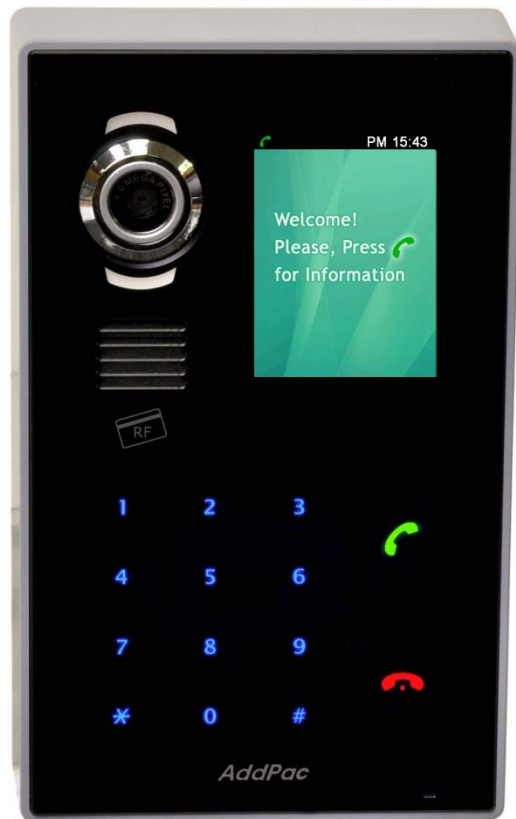


AP-VAC70

IP HD Video Door Phone

High Performance IP HD Video 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
- Video Service & Features
- Audio & Voice Service and Features
- OSD Software Features
- Smart Web Manager
- Application Area
- Ordering Information



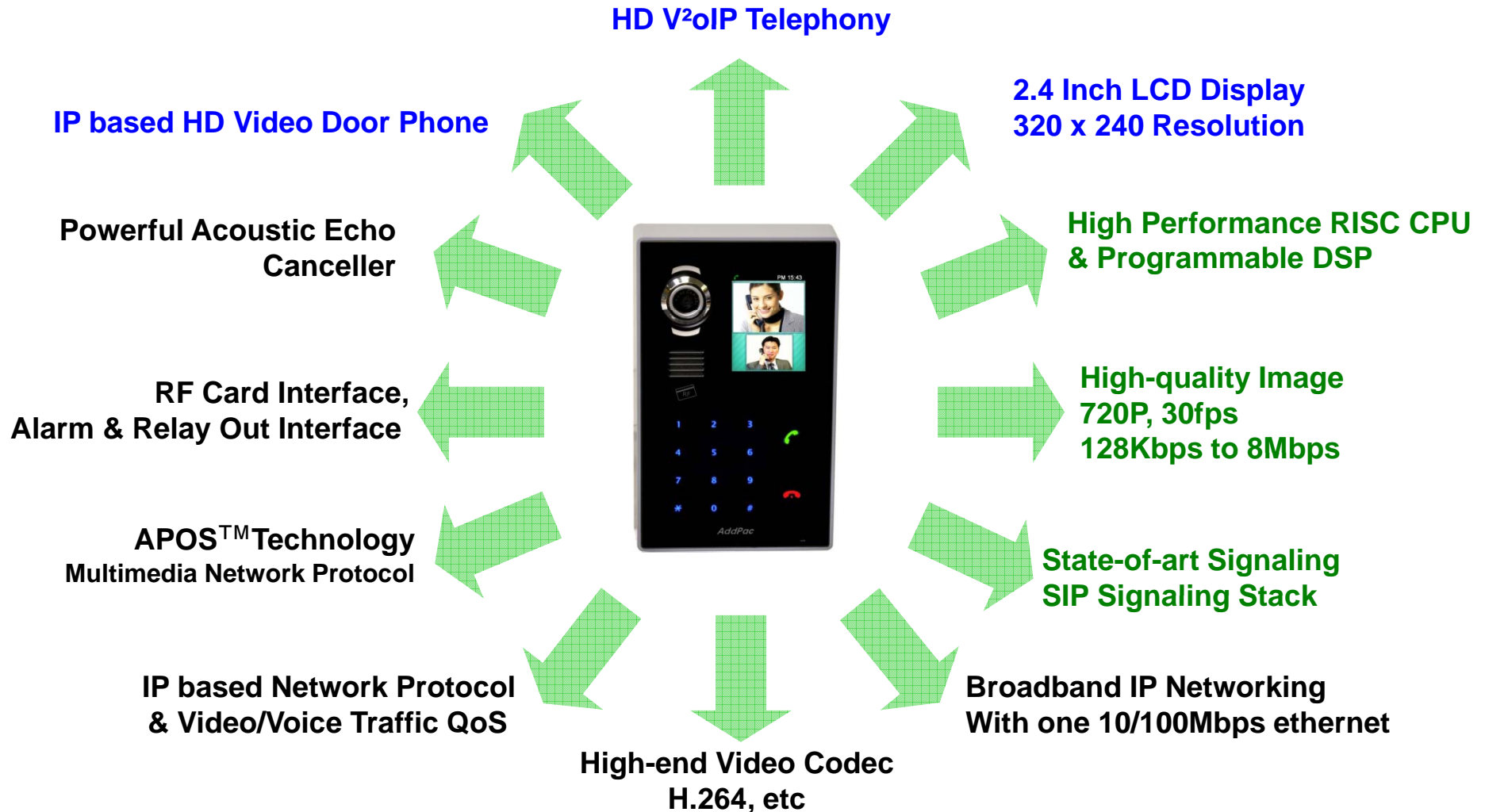
Product Overview

AP-VAC70 IP HD Video Door Phone

- High Performance IP HD Video Door Phone Solution
- 3x4 Key, TFT Color LCD, Internal MIC & Speaker
- Wide Dynamic Range(WDR) HD Video Camera CMOS Image 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, 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-VAC70 IP HD Video Door Phone

