



AP-IP160 High Quality IP Phone

AP-IP160 IP phone is designed to provide enhanced IP telephony functionality to meet the wide range of business user requirements. This IP telephone optimally delivers rich featured voice telephony service on ordinary internet infrastructure as well as AddPac IP-PBX environment on local LAN as a fully featured IP extension for the complete AddPac VoIP solution.

AP-IP160 IP phone provides the advanced IP telephony device features such as LCD screen display, 16 speed-dial key with user presence indication lamp, wide variety of feature keys, two(2) Fast Ethernet ports, **PoE**(Power over Ethernet), the latest QoS, public IP address sharing. It supports not only the major VoIP signaling protocols such as SIP, H.323 but also G.711,G.726,G.729, G.723.1,G.722 voice codecs, stereo audio in/out interfaces for external Headset, MIC, etc.

AP-IP160 IP telephone combines AddPac's field proven VoIP technology and IP audio broadcasting technology. AP-IP160 is market-ready IP telephone which provides a full suit of remarkable functionality compared to other typical IP telephones. Apart from telephony service, it delivers IP voice broadcasting service supporting external MIC/Line-in, Line-out interface for various input/output devices such as headset, Amp or speaker. In addition, it provides high level information display with large size LCD mounted. Since AP-IP160 supports diverse voice codecs according to bandwidth environment, it can be deployed anywhere on the internet, ensuring optimal voice quality by leveraging the latest QoS technology. Furthermore, installed along with IPNext180, IPNext200, and IPNext700 on comprehensive IP-PBX system of AddPac Technology, it not only improves operation offering an wide variety of features such as Music on Hold, Coloring service, Call Transfer but also provides the easy-to-use, intelligent IP telephony service enhanced by MS window based Smart Messenger.

AP-IP160 delivers not only fully featured IP telephony services, but also various supplementary services to users. It features advanced phone directory, voice mail, CID (Caller ID), three-party conference call, call transfer on site or at a remote site. One of its greatest services is IP broadcasting feature which enables AP-IP160 to offer voice broadcasting service, incorporated with in-house broadcasting system.

Not only IP telephony, AP-IP160 is an integrated, feature-rich network equipment delivering routing, NAT/PAT, DHCP Server/Relay, Public IP sharing, Advanced QoS algorithm. Based on two(2) 10/100Mbps Fast Ethernet ports, AP-IP160 offers integrated network and security service of LAN-to-LAN routing, bridge and NAT/PAT. Moreover, AP-IP160 supports H.323, SIP dual VoIP signaling protocols concurrently. So the customers easily migrate to different service providers' networks utilizing different VoIP signaling protocols.

APOS Internetworking Software

APOS™(AddPac Internetworking Operating System) is AddPac's unique software which supports data, voice, video and security. It provides scalability, reliability, stability and QoS for internetworking solutions. It also provides optimized performance and industry standard network functionality with easy-to-use, easy-to-installation and maintenance.

Product Highlights

- High Performance IP Phone for Complete IP Telephony Solution with Voice, Audio, Data Integrated
- 16 Speed-dial key (4 row x 4 column) with User Presence Indication Lamp
- Optimum Voice Quality on Internet and Broadband Networks
- Audio In/Out Interfaces for External Devices Such As Amp, Speaker, Headset
- Internet Telephony Service Including PSTN Phone Service (FXO Interface) : Option
- PoE (Power over Ethernet) Support : Option
- IP based Voice Broadcasting Service
- Advanced Voice Codec G.722 including G.711,G.726, G.723.1,G.729a,etc
- Easy System Firmware Upgrade On the Basis of High Performance Embedded RISC CPU and Programmable DSP Chipset
- Speaker Phone , Head Set, Hand Set, Voice Mail, Unattended Service Button
- Voice Mail Feature Interworking With AddPac IP-PBX
- Support SIP, H.323 Concurrently
- Latest Codec Algorithm for Voice Service
- LCD Control Service for Quick and Easy Setup
- Easy-to-Use Hot Keys
- EMS Solution for Network Maintenance
- APOS Guarantees Scalability, Reliability, Stability
- Directory Management and Useful Facilities using PC based Smart Messenger

AP-IP160 Applications

- IP Telephony System
- IP Voice Broadcasting System
- IP based Multimedia Solution
- IP based Call Center

Hardware Specifications

Main Chassis	High Solidity ABS Chassis
CPU	High Performance RISC + DSP (Digital Signal Processor) Integrated Processor
Memory	4MB Flash Memory 16MB SDRAM Main Memory
Network Interface	1-port 10/100Mbps Ethernet (LAN 0) for WAN Interface 1-port 10/100Mbps Ethernet (LAN 1) for LAN Interface
LCD Window	4 Text Line Graphic LCD
Speed-Dial Key	16 Speed Dial Key with User Presence Indication LAMP
PSTN Backup (option)	1-port FXO Analog Voice Interface
Audio Interface	1-CH 3.5mm Audio Input 1-CH 3.5mm Audio Output
Internal Speaker & MIC	High Quality Sound
Operation Environment	Temperature 0°C ~ +45°C (operating), -40°C ~ +85°C (storage), Humidity 5% ~ 95%
Power Supply	AC110~220VAC 50/60Hz Free Voltage, 5V 2Amp.
Power ON/OFF Switch	
PoE (option)	Power over Ethernet
Demension	D x W x H : (179 x 219 x 173 mm, 45 degree)
Weight	1.2Kg

