

AP-VAC200N

IP Video Intercom

High Performance Fingerprint Recognition SIP Video Intercom Solution



AddPac

AddPac Technology

Sales and Marketing

www.addpac.com

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- Video Service & Features
- Audio & Voice Service and Features
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Product Overview

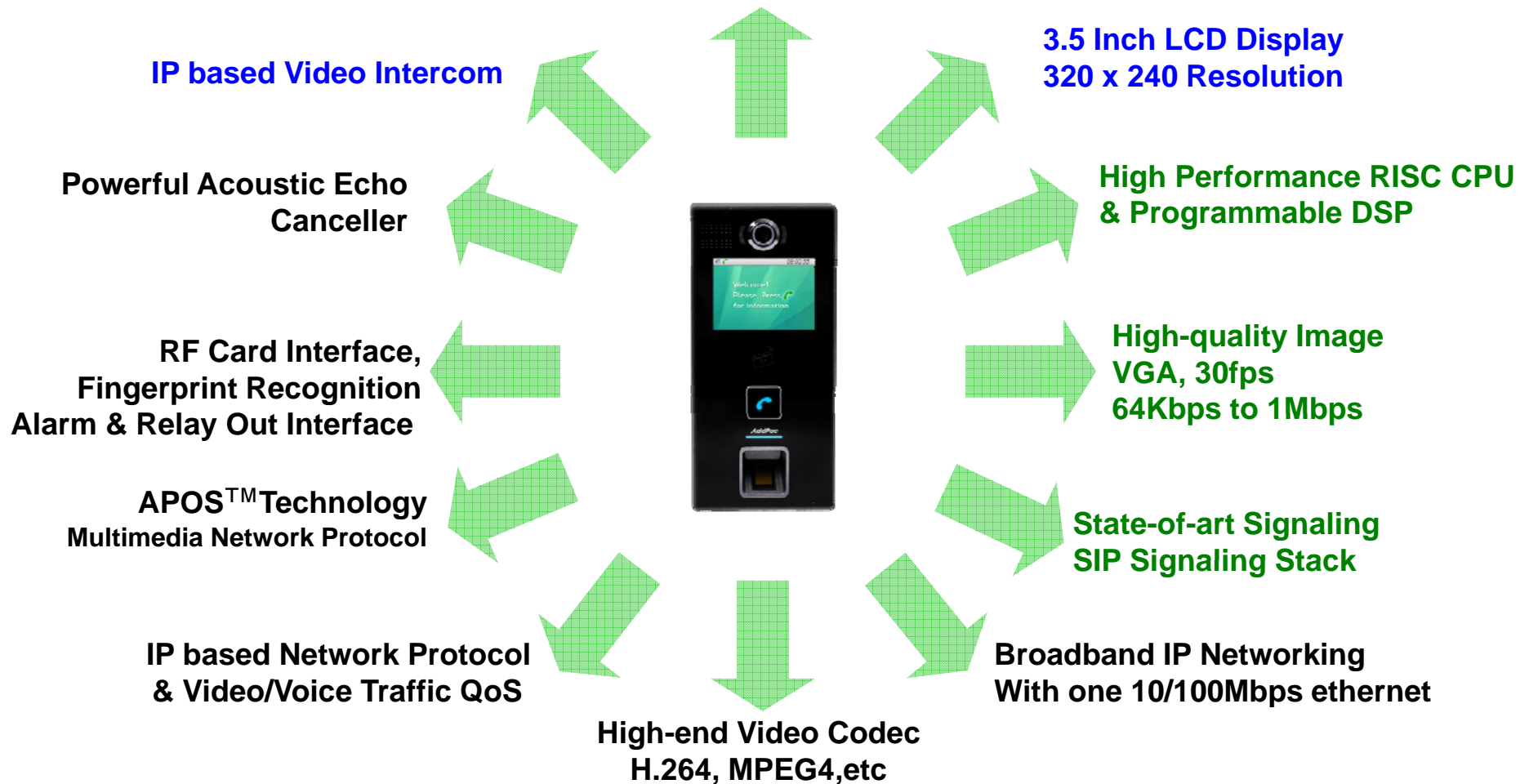
AP-VAC200N Fingerprint Recognition IP Video Intercom