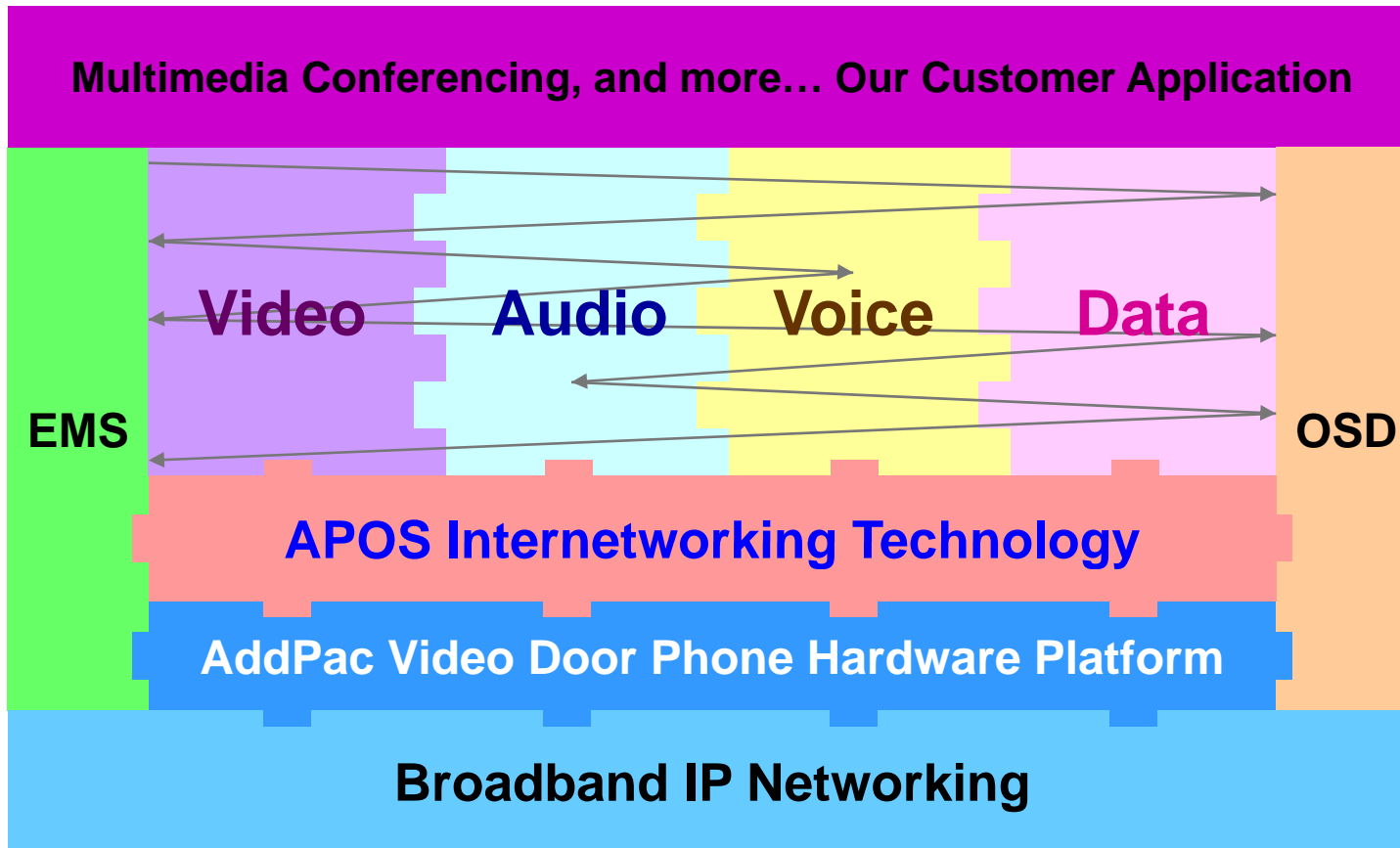


AddPac

www.addpac.com

Multimedia Service

AP-VAC70 IP HD Video Door Phone



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

Hardware Specification

AP-VAC70 IP HD 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
- 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
- External RCA Audio Line Out and MIC In (back side)
- Power Supply
 - Power over Ethernet (Option)
 - External Power Supply



Hardware Specification

AP-VAC70 IP HD 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-VAC70 IP HD Video Door Phone

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**
 - CMOS 720P Wide Dynamic Range(WDR) HD Image Sensor
 - Output Formats : YUV, separated and combined RAW
 - Image Size : WXGA(1280x480), HD 720P(1280x720), WVGA(752x480), VGA(640x480), CIF(352x288), QVGA(320x240)
 - 1/3 Inch One(1) Megapixel Image Sensor
 - Automatic Exposure/Gain
 - Horizontal and Vertical Windowing Capability
 - Auto White Balance Control
 - Aperture/Gamma Correction
 - 50/60Hz Flicker Cancellation
 - Defective Pixel Correction