IP Telephony Services (AddPac IP-PBX)

IP-PBX Inter-working	SSCP AddPac Proprietary Protocol
IP-PBX Signaling Protocol	SIP Protocol between IP-PBX and IP Phone
Voice Mail	Voice Mail with IVR Voice Mail Notification
Number & Call Routing	Basic Call, Music on Hold, Blind Transfer, Call Pickup, Consult Call, Switching Call, Consult Transfer, Call Waiting, Call Waiting Notify Call Park, Call Pickup Remote, Hunt Group, Call Swapping, individual Call Park, Group Call Park Call Forwarding ? Unconditional, Busy, No Answer, Voice Mail
Messenger Inter-working	MS-Window based Smart Messenger Program Support
Conference	AddPac IP-PBX Audio MCU or External MCU support

Speed Dialing Service with User Presence Features

Speed Dialing Service	Extended Speed Dialing Service Box for AddPac IP Phones, Video Phones
Speed Dialing Key Button	16 Key Buttons with User Presence LAMP

User Presence Service	User Busy, User Ringing, Idle
User Presence Servers	IP-PBX built-in Presence Server, Independent Large Capacity Presence Server
Presence Server Interworking	SSCP AddPac Proprietary Protocol
User Registration	Web based Management
User Registration Profile	System Manager build User Profiles

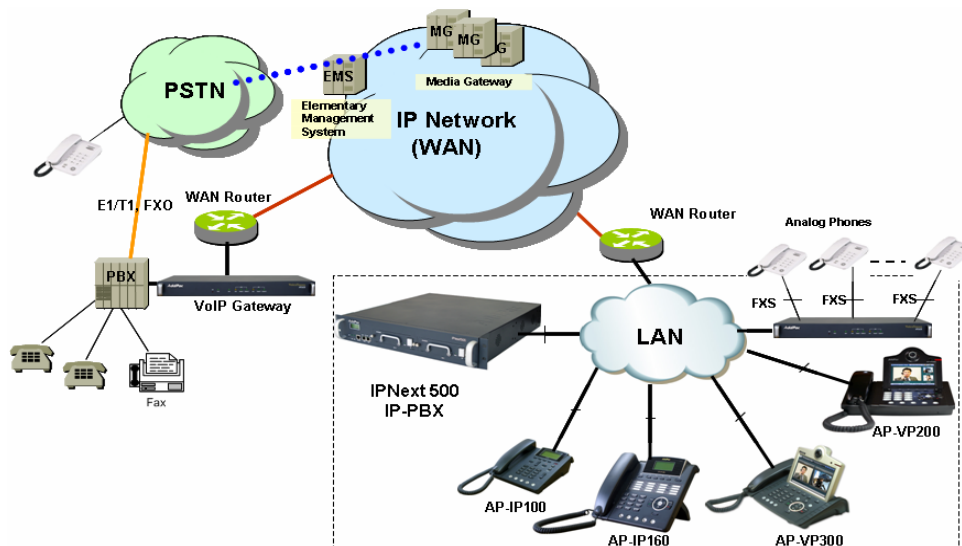
Audio Service and Signaling Protocol Features

Voice and Audio Codec	G.722, G.711, G.723.1, G.726, G.729, etc
VoIP Signaling Protocol	SIP/H.323 VoIP Signaling Protocol (Dual Stack) ITU-T H.323 Gateway, Gatekeeper Support SIP Proxy Server Interoperability
Echo Cancellation	G.165 and G.168 Compliant
Voice Processing	VAD, CNG, Dynamic Jitter Buffer Operation
FAX Support	T.38 G3(Group 3) FAX Relay
DTMF	Detection and Generation, RFC 2833 Compliant
Telephone Features	On-screen Dial Pad, Caller ID & Hold
Voice QoS	Enhanced QoS Management for Voice Traffic

WAN, IP Routing and Other Features

WAN Protocol	Point-to-Point Protocol (PPPoE) for ADSL
IP Routing	IPv4 Static and IEEE 802.1Q VLAN Routing
Network Management	Standard SNMP Agent (MIB v2) Support, Telnet, Web Based Management, Remote Firmware (APOS) Upgrade via FTP/TFTP Support
Security Features	IP Packet Filtering, Access List, Access Control and Data Protections, Enable/Disable for Specific Protocols Multi-level User Account Management, Auto-disconnect for Telnet/Console Sessions, PPP User Authentication Support (PAP/CHAP)
Operation & Management	Performance Analyzing (Process, CPU, Interface), Configuration Backup and Restore for APOS Management, Debugging and Diagnosis Features, System Booting/Rebooting through Watch-Dog, Data Logging Features, IP Traffic Statistics through Accounting Support
Other Features	DHCP Server and Relay, Network Address Translation (NAT), Port Address Translation (PAT), IEEE Standard Transparent Bridging (Spanning Tree Bridging and Concurrent Routing Bridging Protocol), Network Time Protocol (NTP), Cisco Style Command Line Interface (CLI), DNS Proxy, UPnP, MAC Address Filter Service

Network Diagram



Ordering Information

- AP-IP160 IP Phone
- AP-IP160E FXO Support
- AP-IP160P PoE Support
- AP-IP160EP FXO, PoE
- CAB-LAN Ethernet Cable