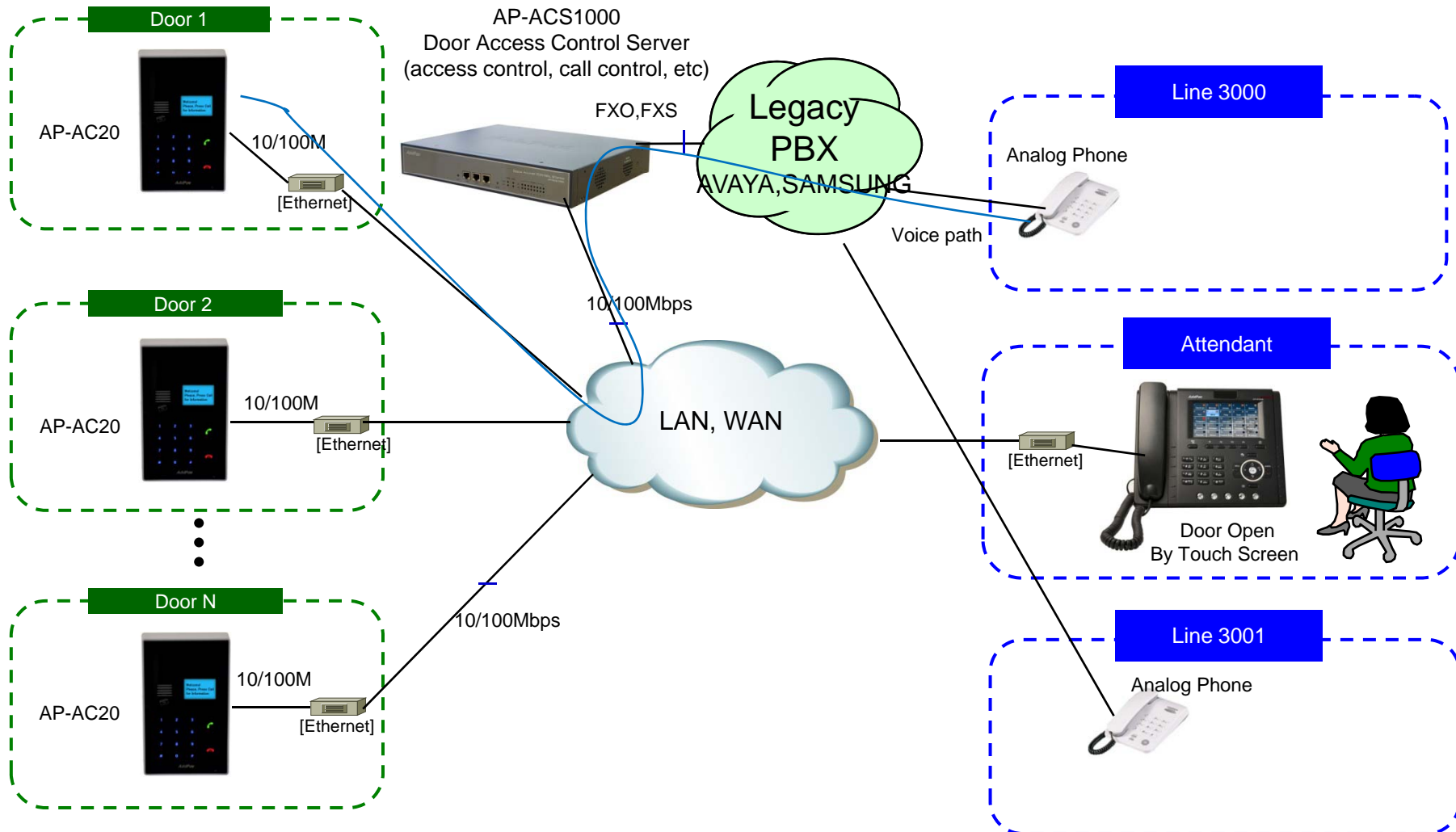
Point-to-Point Connection (Simple Appl.)



