

VoiceFinder AP-MG5000 supports maximum 480 channel(16 E1-T1) VoIP call processing in real-time as a large scale media gateway with 3U size, targeting ISP and large enterprise market. Moreover, AP-MG5000 supports major VoIP call control protocols including H.323, SIP and MGCP concurrently on one embedded OS, and maintains high voice quality on any types of conventional IP networks by utilizing new level of QoS.



Key Features

- Scalable high-performance and high-end computing power using 64bit RISC and DSP architecture for voice processing
- High scalability, reliability, and stability features for voice internetworking applications
- State-of-art VoIP technology for enterprise and ISP & ITSP marketplace
- Provides cutting edges of IP technology using IPv4 and IPv6 network protocols for next generation networks
- Solves the needs for VoIP Trunking, IP & Multimedia Telephony, and VoIP access gateway markets
- Cost-effective VoIP media gateway solution
- Compliance with industry standards and quality

APOS Internetworking Software

APOS™(AddPac Internetworking Operating System) is AddPac's unique software which supports data, voice, video and security with IPv4 and IPv6 software technology. 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.

AddPac

www.addpac.com

Products Overview

High-performance Media Gateway with 480 channel call processing capability

AP-MG5000 can be mounted in 19 inch standard rack and supports high performance 480 channel VoIP call processing in real-time. This market-ready, standards-compliant gateway ensure high voice quality on any types of conventional IP networks supporting AddPac's advanced QoS algorithm as well as standard QoS. AP-MG5000 system consists of a main CPU board slot and VoIP DSP module slots which can be equipped with maximum 4 unit of 4 E1-T1 which has 120 channel VoIP call processing capability per slot. A main CPU board has the built-in 6 port ethernet switch and processes VoIP call control protocol such as H323, SIP and MGCP. A 4 E1-T1 VoIP DSP module has its own high performance communication processor and processes DSP device handling, RTP protocol handling, R2, ISDN-PRI, SS7* independently. A single ethernet port on VoIP DSP module implements VoIP RTP data transmission by being connected directly to network.

Robust solution to meet the demand of high capacity, high performance for enhanced VoIP services

AddPac VoiceFinder VoIP gateways have been recognized with their unmatched level of performance and reliability in the IP telephony market. With the years of experience and the know-how at the enterprise and the carrier-class markets, AP-MG5000 Media Gateway fulfills the clients' demand for high capacity, high performance. Moreover, AP-MG5000 concurrently supports multi-stack operation of H.323, SIP and MGCP call control protocols which are well suitable for any commercial VoIP deployment.

Deliver seamless stability and system consistency for high capacity deployments

AP-MG5000 is a high capacity VoIP media gateway which can concurrently process 480 channel calls. Due to heavy concurrent users, the seamless stability is a major requirement. AP-MG5000 adopts dual PSU (Power Supply Unit) structure for meeting this demand, which ensures system consistency with module replacement during the system operation. Furthermore, 4 E1-T1 VoIP DSP module slot also adopts Compact PCI Hot-swap mode which enables not only module replacement during the system operation but also system consistency without shut down in case of error occurring or extra modules installing.

AP-MG5000 Target Applications

- VoIP Trunking, VoIP Access Gateway Application
- High-performance Media Gateway Application for Larger Enterprise and ITSP Market
- Large Scale IP and Multimedia Telephony Application
- High-performance 3G and 2G Voice Packet Processing

Hardware Specifications

Main Chassis	19-inch Rack Mountable Embedded Hardware Chassis with Cooling FAN
Capabilities	VoIP Voice Call : Up to 480(16 x E1) Independent and Simultaneous Call Processing Power
Module Slots	Four(4) Module Slots for Digital Voice Interface up to 16 E1/T1(Max. 480Ch.)
CPU & Memory	High-end 64bit RISC Microprocessor, 512KB Boot Memory, 16MB Flash Memory, 128MB Main Memory
Network Interface	2-ports 10/100/1000Mbps Gigabit Ethernet, 6-ports 10/100Mbps Fast Ethernet
Console	1-port RS-232C Console Interface
Power Supply	AC110~220VAC 50/60Hz Free Voltage, Dual Power Supply
Operation Environment	Temperature 0℃~+45℃ (operating), -40℃~+85℃ (storage), Humidity 5%~95%
Demension	440mm x 416mm x 88mm (W x D x H), 12Kg (w/o Digital E1/T1 Voice Module)