- Smart IP Video Intercom Solution
- High Performance SIP Video Intercom Solution
- Video Camera, Video Call Button, TFT Color LCD, Internal MIC & Speaker
- High Quality 3.5 Inch LCD, 320 x 240 Video Resolution
- Fingerprint Recognition Support
- RF Card Support
- 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

Product Highlights

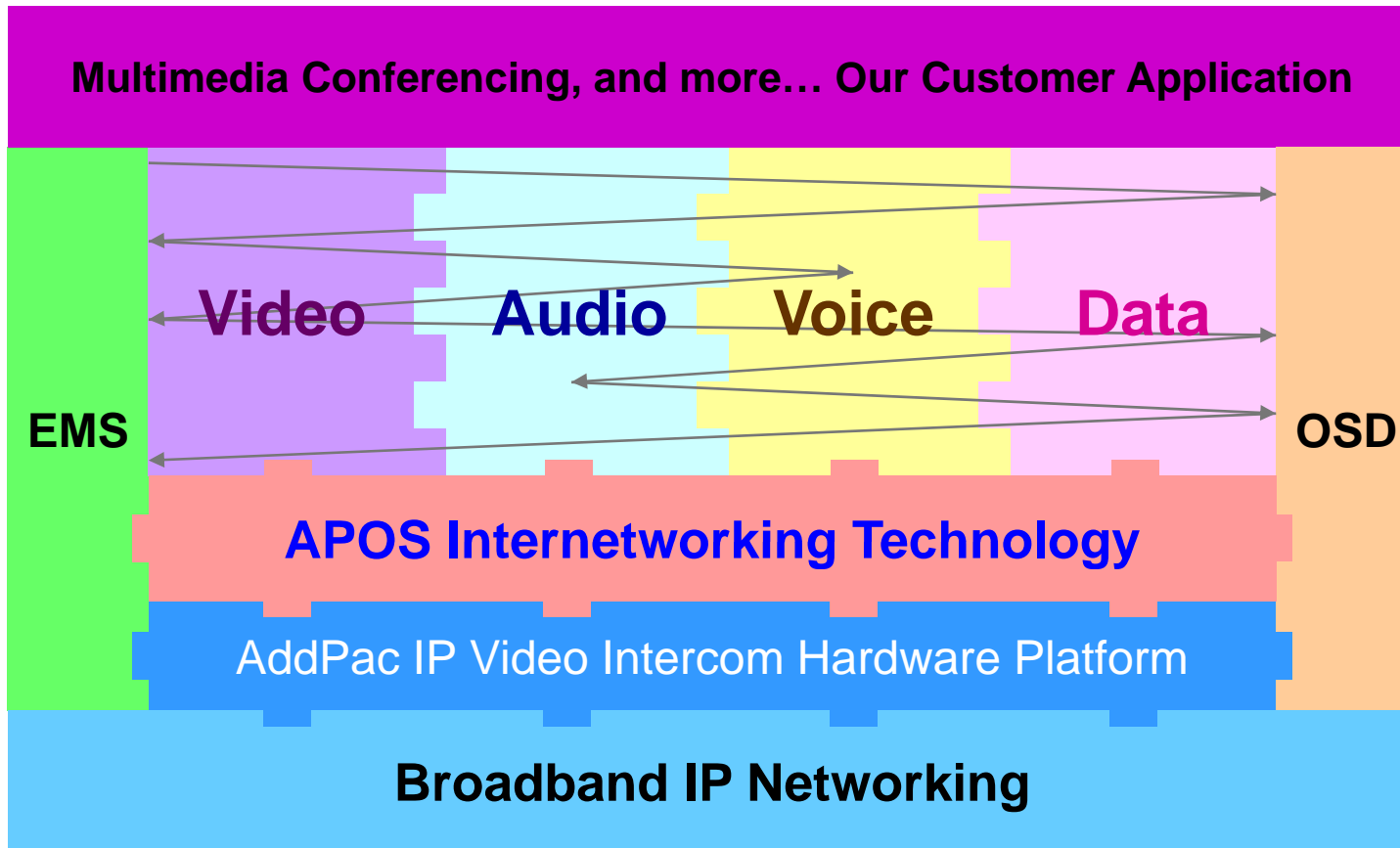
AP-VAC200N Fingerprint Recognition IP Video Intercom