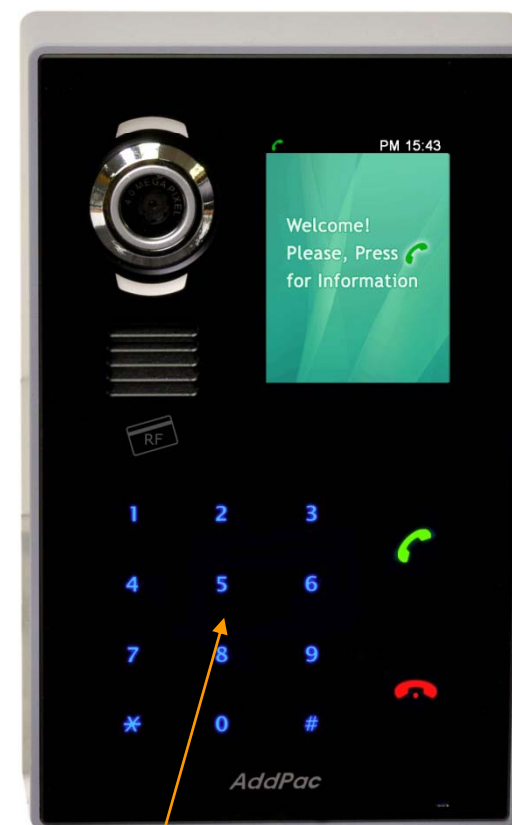
Hardware Specification

AP-VAC70 IP HD 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

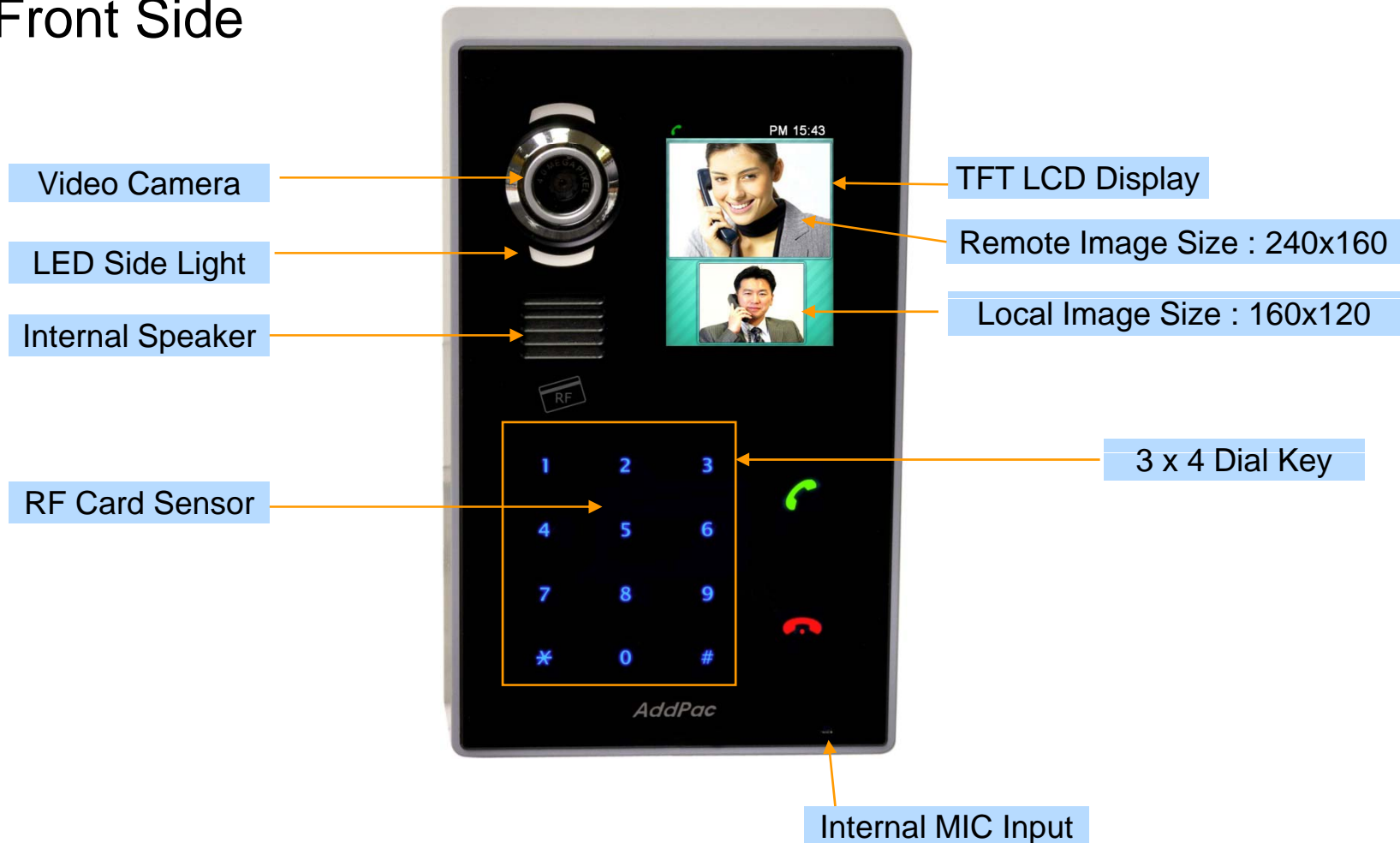
Hardware Specification

AP-VAC70 IP HD Video Door Phone

RISC
CPU

High-end
DSP

Front Side



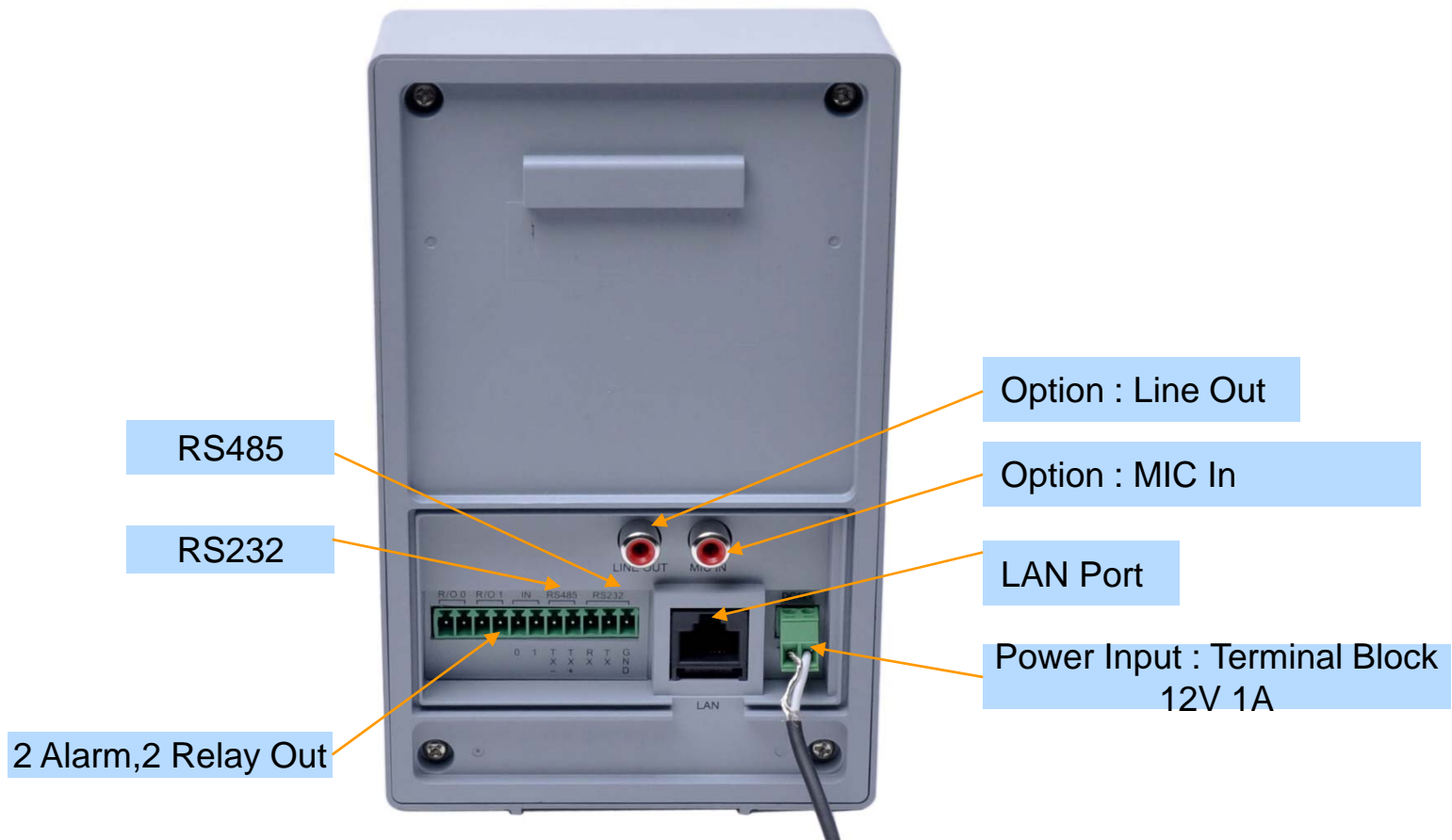
Hardware Specification

AP-VAC70 IP HD Video Door Phone

RISC
CPU

High-end
DSP

Back Side



Hardware Specification

AP-VAC70 IP HD Video Door Phone

RISC
CPU

High-end
DSP

Back Side



Wall Mount Bracket

Rubber Cover for light waterproof

Hardware Specification

AP-VAC70 IP HD Video Door Phone

RISC
CPU

High-end
DSP

Power Supply

Terminal Block



12V 1A Power Adaptor

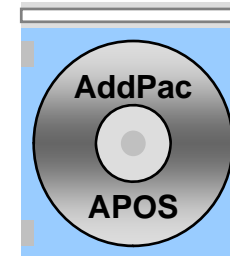
Example



Software Service

AP-VAC70 IP HD Video Door Phone

- **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-VAC70 IP HD Video Door Phone

- **High-performance Video Codec Support**
 - H.264, 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**
- **128Kbps to 8Mbps 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-VAC70 IP HD Video Door Phone