Digital E1/T1 Voice Module	Embedded Hardware Form Factor for AddPac VoIP Media Gateway
Capabilities	VoIP Voice Call : Up to 120(4 x E1) Independent and Simultaneous Call Processing Power per Module
System BUS Interface	High-speed PCI bus architecture with Hot-swapping service support
DSP	High-end DSP (Digital Signal Processing) Chip
Network Interface	1-ports 10/100Mbps Fast Ethernet for voice processing
Operation Environment	Temperature 0℃~+45℃ (operating), -40℃~+85℃ (storage), Humidity 5%~95%
Demension	165mm x 215mm x 25mm (W x D x H), 700g

Voice over IP Services

Voice Codec	G.723.1, G.726, G.729, G.711 Voice Codec
Echo Cancellation	G.165 and G.168 Compliant
FAX Support	T.38 G3(Group 3) FAX Relay FAX Bypass(G.711) Mode Support
Voice Processing	VAD, CNG, Dynamic Jitter Buffer Operation
DTMF	Detection and Generation, RFC 2833 Compliant
Voice over IP Signaling	SIP, H.323, and MGCP Triple Stack Support SIP Proxy Server Interoperability H.323 Gatekeeper and MGC Interoperability

Signaling Protocol Features

ISDN	ISDN-PRI Support : ETSI EURO ISDN, ANSI N12, Japan INS1500, Hong Kong Variant, Korean, etc.
CAS	MFC/R2 Signaling Protocol Other Variant CAS Protocol
Other Signaling	SS7* Signaling Protocol

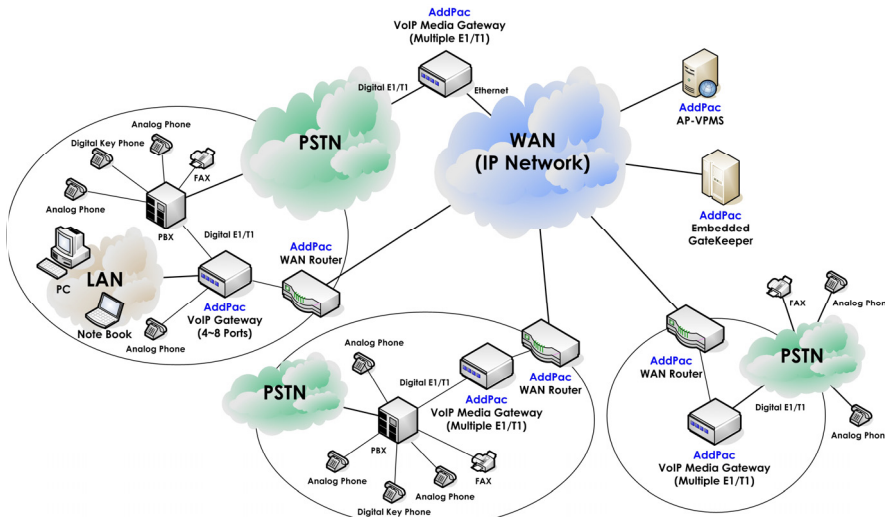
Traffic QoS Control

Traffic QoS Control	Enhanced Voice Traffic QoS Service, Voice/Data Prioritizing Control, Ensuring Optimized Quality, Frame Rate with Limited Bandwidth, Various QoS Algorithm Support
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WAN, IP Routing and Other Features

WAN Protocol	PPP, PPPoE, Standard Compliant Protocol
IP Routing	IPv4 and IPv6 Dual Stack Routing, Static and IEEE 802.1Q VLAN Routing, RIP v1/v2, RIPng, OSPF v2/v3, BGP v4, Multicast IGMP Protocol Support
Network Management	Standard SNMP Agent (MIB v2) Support, Console, 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), Load Balancing, etc.

Network Diagram using AP-MG5000



Ordering Information

AP-MG5000	AP-MG5000 Media Gateway Main Chassis 19-inch Rack Mountable Hardware Four(4) Digital Voice Interface Module Slots 2-ports 10/100/1000Mbps Gigabit Ethernet 6-ports 10/100Mbps Fast Ethernet 1-port RS-232C Console APOS Internetworking Software
HIM-VoIP2E1*	2-ports Digital E1/T1 Voice Module
HIM-VoIP4E1	4-ports Digital E1/T1 Voice Module
HIM-BL	HIM Blank Panel for Module Slot
AP-3UR19	3U x 19-Inch Rack Mountable Wing (2EA)
CAB-CO	RS-232C Console Cable
CAB-LAN	LAN Cable
AP-VPMS	AddPac VoIP EMS Package