Smart SIP Video Intercom



Multimedia Service

AP-VAC200N Fingerprint Recognition IP Video Intercom



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

Hardware Specification

AP-VAC200N Fingerprint Recognition IP Video Intercom

RISC
CPU

High-end
DSP

- RISC+DSP Microprocessor Computing Power
- Audio and Voice Interface
 - Internal MIC
 - Internal Speaker
- Video Camera Interface
- TFT Color LCD Interface
 - 3.5 Inch LCD, 320 x 240 Video Resolution
- Network Interface
 - One(1) 10/100Mbps Fast Ethernet
- Fingerprint Recognition Interface
- RF Card Interface
- Alarm & Relay Out Interface (door open, etc)
- RS232/RS485 Interface
- External RCA Audio Line Out and MIC In (back side)
- Steel Chassis
- Power Supply
 - Power over Ethernet (Option)
 - External Power Supply



Hardware Specification

AP-VAC200N Fingerprint Recognition IP Video Intercom

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-VAC200N Fingerprint Recognition IP Video Intercom

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
- **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

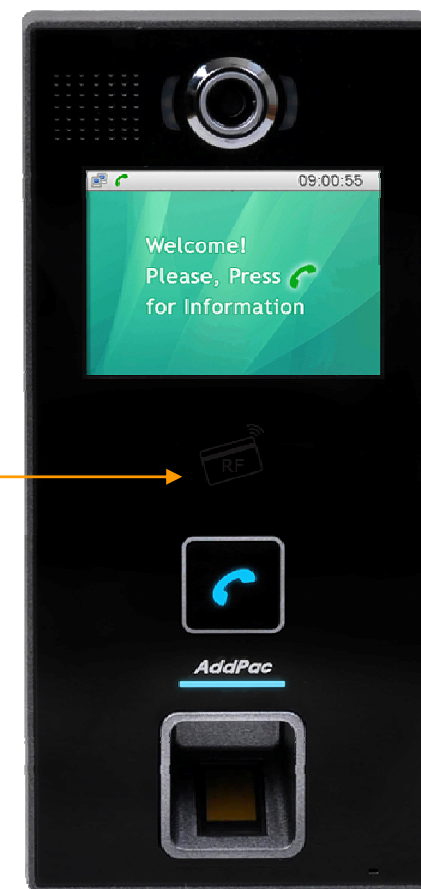
AP-VAC200N Fingerprint Recognition IP Video Intercom

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

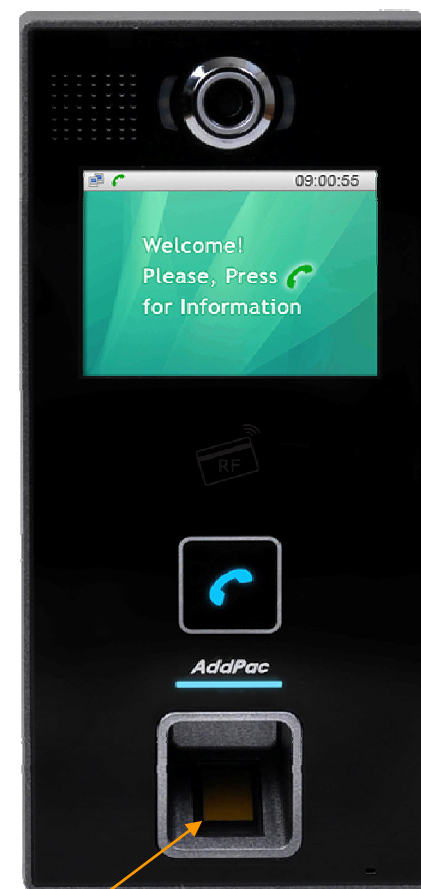
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RISC
CPU