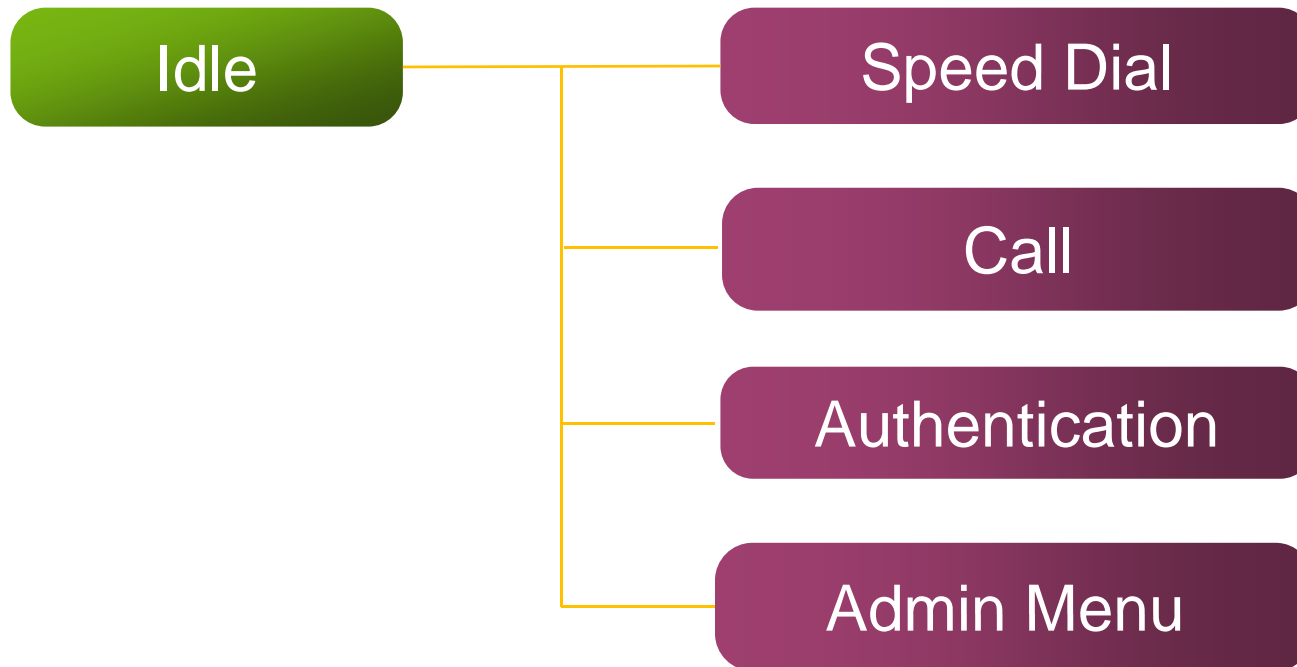
- **Audio & Voice Networking Interface**
 - External Audio Line-Out Interface (RCA Connector)
 - External Audio MIC-In Interface (RCA Connector)
- **VoIP based Signaling Protocol Support**
 - SIP Signaling Protocol Stack
- **High-performance Audio & Voice Codec Support**
 - G.711, G.726 Audio Codec
-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



