

ADSL2/2+ IAD

AVS920W Series

CastleNet's AVS920W is a highly integrated IAD which enables ADSL2+, WLAN, VoIP, Switch, File server and Printer Server together. It is positioned to enhance the user's triple play broadband experience with excellent QoS and traffic management.. This new generation of platforms not only eases the deployment of DSL-based IAD but also provides new opportunities for the service provider to derive additional value from the emerging VoIP and IP Video service.

The capabilities of the AVS920W allow for some highly advanced applications beyond just typical DSL, but also WLAN access points, VoIP, File server and Printer server. AVS920W also provides TR-069 CPE WAN Management Protocol which eases and reduces the management effort of the service providers.



Specification / Data Protocol

Physical Interfaces

One ADSL port for WAN and PSTN backup
 Four 10/100 Mbps Fast Ethernet ports for LAN
 IEEE 802.11 b/g Wireless AP with WPS auto setup
 Two VoIP FXS ports
 Two USB 2.0 host ports for USB mass storage and Printer
 One USB 1.1 device for LAN client

ADSL Compliance

G.994
 G.992.1 (G.dmt) - Annex A and B
 G.992.2 (G.lite) - Annex A
 ANSI T1.413
 G.992.3 (ADSL2), Annex A, B, L, and M
 G.992.5 (ADSL2+), Annex A, B, and M

ATM protocols

Up to 16 PVCs
 OAM F4/F5 loop back
 Adaptation Layers AAL5, AAL2 and AAL0 are supported.

PPP support

PPP over ATM PVC (RFC 2364&RFC1577)
 PPP over Ethernet (RFC2516)
 Multiple PPPoE sessions on single PVC
 PPPoE pass through
 PAP, CHAP, MS-CHAP authentication supported

Networking Stack

NAT Static Port Mappings, NAT/NAPT

Bridging IEEE 802.1d Bridge

Routing Static route, RIP v1 / v2

Multicasting

IGMP Proxy v1/v2/v3, IGMP snooping v1/v2

Management

SNTP, DDNS, UPnP, HTTP, FTP, TFTP, Telnet, SSH, SNMP,
 TR-069, DHCP client/server/relay

Firewall / Security

SPI (Stateful Packet Inspection) Firewall

Intrusion alert

Application layer gateway for H.323, SIP, IPSec/L2TP/PPTP, etc

Mac/IP/TCP/interface Filtering

Denial of Service (DOS)

Advanced DMZ

IPSEC / PPTP Pass through

Quality of Service (QoS)

ATM QoS

CBR, rt-VBR, nrt-VBR, UBR-with-PCR, UBR
 IP/Bridge/802.1P QoS



Feature

- Compliant to DSL Forum TR-048, TR-067 and TR-100 Interoperability Test
- Feature-Rich TR-069 supports Remote Registration / Remote Authentication / Remote Configuration
- Complete solution for integration of ADSL, Router, Switch, WLAN and VoIP
- WPS support for easy WLAN client setup
- Outbond/Stun Proxy for NAT Traversal
- POTS Lifeline backup
- T.38 fax support
- SIP supported for VoIP signaling
- User can browse the Internet while talking on the phone and watch IPTV simultaneously
- Support Samba server for file sharing
- Support Printer server function
- Remote / Local configuration & management through Web / Telnet configuration & management
- Three levels access account management
- Device management access control based on source IP addresses and incoming interfaces
- System management includes SNMP, Telnet command line interface and web interface

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Voice over IP Specification

Voice over IP Protocols

RFC 3261 SIP V2.0

Voice Codecs

G.711, G.722, G.723.1, G.726, G.729A/B

Fax Protocol

T.38

NAT Traversal

Out-bond/Stun Proxy

Tone Generation / Detection

Echo Cancellation

CID Generation

Environmental Specification

Power Input Device input power at 12VDC/1.5A
 Power Consumption 15W
 Operating Temperature 0 degrees to 40 degrees Celsius
 Humidity 95% non-condensing

Application Features

Generation Application Features

Display name and address
 SIP Network re-registration
 Phone book

DTMF

Inband

Basic

Tone generation / Detection
 Echo cancellation
 CID generation (Calling ID)

Call Features

Hold / Retrieve
 Transfer
 Conference call
 Waiting
 Forwarding unconditional
 Forwarding busy
 Forwarding no response
 Anonymous call

Wireless specification

Standards IEEE 802.11b/g
 Frequency Band 2.300 to 2.500 GHz ISM band
 Modulation OFDM with BPSK, QPSK, 16 QAM, 64 QAM
 FEC Coding Rates 1/2, 1/3, 1/4
 Hardware encryption AES, TKIP, WEP
 Quality of Service 802.11e draft
 Supported Bit Rate 54M, 48M, 36M, 24M, 18M, 12M, 11M,
 9M, 6M, 5.5M, 2M, 1Mbps

WPS support for easy client setup

Ordering Information

Models	Description
AVS920W	ADSL 2/2+ IAD with 4-port switch, VoIP and 802.11b/g integration

*This brochure is a preliminary version for the customer comment and reference. The specification could be modification without prior notice.



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