Technical Specifications

High Availability WAN
- Multiple link auto failover media independent
- Multiple Gateway option
  - Primary/Primary,
  - Primary/Secondary,
  - Primary/Primary/Secondary,
  - Primary/Primary/CDN or DMZ/Secondary with routed IP pool or DSCP (ToS) value
- WAN optimization algorithm based on Round Robin/Overflow/Priority/Least used/Fastest response/Persistence/Enforced
- WAN Port Support from 100 Mbps to 40 Gbps support, 3G/4G LTE, PPPoE over ADSL
- WAN IP Support Static/Dynamic
- Multiple SD-WAN Client/Server with WAN optimization
- Single to Multiple IPIP Tunnel VPN with WAN optimization

DHCP Support
- DHCP Server for IPv4
- DHCP-relay including DHCP option-82
- Client Binding with MAC address

Remote Office Connectivity (site-to-site VPN) without WAN optimization
- L2TP
- PPTP
- SSTP
- SD-WAN Client
- IPIP Tunnel
- GRE Tunnel

NATing (N/W BEHIND IP)
- NAT 1:N
- NAT N:N
- NAT ONE:ONE
- NAT ONE:MANY
- NAT UDP/TCP Port Forwarding

Subscriber Management
- PAP/CHAP/MSCHAP v-1/2
- IPoE/PPPoE/MAC/Captive Portal/VLAN Type Local/Radius Authentication
- Authentication based on Service and security
- Rate Limit (Bandwidth Shaping) with FUP on base and TOS (DSCP) data transfer
- Local/Radius - Pool/Authentication
- Static IP via Radius and Local authentication
- Access based on Time and Date time restriction
- Data transfer based Quota allocation per Rate-limit per QoS
- Schedule based Rate-limit and burst
- Real time QoS User/Group Policy update
- QoS via Radius and Local authentication
- User Disconnect/Session and Change of authorisation through Standard CoA/DAE
- Per Subscriber Online Traffic Monitor Accounting/Session/Graph
- Prepaid Vouchers
- Error Handling Redirect to Expired/Disabled/unauthorised/No Money Page for Subscribers
- multiple PPPoE service name Subscriber wise
- Limited/unlimited/Fair Usage support

Captive Portal Management
- Customized User portal Based on IP Address (Multiple portal support per Interface per IP Address Gateway)
- Customized User portal with Social media Check-in and like
- Banner Management
- POP up messages
- Audio/Video Ad management
- Captive Portal combination of Mobile OTP/Voucher/Username/BYOD
- SMS integration customized and adaptive to new provider without Development need

External Radius Support
- Primary/Secondary Radius support
- Separate Authentication/Accounting Radius Support
- Separate Radius based on Service (IPoE/PPPoE) on same interface Support
- Post-paid/Prepaid Service support

Security
- Country wise IP Blocking
- IP Address/Pool Blocking
- Domain Blocking
- IP Address/Pool Domain White listing
- Content Filter Per Subscriber Group
- Subscriber IP Address Tracking
- Duplicate Address Detection
- SPAM Control filter
- Basic DDOS control
Firewall
- State-full Inspection
- Allow/Deny Protocols
- Source/Destination IP Address/Pool Port

Branding and Notification
- Static/Dynamic Advertisement
- Interface wise
- In-session notification

Access Point Controller
- Access Point reachability monitoring
- Access Point Dashboard
- Change configuration, Push Configuration
- Status of each access point hardware
- List connected user per Access Point
- Floor plan view

QoS
- Subscriber wise
- Group wise
- Application based
- ToS/DSCP Based
- Real time Dynamic Bandwidth
- Destination Based IP address/Pool

Administration
- Role-based administration
- Multiple administrators and user levels Per interface
- Upgrades & changes via Web UI
- Department/Franchise/Operator Management
- Backup/Restore configuration
- International Time zone
- Config log with 100 rollbacks
- All services and Remote Radius SMS Service alerts
- Multilingual UI

Dashboard Management
- Basic/All User Statistics
- Real time/Historical Bandwidth
- Graph for External/Internal interfaces
- Full User Statistics
- Basic System Element Statistics
- Full System Element Statistics
- Service level status
- Smart Monitoring Tools
- Hardware monitoring

Layer 3 Features
- VLAN routing
- IP routing
- DHCP-relay including DHCP option-82
- 802.1X support IPv6

RFC Compliance
- AAA : rfc2138, rfc2865, rfc3580, rfc2548, rfc2139, rfc2866, rfc3162, rfc2869, rfc3576

Third Party
- SMS Gateway integration customized and adaptive to new provider without Development need.
- Multiple Payment Gateway Support
- Property Management System - on Request integration

LOGS
- Authentication Subscriber
- NAT Connection tracking logs
- URL Connection tracking logs
- Per session logging support
- Log Local/Syslog
- Data transfer reporting (By user, package & IP address)

Standards Compliance
- 802.1D Bridging & Spanning Tree Protocol
- 802.1p QOS/COS
- 802.1Q VLAN Tagging
- 802.1X Port-based Network Access Control (PNAC)
- 802.1ah PBB (MAC in MAC)
- 802.3ab 1000 BASE-T
- 802.3z Gigabit Ethernet
- 802.3ae 10 Gigabit Ethernet
- 802.3ba 40 Gigabit Ethernet

Layer 2 Features
- Jumbo frames up to 9,216 bytes
- Provide non-blocking wire speed L2 switching
- Flow control
- IEEE 802.3x for full-duplex mode
- Back-pressure flow control in half-duplex mode Broadcast, unicast, and multicast storm protection VLAN support

Layer 2 Features (continued)
- IEEE 802.1Q VLANS
- 4,094 VLANS support
- Port-based VLAN support
- Port security
- Q-in-Q support
- 802.1X support