AddPac Technology
Video Equipments Series

AP-VR2000 Video Service Router

High-performance, Video Codec Equipment Solution

High Performance AP-VR2000 Video Service Router

AP-VR2000 video service router is a next-generation video codec equipment based on High performance DSP. It is equipped with two port 10/100Mbps Ethernet interface and two(2) multimedia slot for various video/audio codec modules. It provides excellent performance for video application such as high-quality network video broadcasting equipment, network cameras and real time video codec solutions.

As a modular type IP based video codec system supporting H.263, MPEG4, H.264, JPEG, etc video codec, the AP-VR2000 provides the visual communication solution over various WAN (Wide Area Network) environments such as xDSL, cable modem and Internet leased lines. The AP-VR2000 is standards-based and interoperates efficiently with video solutions from other vendors as well as pre-existing video solutions from AddPac, such as the high performance multiservice router, video phone, and video gateway, to participate in any size video solution.

And AP-VR2000 supports various network protocols such as IP-routing, bridging, PPP, NAT/PAT, and network management features such as SNMP MIB v2, Cisco-style CLI, web, etc. This video codec equipment typically was designed using high-performance PowerPC RISC CPU architecture with following network interface configuration: 2-Port 10/100Mbps Fast Ethernet, Two(2) module slots for video Interface, RS-232C Port for console, LCD display for status indication, service

APOS Internetworking Software for AP Video Equipment

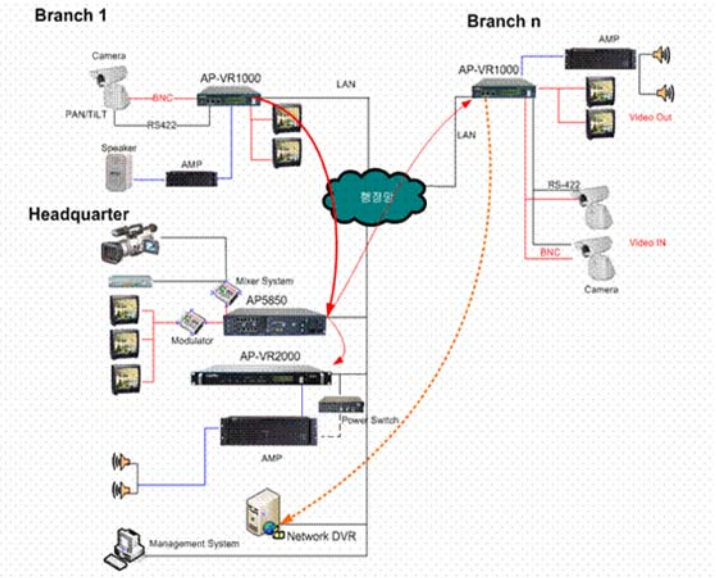
AddPac Operating System (APOS) is best router software to provide scalability, reliability, stability, and QoS for internetworking solutions. APOS also provides optimized performance and industry standard network functionality with easy-to-use, easy-to-installation, and maintenance.

AddPac

Product Highlights

- High-end PowerPC RISC Microprocessor Architecture
- High-performance Modular Architecture
  - Two(2) Interface Slot for Video, Router Service
- Programmable High-End DSP
- Support ATM, POS , HSSI, and V35 Interface
- Two(2) 10/100Mbps Fast Ethernet Interface
- LCD Panel and ON-AIR LAMP for monitoring
- Video Codec : H.263, MPEG-4, H.264
- Audio Codec : G.711,G726, MP3,etc
- Multiple PTP (Point-to-Point) based Video Broadcasting Service Scheme
- IGMP supporting for Multicast Video Broadcasting Service
- Static, RIP v1/v2, OSPF v2 and IEEE802.1Q VLAN Routing Protocol
- Web based Management using HTTP sever
- Standard SNMP Agent (MIB v2) Support for Network Management
- Static, RIP v1/v2, OSPF v2, and IEEE 802.1Q VLAN Routing Protocols
- Traffic Queuing
- DNSProxy, MAC Address Filter Service
- Essential Scalability Features such as DHCP Server & Relay, NAT/PAT, IEEE Transparent Bridging, IP Accounting, and Debugging/Diagnostics, etc.
- AddPac APOS Internetworking Software to provide Scalability, Functionality, Stability, and QoS Control
- Remote Software Upgrade using FTP & TFTP
- Cisco Style Command Line Interface(CLI)