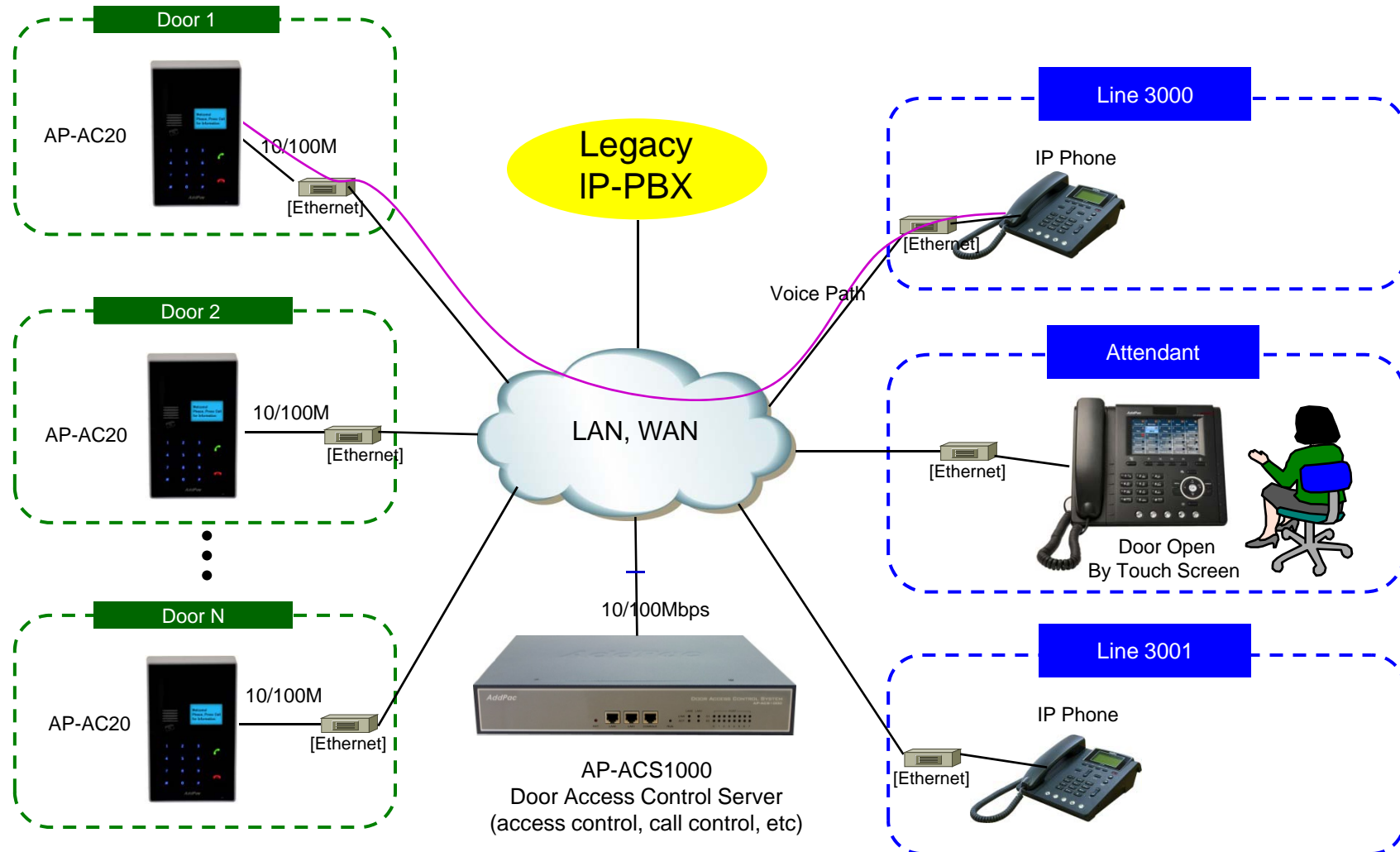
Integrated Door Access Control and Call Control (All AddPac Solution)