OSD Software Feature

OSD Software Features

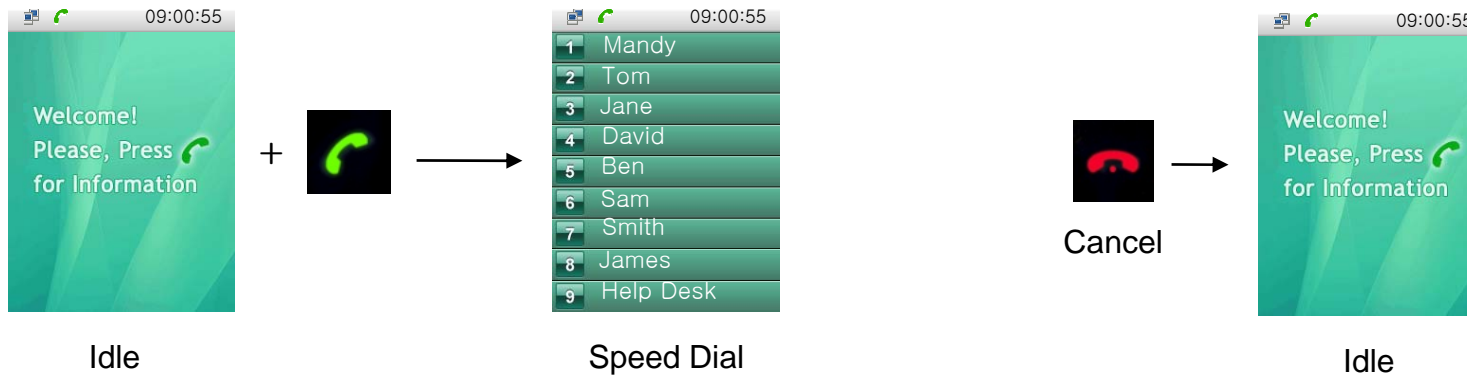
AP-VAC70 IP HD Video Door Phone



OSD Software Features

AP-VAC70 IP HD Video Door Phone

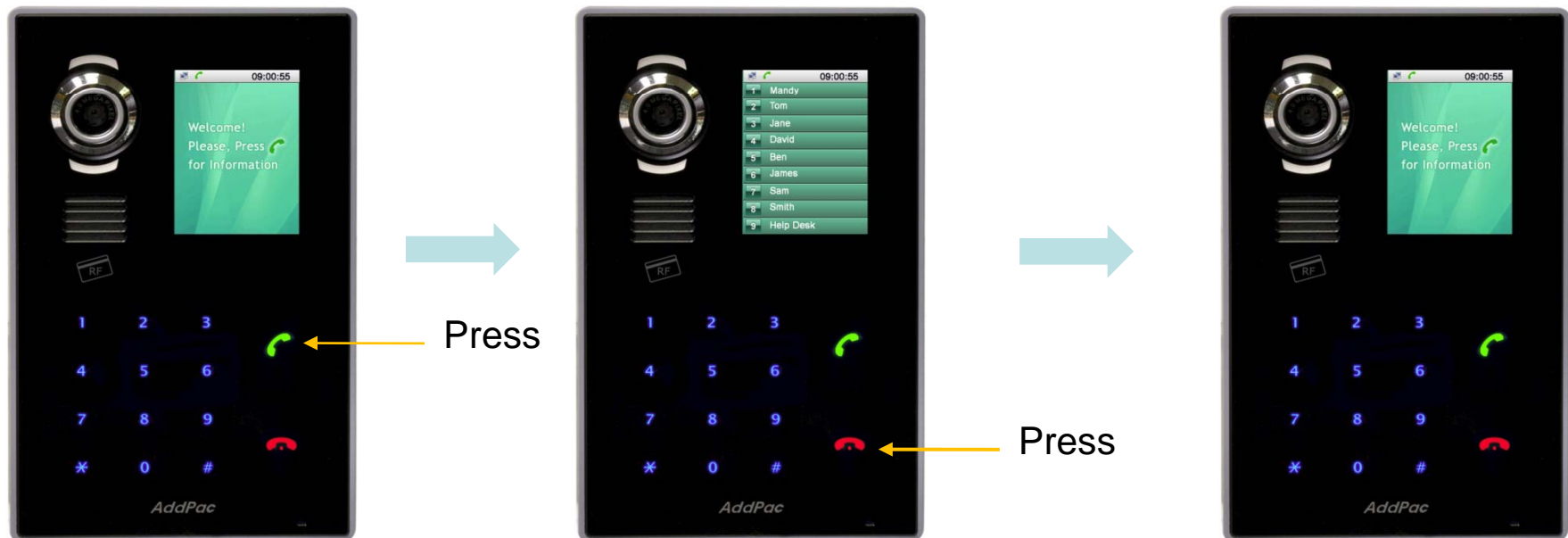
Speed Dial



OSD Software Features

AP-VAC70 IP HD Video Door Phone

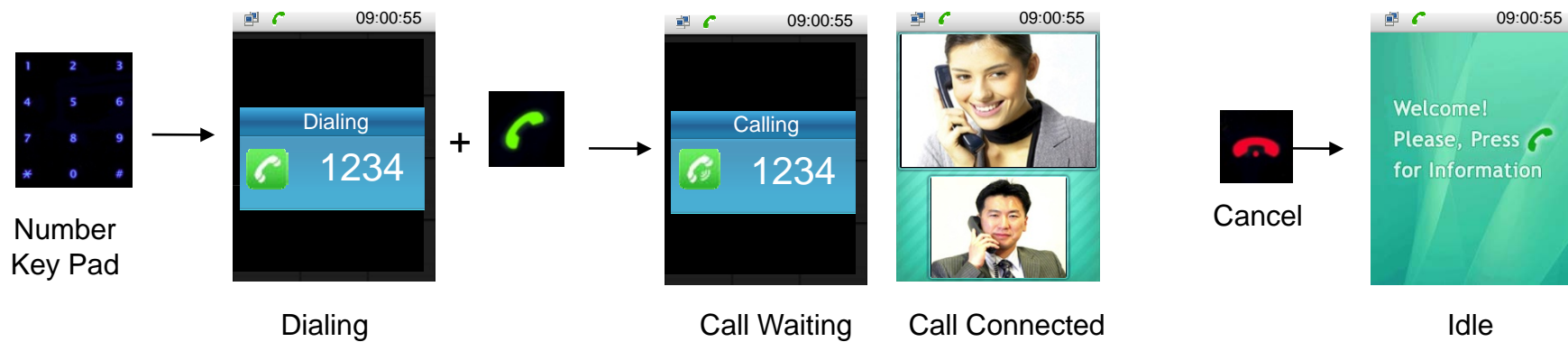
Speed Dial



OSD Software Features

AP-VAC70 IP HD Video Door Phone

Call



OSD Software Features

AP-VAC70 IP HD Video Door Phone

Call



Press Digit



Dialing
Press Call Button



Call Waiting

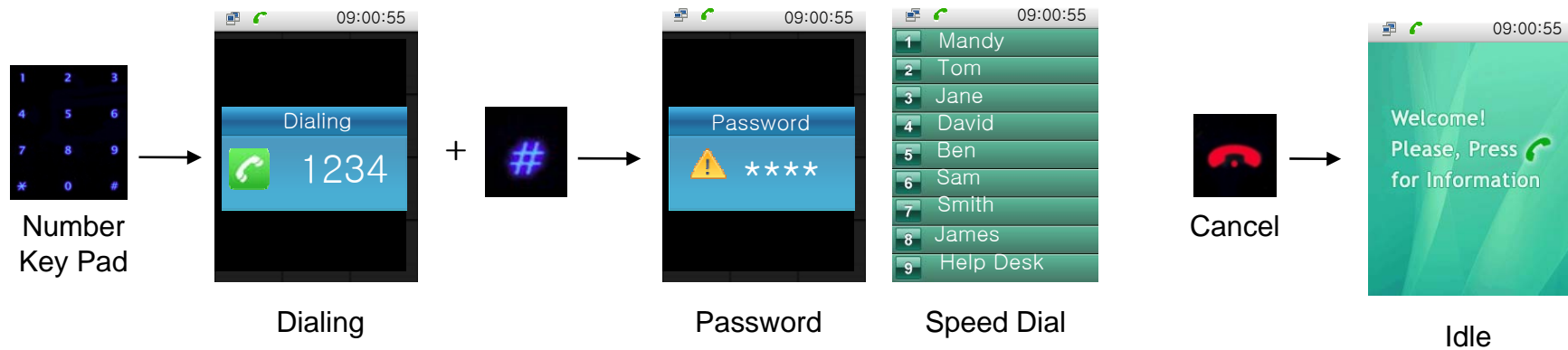


Call Connected

OSD Software Features

AP-VAC70 IP HD Video Door Phone

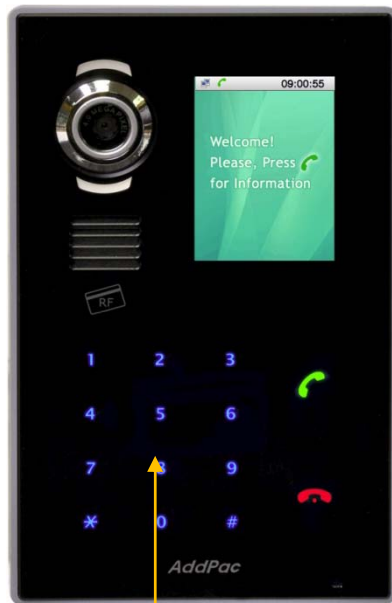
Authentication



OSD Software Features

AP-VAC70 IP HD Video Door Phone

Authentication



Press Digit



Dialing

Press # key



Password

Press Password Key



