

VoiceFinder AP-MG3800 supports maximum 240 channel(8 E1/T1) VoIP call processing in real-time as a large scale media gateway with 1.2U size, targeting ISP and large enterprise market. Moreover, AP-MG3800 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.

Products Overview

High-performance Media Gateway with 240 channel call processing capability

AP-MG3800 can be mounted in 19 inch standard rack and supports high performance 240 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-MG3800 system consists of a main CPU board part and VoIP DSP module slots which can be equipped with maximum 2 unit of four(4) port E1/T1 Interface which has 120 channel VoIP call processing capability per slot. A main CPU board part has the built-in 2 port ethernet and processes VoIP call control protocol such as H323, SIP and MGCP. A four(4) port 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-MG3800 Media Gateway fulfills the clients' demand for high capacity, high performance. Moreover, AP-MG3800 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-MG3800 is a high capacity VoIP media gateway which can concurrently process 240 channel calls. Due to heavy concurrent users, the seamless stability is a major requirement. To satisfy the requirement like this, four(4) port 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-MG3800 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

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|------------------------------|---|
| Main Chassis | 19-inch Rack Mountable Embedded Hardware Chassis with Cooling FAN |
| Capabilities | VoIP Voice Call : Up to 240(8xE1) Independent and Simultaneous Call Processing Power |
| Module Slots | Two(2) Module Slots for Digital Voice Interface up to 8 E1/T1(Max. 240Ch.) |
| 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, 5V, 100Watt |
| Operation Environment | Temperature 0℃~+45℃(operating), -40℃~+85℃(storage), Humidity 5%~95% |
| Demension | 440mm x 420mm x 65mm (W x D x H), 6.08Kg |

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|-----------------------------------|---|
| 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

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|--------------------------------|---|
| 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

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|------------------------|---|
| 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 |

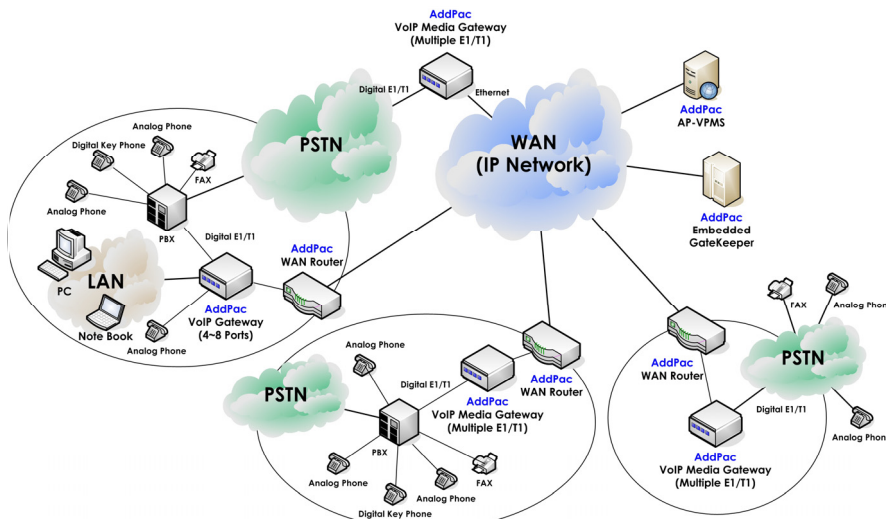
Traffic QoS Control

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| 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

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|-----------------------------------|---|
| WAN Protocol | PPP, PPPoE, Standard Compliant Protocol |
| IP Routing | IPv4 and IPv6 Dual Stack Routing, Static and IEE 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 |
| Operation & Management | Multi-level User Account Management, Auto-disconnect for Telnet/Console Sessions, PPP User Authentication Support (PAP/CHAP) |
| Other Features | 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-MG3800



Ordering Information

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|--------------------|---|
| AP-MG3800 | AP-MG3800 Media Gateway Main Chassis 19-inch Rack Mountable Hardware Two(2) Digital Voice Interface Module Slots 2-ports 10/100/1000Mbps Gigabit Ethernet 1-port RS-232C Console APOS Internetworking Software |
| HIM-VoIP4E1 | 4-ports Digital E1/T1 Voice Module |
| HIM-BL | HIM Blank Panel for Module Slot |
| CAB-CO | RS-232C Console Cable |
| CAB-LAN | LAN Cable |
| AP-VPMS | AddPac VoIP EMS Package |