









AP-VAC20 IP Video Door Phone

AP-VAC20 enterprise IP video door phone controls visitor access through video screen using LAN or internet. It has an excellent scalability using SIP standard VoIP signaling process feature by interworking with AddPac IP-PBX, video phone, and soft phone. It also supports the state of the art audio/video codec optimally. It provides enterprise visitor access control solution along with AP-ACS1000 Access Control Server.

AP-VAC20 is a new IP video door phone where Internet voice communications are combined with Internet video communications. This product provides advanced features and services such as video codecs (e.g. H.264, MPEG4), Blue LCD, high-performance AEC (Acoustic Echo Canceller), high quality audio sound, built RF Interface, PoE(Power over Ethenet), QoS, and standard VoIP signaling protocols such as SIP.

AP-VAC20 is a high-performance multi-functional IP video door phone where the state-of-the-art video processing technology is added to the voice processing technologies developed by AddPac in the VoIP field. Since AP-VAC20 supports networks of 64 Kbps to 1Mbps, it is available at any Internet-enabled place. Above all, AP-VAC20 ensures the best video quality due to the 'rate control' function that ensures the best video quality and frame rate at a limited bandwidth and the high-end error resilience technology for troubleshooting various packet failures on the Internet. In case of H.264 video codec, it supports max. 30 fps (frame per second) of VGA(640 x 480) video image. AP-VAC20 IP video door phone supports visitor access feature through video image. It also supports RF card access and password access feature for the convenience of employees.

AP-VAC20 RISC CPU and DSP are all programmable structure so that user may use the latest features without much effort by simply setting an auto upgrade option or download from the homepage.

AP-VAC20 IP door phone is embedded with Smart Web Manager for video door phone management. User may setup/manage IP video door phone through PC, smart phone, and tablet device.

The performance and reliability of AddPac VoIP, Video and Multimedia equipments have been recognized in global markets as well as the Korean market. AP-VAC20, which is a collection of experiences and know-how accumulated in the enterprise and service provider markets, would be a solution that meets the needs of customers that ask for next-generation communications along with AddPac IP telephony solution.

Product Highlights

- High Performance IP based Video Door Phone Solution
- Unmatched Video Quality for Interactive Communication in 30 fps of VGA(640×480), QVGA(320x240), Supporting Both Encoding and Decoding
- High Quality Video Camera with LED Side Light
- Blue LCD Display: 128x64 Resolution
- Support the Latest Codec Algorithms Such as H.264, MPEG4 for High Quality Video/ Voice
- G.711,G.726, etc Voice Codec.
- Optimal Video Quality Avoiding Bandwidth Loss On Asymmetric Network
- High Performance and High Quality AEC (Acoustic Echo Canceller)Embedded.
- Optional Audio Interfaces for a Wide Range of External Devices (back side)
- Easy System Firmware Upgrade On the Basis of High Performance Embedded RISC CPU and Programmable DSP Chipset
- One(1) 10/100Mbps Fast Ethernet Support
- Built-in RF Card Interface
- Internal MIC, Internal Speaker & Amplifier
- Two(2) Alarm Input and One(1) Relay Out Interface (door open, etc)
- RS232/RS485 Interface for Interworking
- OSD (On Screen Display) for Quick and Easy Setup
- Web based Smart Manager Solution for Network Maintenance
- APOS Guarantees Scalability, Reliability, Stability

AP-VAC20 Applications

- IP based video door phone
- IP Voice/Video Broadcasting System
- IP based Emergency Call phone

IP Video Door Phone Series

General Hardware Specifications

High Performance RISC Integrated Processor DSP High Performance DSP (Digital Signal Processor)

Memory 512MB Flash Memory

128MB Main Memory (DDR) Network Interface 1-ports 10/100Mbps Fast Ethernet

PoE Interface IEEE802.3af compliant,

Input voltage range 36V to 57V,

Short-circuit Protection

Video Camera CMOS Video Camera with side LED Lights

RF Card Interface ISO14443A/B all bit rates: 106/212/424/848kbps,

MiFare Series, etc

Audio Interface Internal MIC and Speaker I/O Interface RS232C: 1-Port

RS485: 1-Port

Alarm Input: 2-Port Relay Output: 2-Port

Temperature 0°C ~ +45°C (operating), -40 °C ~ +85°C **Operation Environment**

(storage), Humidity 5% ~ 95%

Power Supply AC110~220VAC 50/60Hz Free Voltage, 12V 1Amp.

166mm x 102.8mm x 40.5mm(H x W x D) Demension

Weight 0.35 Kg

Audio/Video Hardware Specifications

LCD Display Display Type: FSTN, Positive

Built-in Controller: ST7567

Blue LED Back Light

Active Area: 35.48(W) x 22.38(H) Number of Dots: 128 x 64

Microphone Built-in Internal Microphone

Built-In 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

1-W BTL Output(5V, 0.11 % THD+N) Audio AMP.

Uncompensated Gains of 2 to 20 (BTL Mode)

Thermal and Shot-circuit Protection High Supply Ripple Rejection Ratio

Audio/Video Hardware Specifications

External Audio Interface Color Video Camera

1-Port RCA Audio Input, Output

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

Acoustic Echo Canceller Full-duplex operation during double-talk situations.

> One channel AEC, LEC up to 256ms shared Cancels echoes with up to 10dB echo return Advanced noise reduction (up to 20dB)

Audio Service and Signaling Protocol Features

Voice and Audio Codec **VoIP Signaling Protocol** G.711, G.726, etc SIP VoIP Signaling Protocol

SIP Proxy Server Interoperability

Detection and Generation, RFC 2833 Compliant

Telephone Features Touch Dial Pad (3x4 Key)

Voice QoS

Enhanced QoS Management for Voice Traffic

Video Services and Features

Video Codec H.264 (MPEG4 part 10), MPEG4,etc

Video Resolution QVGA(320x240), VGA (640x480) Up to 30fps with VGA-Resolution (H.264) Frame Rate

Operating Bandwidth 64Kbps ~ 1Mbps

Video QoS Features Enhanced QoS Management for Video Traffic

Rate Control for Best Video Quality Frame Rate Control at a Limited Bandwidth Video Error Concealment Service

Control and Setting OSD (On Screen Display)

WAN, LAN, IP Services and Other Features

Basic Network Protocol ARP, IP, ICMP, IGMP, UDP, TCP Telnet, FTP, TFTP, HTTP Server, NTP Client

Extended Network Protocol

IP Routing Network Address

IPv4 Routing, Static, Default Routing

IEEE 802.3 Ethernet / IEEE 802.1Q Virtual LAN

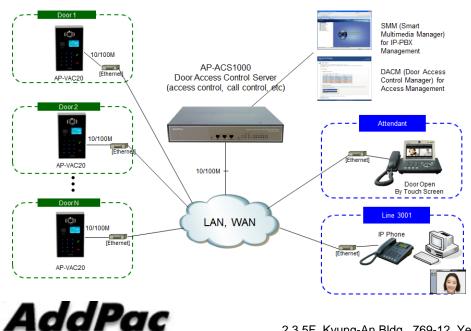
Fixed (Static), DHCP

Network Management Web Based Management, Remote Firmware

(APOS) Upgrade via FTP/TFTP Support

Cisco Style CLI, Auto Upgrade via HTTP, etc Miscellaneous

AP-VAC20 Network Diagram



Ordering Information

• AP-VAC20 IP Video Door Phone

Power Adaptor with terminal

block

CAB-LAN **Ethernet Cable**





AddPac Technology Co., Ltd.