Speed Dial

AddPac

www.addpac.com

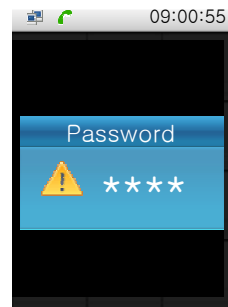
OSD Software Features

AP-VAC70 IP HD Video Door Phone

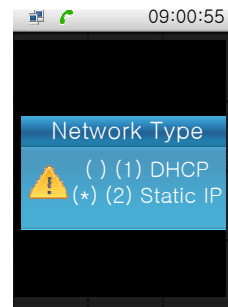
Admin. Menu



Repeat 5 times
or more



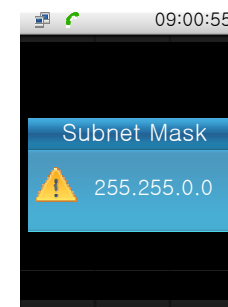
Password



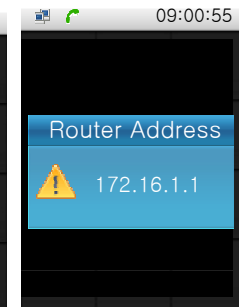
1) Network Type



2) IP Address



3) Subnet Mask

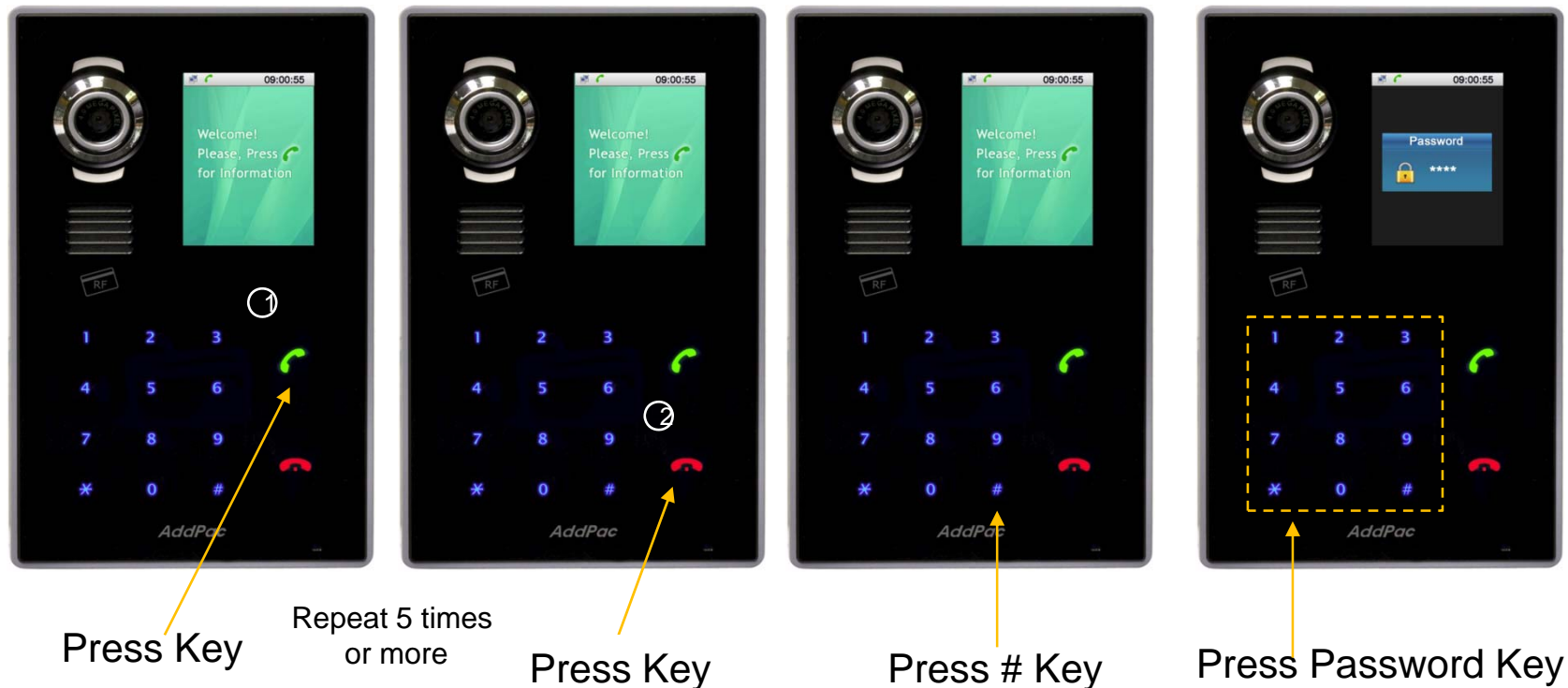


4) Router Address

OSD Software Features

AP-VAC70 IP HD Video Door Phone

Admin. Menu



OSD Software Features

AP-VAC70 IP HD Video Door Phone

Admin. Menu



1) Network Type

2) IP Address

3) Subnet Mask

4) Router Address



Smart Web Manager (Example)

Smart Web Manager

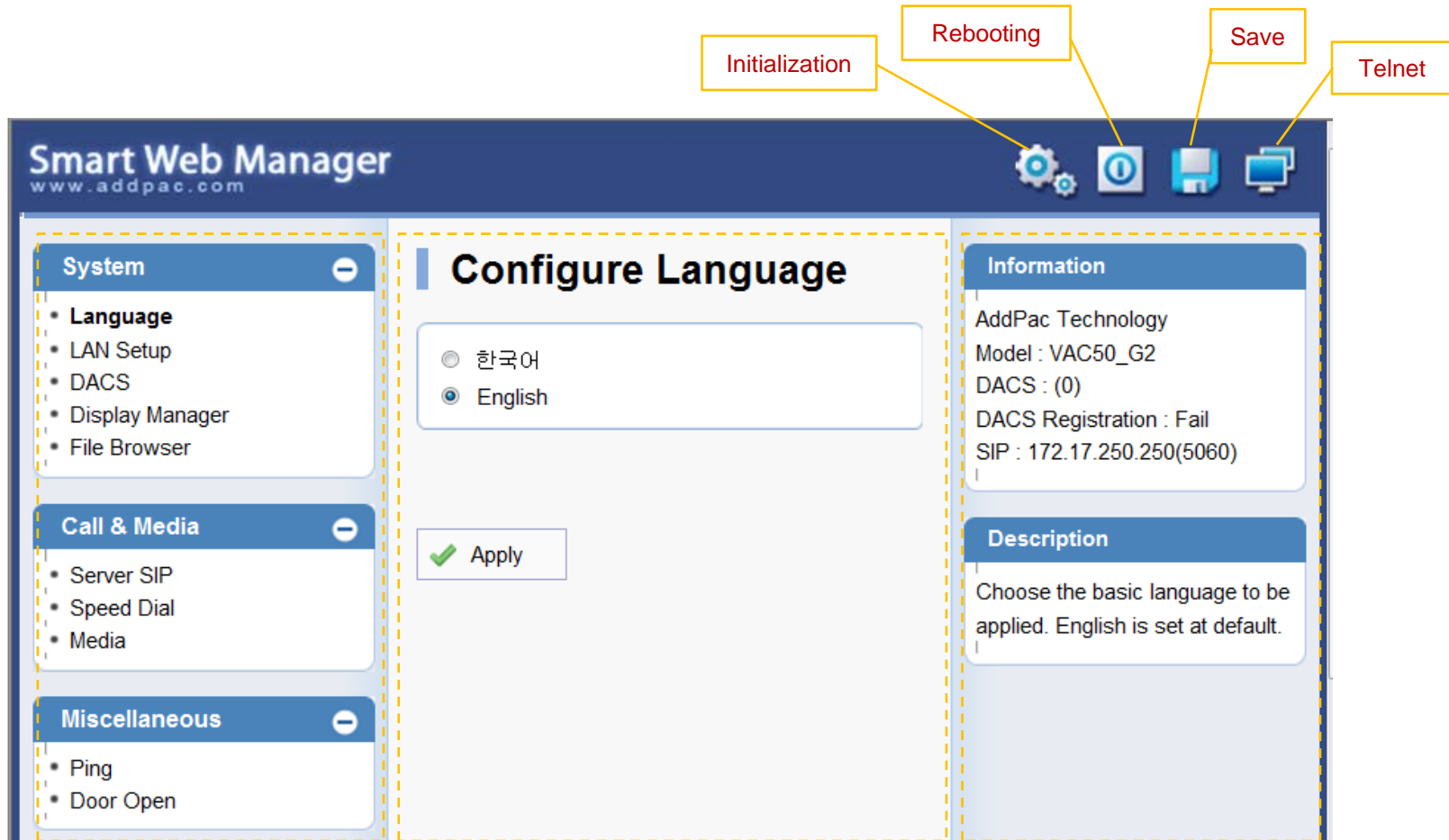
AP-VAC70 IP HD Video Door Phone

- 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-VAC70 IP HD Video Door Phone



