

Technical Specifications

Interfaces

- Ethernet WAN (single or multiple)
- xDSL / Cable / WWAN ISP
- Wireless WAN (GPRS / EVDO / 3G / LTE / WiMAX)
- Dialup WAN (primary or backup)
- Ethernet LAN port or switch (managed / unmanaged)
- Wi-Fi LAN Access Point or client (e.g. Muni Wi-Fi or travel router)

Protocol Support

- IP routing (IPv4 and IPv6)
- TCP/IP, UDP, ICMP
- STP, RSTP, MSTP
- PPPoE, PPTP, L2TP client, including multi-instance capabilities
- DHCP (with option 60 VCI support)
- DNS / DNSsec Server / Proxy
- NTP, NTPv4
- IEEE 802.11 standards including a 802.11n
- SIP, FTP and other common ALGs
- UPnP, Bonjour (zeroconfig), LLDP & other common discovery protocols
- DLNA HND device class capabilities
- OSGi framework & applications
- Support for music streaming to iTunes clients and Roku SoundBridge

Networking Capabilities

- Static Routing, Dynamic Routing
- Bridge and routing mode of operation
- Logical WANs for different SP services
- Static IP address assignment
- Advanced QoS – 802.1p, priority marking and remarking, DSCP Diffserv
- Classless and class based scheduling and packet queuing such as RED, CBQ, WFQ
- Internal DHCP server on LAN, including multi-instance DHCP server
- Multi-instance DHCP client on each logical WAN
- DHCP address reservation and MAC filtering
- Outbound protocol binding
- PPPoE client support: Static and dynamic
- Multi-PPPoE for SPs world-wide
- PPTP (e.g. Austria DSL) client support for login

- Telestra BigPond (Australia) authentication support
- IGMP (v2, v3), IGMP snooping and directed multicast
- Dynamic DNS clients (DynDNS, Iego, PeanutHull, DDNS 3322, others)
- NAT or classical routing
- Port-Triggering
- UPnP IGD discovery and features
- Multiple LAN sub-nets
- USB connectivity (NAS, printer, 3G, WCN, WPS, thumb-drive for firmware update)
- Peer-to-peer networking and online gaming support

Wireless Features

- 802.11 a/b/g/n radio support
- Customizable SSID, Guest SSIDs
- WEP/WPA/WPA2/WPS
- MAC Access List
- Disable SSID broadcast
- Auto Channel selection
- Rogue AP detection
- QoS (WMM)
- Multi-radio, Multi-Virtual AP
- Client Isolation on same AP
- ToD (Time of Day) active AP
- SSID based VLANs

Security Features

- One to one and many to one NAT
- SPI Firewall
- DoS Attack Resistance
- Packet-filtering Firewall
- Port / service blocking
- Firewall with multiple zones
- Schedule based firewall rules
- Pre-set security levels in Firewall
- Intrusion Detection System (IDS)
- Intrusion Prevention System (IPS)
- Web Content Filtering (WCF)
- GAV (Gateway Anti-Virus)
- Java / URL / ActiveX blocking
- E-mail alerts
- Wireless security (WEP, WPA, WPA2)
- WPS (Wireless Protected Setup)
- WIPS (Wireless Intrusion Prevention System)
- PNAC (Port based Network Access Control)
- Internal local user database

- DNSsec
- Hardened software components and GUI
- Choice of advanced encryption and integrity algorithms

Network Attached Storage

- Disk Management features
- User based disk access control features
- Remote and automatic backup
- Extensive support for file transfer protocols
- Support for all popular audio, video and other media file types

Management & Administration

- Intuitive, easily branded browser based GUI
- Multiple profiles and rights management
- Search supported with search tags
- RSS feeds and dynamic refresh
- Extensive help sections for all features
- Cross-linking of features for better configuration experience
- Home Media Director for forming global playlists
- SNMP v2.c and v3 (control / monitor)
- Parental Control and scheduling based on services
- TR-069 family of protocols for remote access & provisioning
- FTP/SFTP, Telnet/SSH, RCP/SCP
- Serial console (RS232/USB) CLI support
- Display usage-reports & router status
- Localization & Internationalization
- SSL (HTTPS) based remote mgmt with IP address restrictions
- Save/Restore configuration settings
- USB thumb-drive booting and configuration/firmware backup/restore
- GUI based firmware upgrade
- Captive Portal feature for guests
- Email logs and alerts
- SMTP authentication for emails
- Traffic Metering
- Support for manufacturing tests access for ODMs / SPs