High-end
DSP

- Fingerprint Recognition

- Sensor Type : Capacitive
- Resolution(dpi) : 508
- Sensing Area(mm) : 12.8 x18.0
- Image Size(pixel) : 256 x 360
- CPU : 400MHz DSP
- Flash Memory : 4MB
- ERR : < 0.1%
- Enrollment Time : 800msec
- 1:1 Verification Time : 800msec
- 1:1000 Identification Time : 970msec
- Template Size : 256~384bytes (configurable, 384bytes default)
- Template Capacity : 9,000
- Encryption : 256bit AES



Fingerprint Recognition

Hardware Specification

AP-VAC200N Fingerprint Recognition IP Video Intercom

RISC
CPU

High-end
DSP

Front Side

Internal Speaker

Video Camera

LED Side Light

RF Card Sensor

Status LED

Fingerprint
Recognition

TFT LCD Display

Time & Attendance Menu

Function & Direction Key

SIP Video Call Button

Steel Chassis

Internal MIC Input

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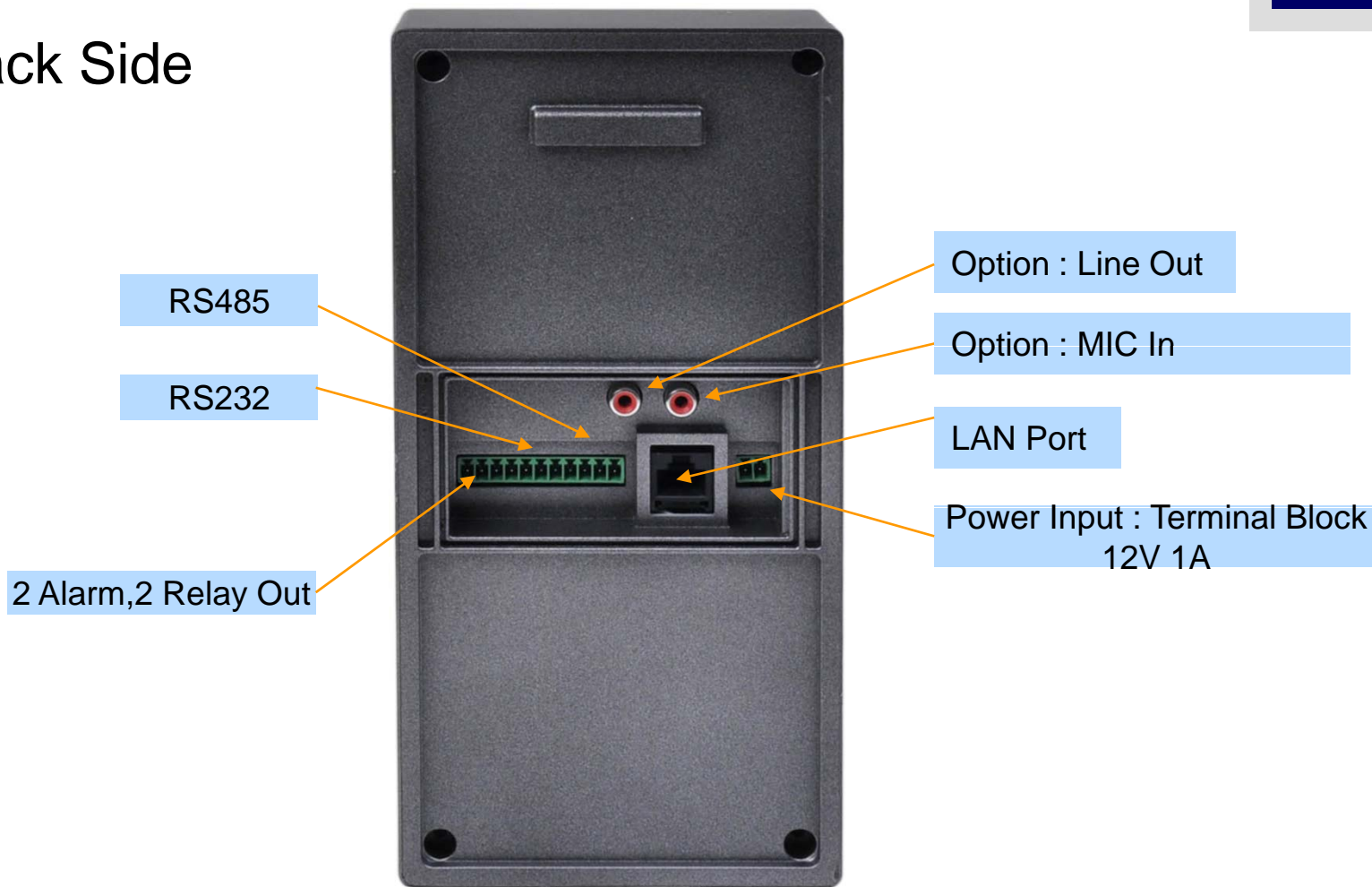
Hardware Specification