Menu Tree

Output Screen after
Menu Select

System Information and
Help Message

Smart Web Manager : SIP configuration

AP-VAC70 IP HD Video 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

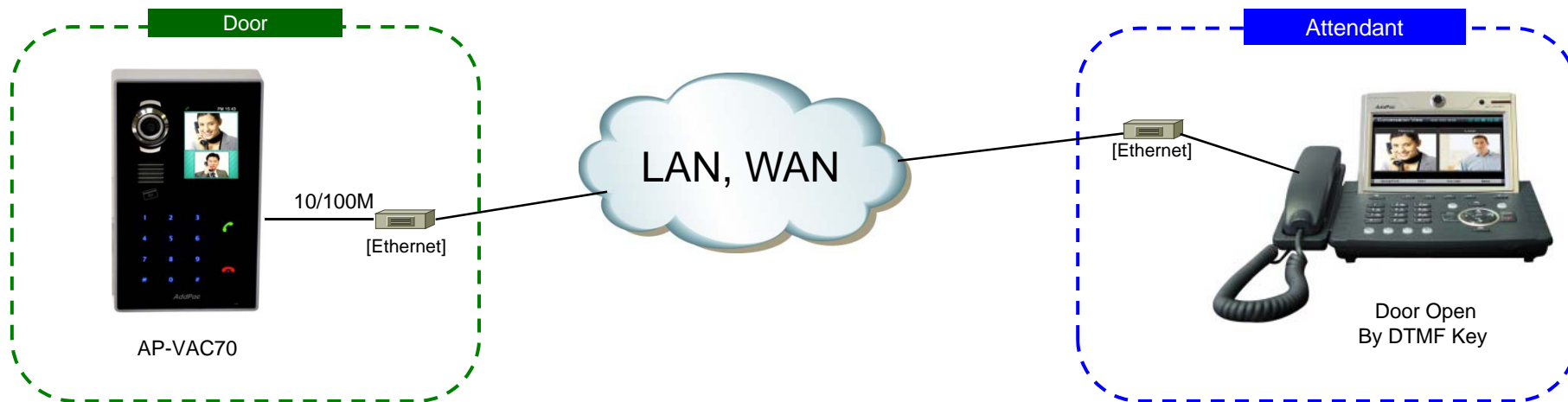
AP-VAC70 IP HD Video Door Phone

Application Area

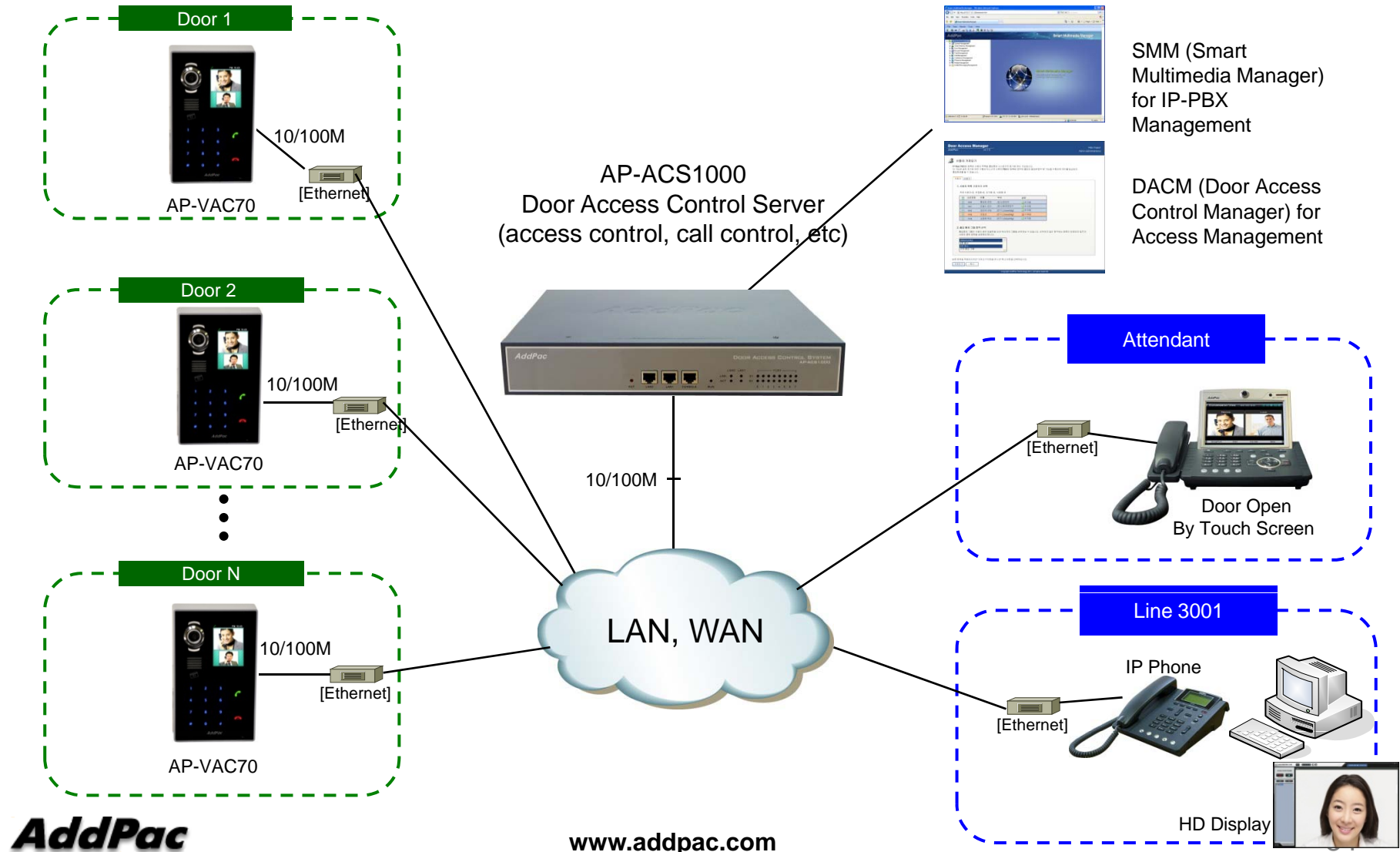
- Point-to-Point Application (Simple Application)
- Point-to-Multipoint Application
 - All AddPac Solution
(Call Manager + Door Access Control Server)
 - Legacy PBX Environment
 - Legacy IP-PBX Environment



