



## AP-IP90 IP Phone

AP-IP90 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.

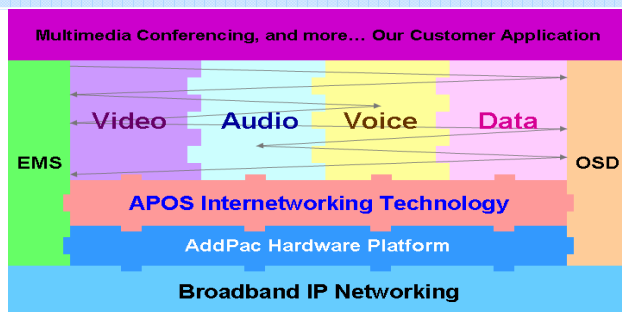
AP-IP90 IP phone provides the advanced IP telephony device features such as LCD screen display, wide variety of feature keys, two(2) Ethernet ports, the latest QoS, public IP address sharing. It supports not only the major VoIP signaling protocols such as SIP, H.323 but also G.711, G.726, G.729, G.723.1, G.722 voice codecs, stereo audio in/out interfaces for external Headset, MIC, etc.

AP-IP90 IP telephone combines AddPac's field proven VoIP technology and IP voice broadcasting technology. Apart from basic VoIP telephony service, it delivers IP based voice broadcasting service.

In addition, it provides advanced display for IP phone application with graphic LCD mounted. Furthermore, installed along with IPNext500 and IPNext700 on AddPac's comprehensive IP-PBX system, 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 AddPac's unique PC-based Smart Messenger for Unified Communication.

AP-IP100 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-IP100 to offer voice broadcasting service, incorporated with in-house broadcasting system.

Not only IP telephony, AP-IP100 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-IP90 offers integrated network and security service of LAN-to-LAN routing, bridge and NAT/PAT.



## 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
- 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
- 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-IP90 Applications

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

## Hardware Specifications

<b>Main Chassis</b>	High Solidity ABS Chassis
<b>CPU</b>	High Performance RISC + DSP (Digital Signal Processor )Integrated Processor
<b>Memory</b>	4MB Flash Memory 16MB SDRAM Main Memory
<b>Network Interface</b>	1-port 10/100Mbps Ethernet (LAN 0) for WAN Interface 1-port 10/100Mbps Ethernet (LAN 1) for LAN Interface
LCD Window	59.0mm x 28.0mm(Active Area) Graphic LCD
<b>Voice Interface (Option)</b>	<b>Phone Interface :</b> 1-port FXS Analog Voice Interface(AP-100B) PSTN Backup : 1-port FXO Analog Voice Interface (AP-IP100E)
<b>Audio Interface</b>	1-CH 3.5mm Audio Input 1-CH 3-5mm Audio Output
Internal Speaker & MIC	High Quality Sound
<b>Operation Environment</b>	Temperature 0℃ ~ +45℃(operating), -40℃ ~ +85℃ (storage), Humidity 5% ~ 95%
<b>Power Supply</b>	AC110~220VAC 50/60Hz Free Voltage, 5V 2Amp.
<b>Demension</b>	210mm x 200mm x 60mm (D x W x H)
Weight	1.0Kg

## Audio Service and Signaling Protocol Features

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

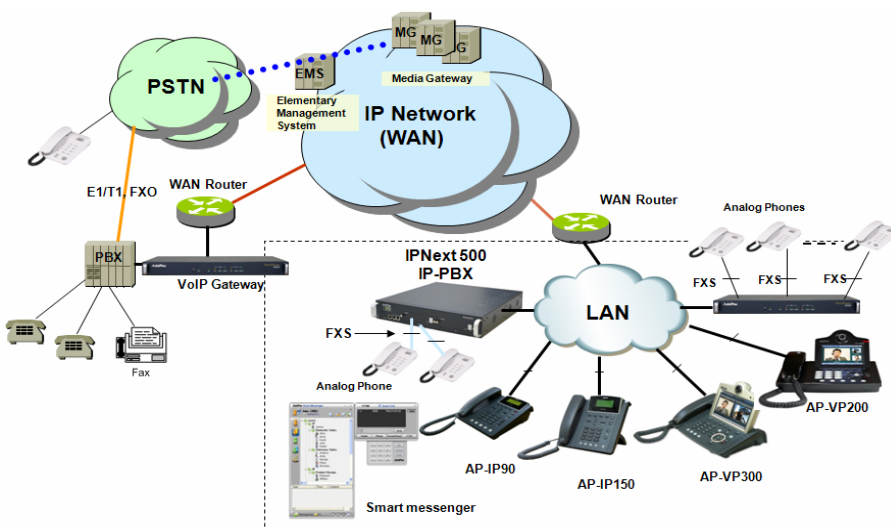
## WAN, IP Routing and Other Features

<b>WAN Protocol</b>	Point-to-Point Protocol (PPPoE) for ADSL
<b>IP Routing</b>	IPv4 Static and IEEE 802.1Q VLAN Routing
<b>Network Management</b>	Standard SNMP Agent (MIB v2) Support, Telnet, Web Based Management, Remote Firmware (APOS) Upgrade via FTP/TFTP Support
<b>Security Features</b>	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)
<b>Operation &amp; Management</b>	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
<b>Other Features</b>	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 etc.
<b>Control and Setting</b>	OSD (On Screen Display) and Remote Commander

## IP Telephony Services (AddPac IP-PBX)

<b>IP-PBX Interworking</b>	SSCP AddPac Proprietary Protocol
<b>IP-PBX Signaling Protocol</b>	SIP Protocol between IP-PBX and IP Phone
<b>Voice Mail</b>	Voice Mail with IVR Voice Mail Notification
<b>Number &amp; Call Routing</b>	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 Etc.
<b>Messenger Interworkng</b>	MS Window based Smart Messenger Program Support
<b>Conference</b>	AddPac IP-PBX Audio MCU or External MCU support

## AP-IP90 Network Diagram



## Ordering Information

- AP-IP90 IP Phone (w/o FXO or w/o FXS Port)
- AP-IP90E FXO Interface
- AP-IP90B FXS Interface
- CAB-LAN Ethernet Cable