AP-VAC200N Fingerprint Recognition IP Video Intercom

RISC
CPU

High-end
DSP

Back Side



Hardware Specification

AP-VAC200N Fingerprint Recognition IP Video Intercom

RISC
CPU

High-end
DSP

Power Supply

Terminal Block



12V 1A Power Adaptor

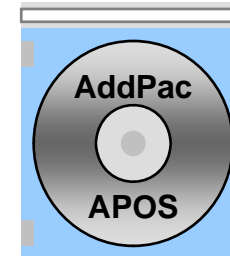
Example



Software Service

AP-VAC200N Fingerprint Recognition IP Video Intercom

- **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-VAC200N Fingerprint Recognition IP Video Intercom

- **High-performance Video Codec Support**
 - H.264, etc
- **Image Resolution Support**
 - Local Display : 160 x 120
 - Remote Display : 240 x 160
 - Video Encoding : VGA(640x480), QVGA(320x240)
- **Up to 30fps with VGA Resolution**
- **128Kbps to 1Mbps 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-VAC200N Fingerprint Recognition IP Video Intercom

- **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**



Smart Web Manager (Example)

Smart Web Manager

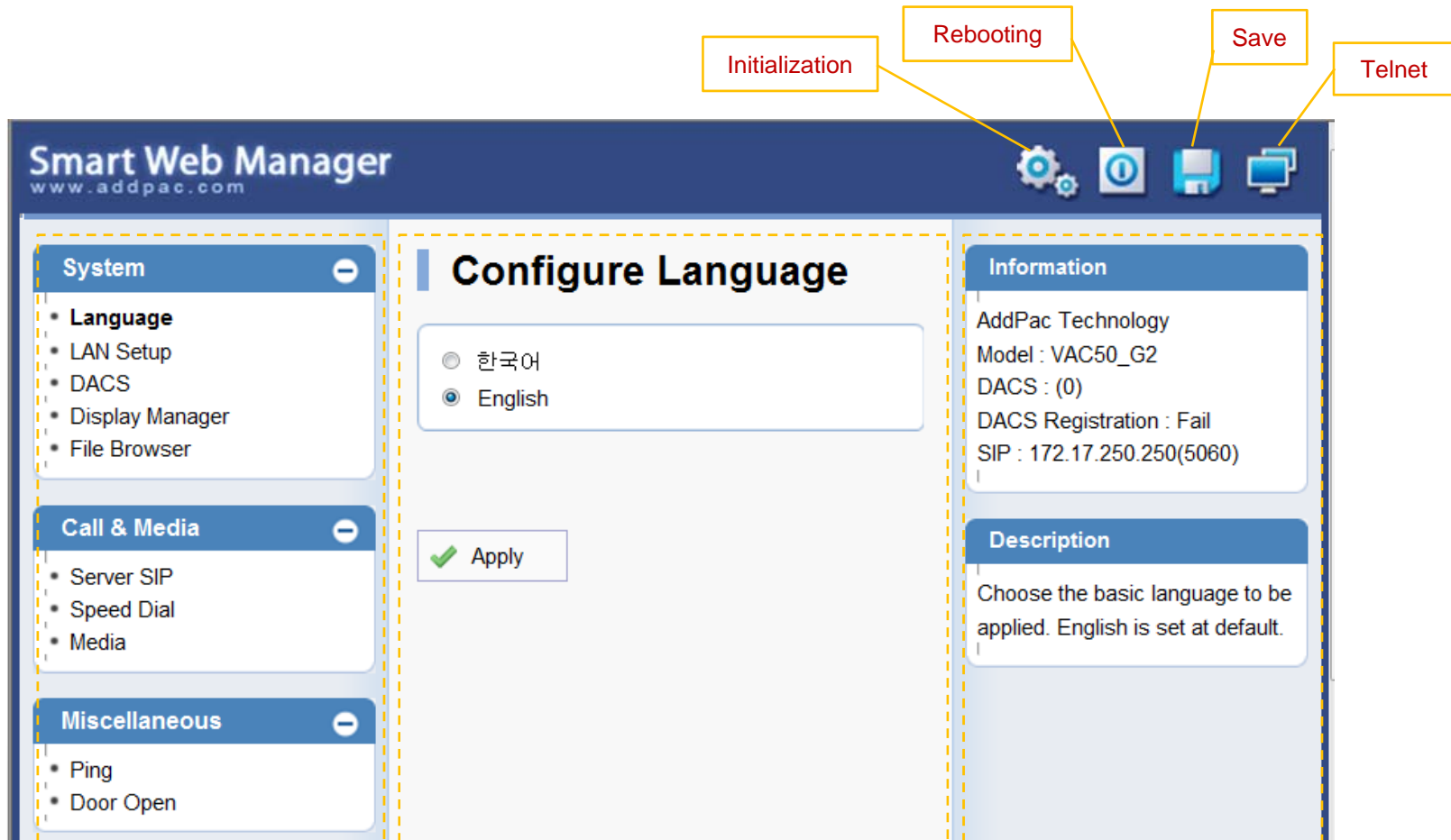
AP-VAC200N Fingerprint Recognition IP Video Intercom