Video Service Network Diagram Using AP-VR2000



Hardware Specification

Microprocessor

• CPU	High Performance RISC Processor

Memory

• Flash Memory	8Mbyte
• Main Memory	64M bps High-Speed SDRAM
• Boot Memory	512Kbyte Flash Memory

Network Interface

• LAN Ports	Two(2) 10/100Mbps Ethernet Interface
• Console Port	One(1) RS-232C Interface(RJ45)

WAN Interface Modules

• AP-ATMDS3-1	1-Port DS3 45Mbps ATM Network Interface Module
• AP-POSDS-1	1-Port POS/SDH DS3 45Mbps Network Interface Module
• AP-ATM1E1	1-Port ATM E1 Network Interface Module(1 x RJ45)
• AP-V35FR1	1-Port V.35 Interface Module
• AP-V35FR6	6-Port V.35 Interface Module

Video Interface Modules

• AP-AV1000	High-End Programmable DSP 3.5mm Stereo-Audio In/Out RCA Connector for Video In/Out RS-232C(DB-9) for Camera Control

Power & Operation Environments

• Power Requirement	VAC 110~220V, 50/60Hz, 25Watt
• Operating Temperature	0°C to + 50°C (32° to 122°F)
• Storage Temperature	-40°C to + 85°C (-40° to 185°F)
• Relative Humidity	5% to 95% (Non-condensing)

Dimensions

• H xW x D (mm)	44mm x 208mm x 215mm

Support Protocols & Services

Routing Protocols

• Static, RIP v1/v2, OSPF v2, and IEEE 802.1Q VLAN Routing
• IGMP Protocol, Multicasting Join

WAN Protocols

• Point-to-Point Protocol(PPPoE for ADSL),etc
•ATM Classes of Service (AAL0,5), ATM Encapsulation(IPOA, PPPoA)

Video Service

• Codec	H.263, MPEG4, H.264
• Frame Rate	Up to 30fps with VGA Resolution(MPEG4)
• Bandwidth	64Kbps ~ Several Mbps

Audio Service

Voice & Audio Codecs	- MP3, etc for High Quality Stereo Audio Service - G.711 & G.726 for Voice Quality Audio Service
QoS	Enhanced QoS Management Features for Audio/Video Traffics

Network Managements

• Standard SNMP Agent (MIB v2) Support
• Traffic Queuing
• Remote Management using Console, Rlogin, Telnet
• Web based Managements using HTTP Server

Security Functions

• Standard & Extended IP Access List
• Enable/Disable for Specific Protocols
• Multi-Level User Account Management
• Auto-disconnect for Telnet/Console Sessions
• Access Control and Data Protections
• PPP User Authentication Supports
→ Password Authentication Protocol(PAP)
→ Challenge Handshake Authentication Protocol (CHAP)

Operation & Management

• System Performance Analysis for Process, CPU, Connection I/F
• Configuration Backup & Restore for APOS Managements
• Debugging, System Auditing, and Diagnostics Support
• System Booting and Auto-rebooting with Watchdog Feature
• System Managements with Data Logging
• IP Traffic Statistics with Accounting

Other Scalability Features

• DHCP Server & Relay Functions
• IP Accounting
• Transparent Bridging (IEEE Standard) Function
  - Spanning Tree Bridging Protocol Support
  - Remote Bridging Support
  - Concurrent Routing and Bridging Support
• Network Address Translation (NAT) Function
• Port Address Translation (PAT) Function
• Cisco Style Command Line Interface(CLI)
• Network time Protocol(NTP) Support
• Remote Upgrade for APOS Management using FTP/TFTP

Ordering Information

•AP-VR2000-01 : AP-VR2000 Video Service Router Standard Configuration
- Two(2) Network Interface Slot for video, router serivce
- Two(2) Fast Ethernet, LCD, ON-AIR LAMP, RS-232C Console(RJ45)
- PowerPC RISC CPU, 8MB Flash, 64MB SDRAM
- APOS v5.xx with Operation Manual
- Including CAB-LAN, CAB-CON
•AP-AV1000 : RCA Video In/Out, 3.5mm Stereo Audio IN/OUT
•CAB-LAN : RJ45 LAN Cable
•CAB-CON : RJ45 Serial Console Cable

Contact Information

Web site : http://www.addpac.com
E-mail : info@addpac.com

AddPac Technology Co., Ltd.
2/3F, Jeong-Am Bldg., 769-12, Yeoksam-Dong
Kangnam-Gu, Seoul, 135-080, KOREA
Phone +82 2 568 3848
Fax + 82 2 568 3847