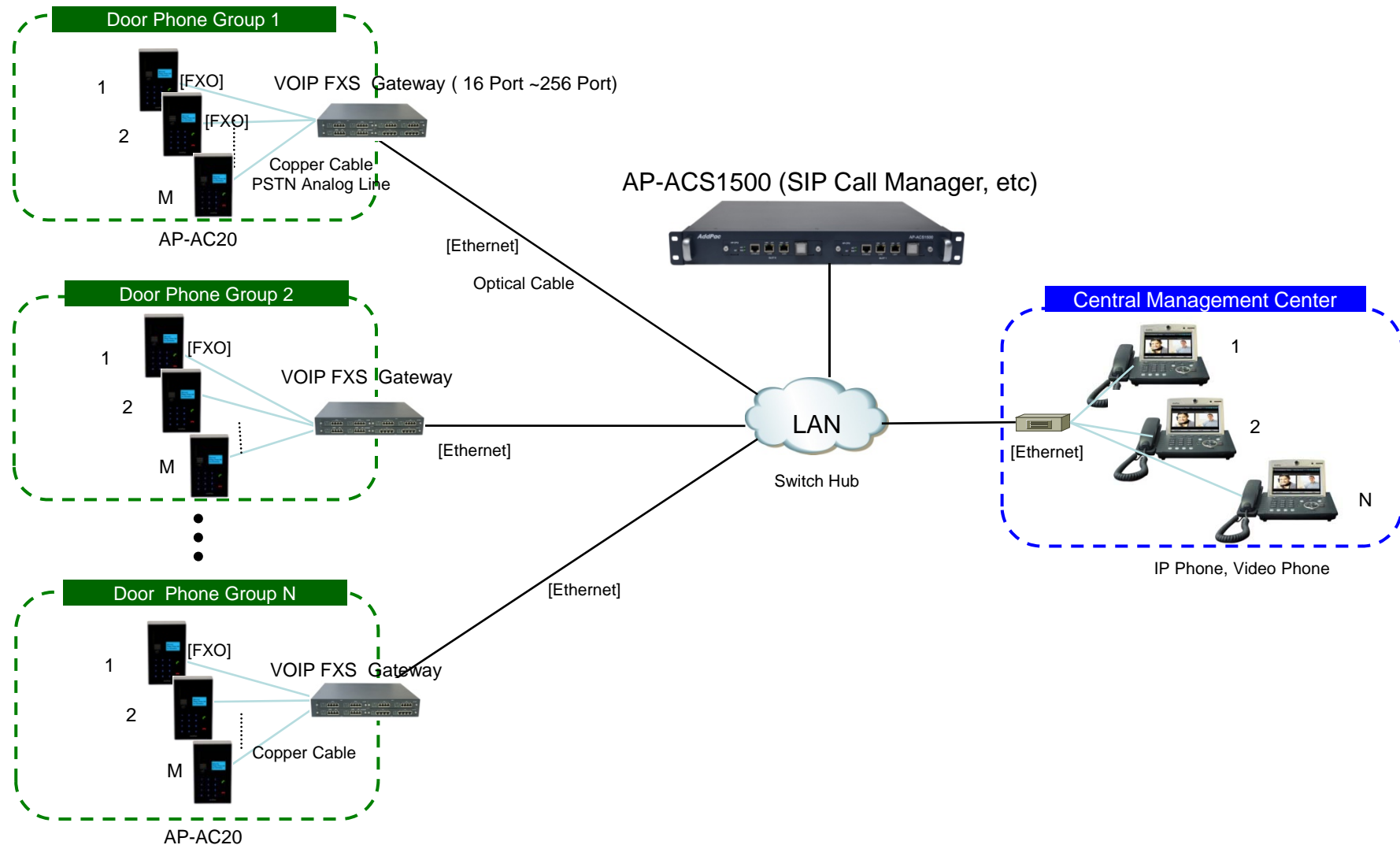
Legacy PBX Environment



Legacy IP-PBX Environment



Analog Line Service Environment



Ordering Information

- **AP-AC20 IP Door Phone Hardware**
 - AP-AC20 IP Door Phone Main Body
 - RISC Microprocessor with High-end Programmable DSP Architecture
 - Blue LCD, Internal MIC, Internal Speaker
 - 1-ports 10/100Mbps Fast Ethernet
 - Option : PoE Interface
 - Option : RF Card
 - Option : FXO Port, FXS Port
 - Including Network Cable Set & Ext. Power Supply, etc.
- **Built-in APOS Internetworking Software for AP-AC20**
- **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



Thank you!

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Sales and Marketing

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