- 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-VAC200N Fingerprint Recognition IP Video Intercom



Menu Tree

Output Screen after
Menu Select

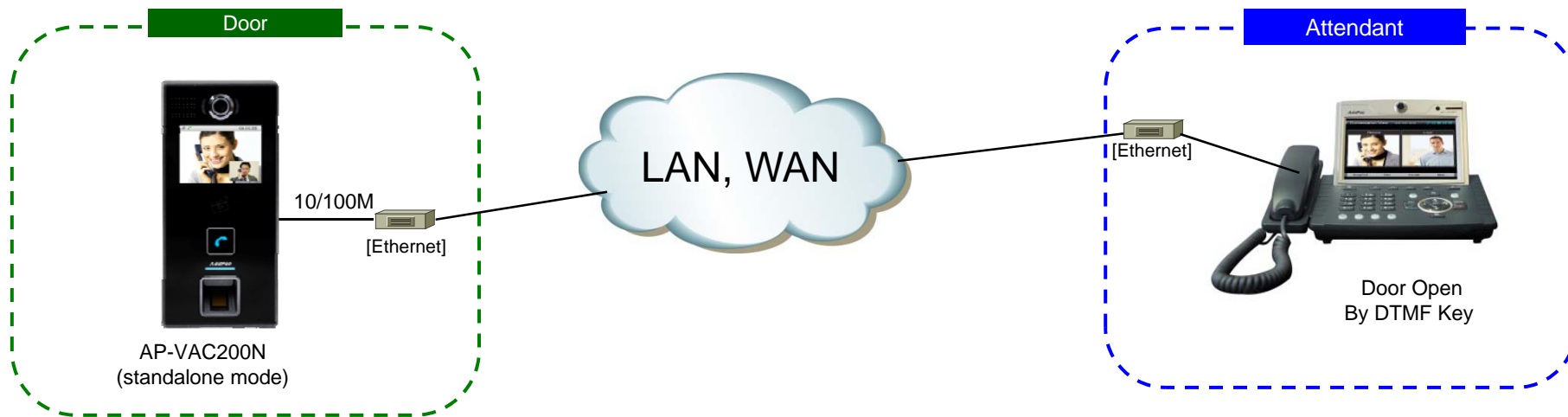
System Information and
Help Message

Application Area

- Point-to-Point Application (Simple Application)
- Point-to-Multipoint Application



Point-to-Point Connection (Simple Appl.)