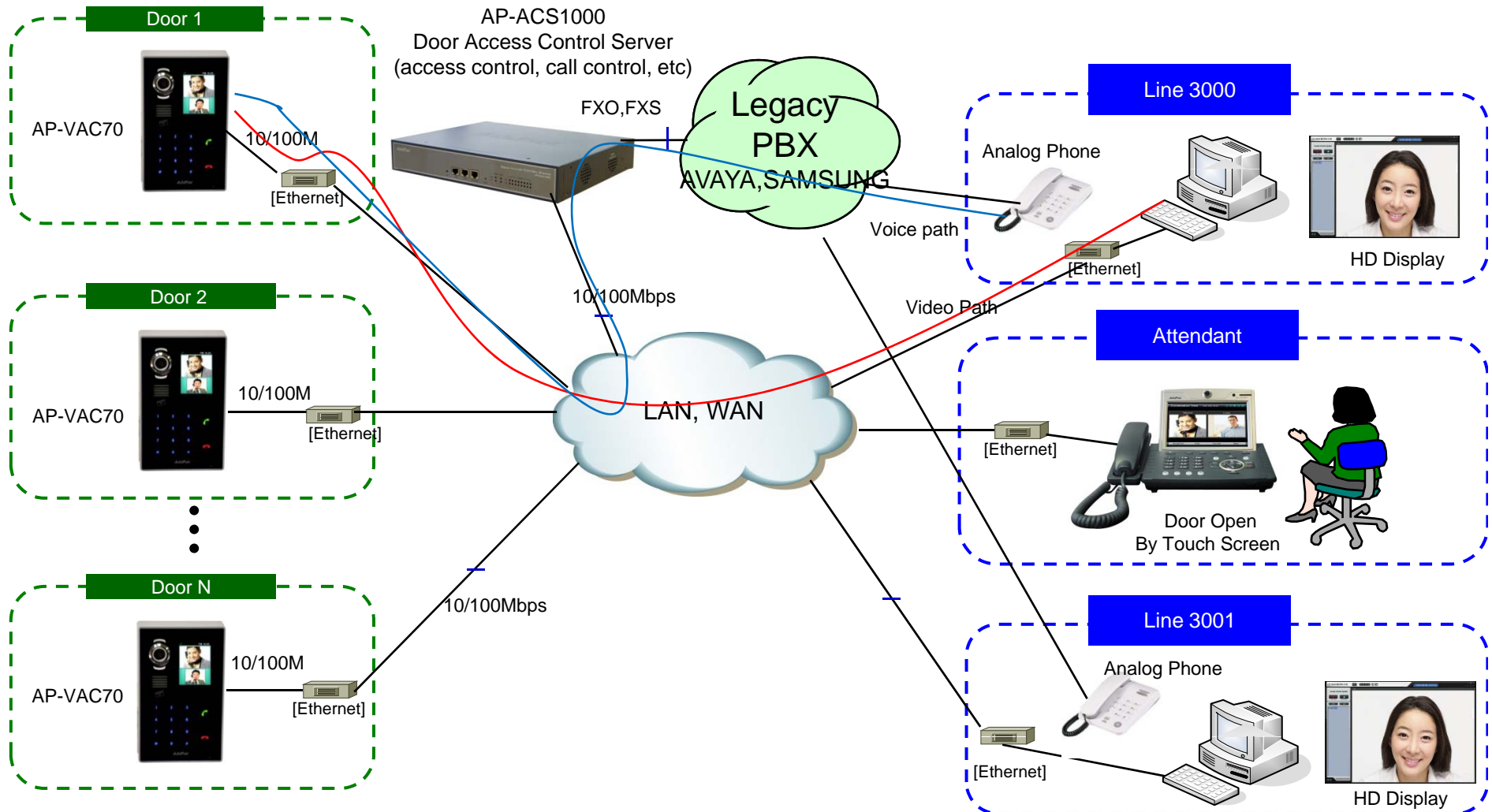
Point-to-Point Connection (Simple Appl.)



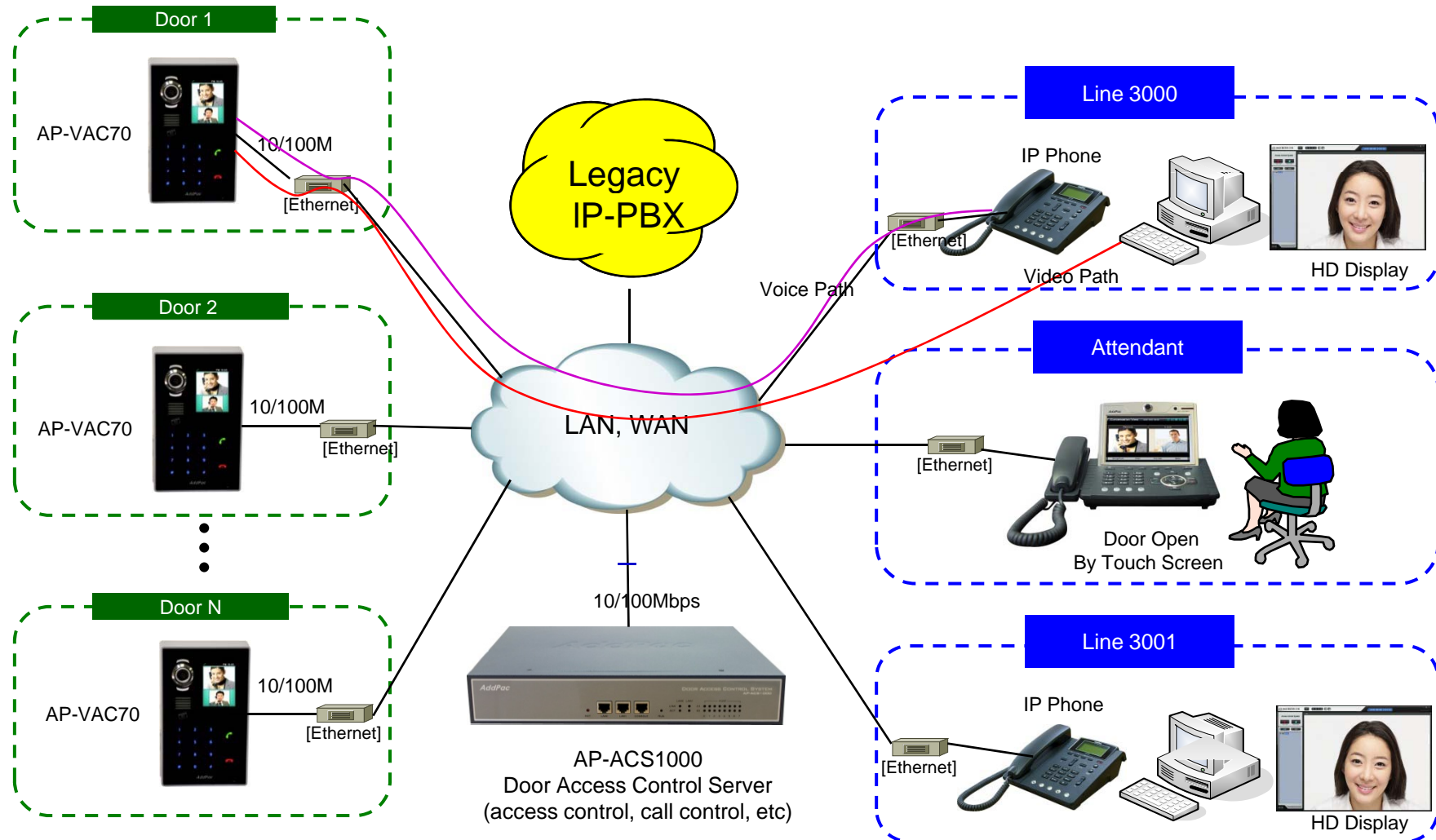
Integrated Door Access Control and Call Control (All AddPac Solution)



Legacy PBX Environment



Legacy IP-PBX Environment



Ordering Information

- **AP-VAC70 IP HD Video Door Phone Hardware**
 - AP-VAC70 HD Video Door Phone Main Body
 - RISC Microprocessor with High-end Programmable DSP Architecture
 - 2.4 Inch LCD, Built In HD Camera, Side Light
 - Internal MIC, Internal Speaker
 - 1-ports 10/100Mbps Fast Ethernet
 - PoE Interface
 - Including Network Cable Set & Ext. Power Supply, etc.
- **Built-in APOS Internetworking Software for AP-VAC70**
- **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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