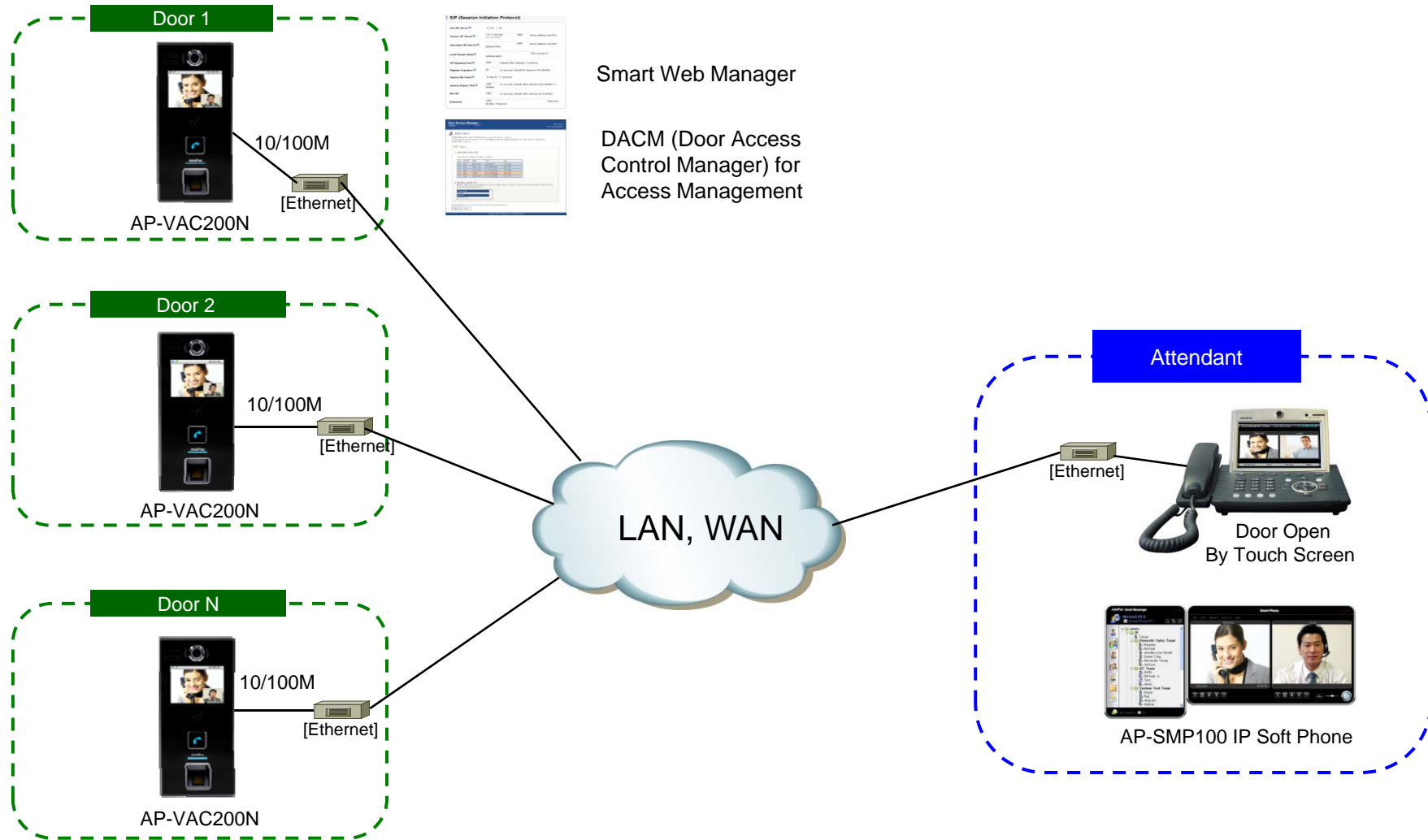


Smart Web Manager



DACM (Door Access Control Manager) for Access Management

Integrated Door Access Control and Call Control



Ordering Information

- **AP-VAC200N Fingerprint Recognition IP Video Intercom Hardware**
 - AP-VAC200N Main Body
 - RISC Microprocessor with High-end Programmable DSP Architecture
 - 3.5 Inch LCD, Built In Camera, Side Light
 - Fingerprint Recognition, RF card Interface
 - Steel Chassis
 - 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-VAC200N**
- **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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