



- 8 x WAN/LAN switchable ports & 4 x fixed LAN ports
- 2 x 10G SFP+ & 2 x 2.5G Ethernet for WAN or LAN
- 2GHz Quad-Core Processor
- 500 simultaneous VPN tunnels with 5Gbps IPsec throughput
- Supported and managed by VigorACS
- 256GB SSD storage for linux applications (Vigor3912S)

### NAT

- Connection Number 300K/500K/1000K
- Port Redirection/Open Ports/Port Triggering
- Port Knocking
- Fast NAT
- Server Load Balance

### WAN

- Protocol: DHCP/Static IP/PPPoE
- Load Balance
- WAN Connection Fail-over
- Multiple VLAN
- WAN Budget

### IP Protocol

- IPv4 • IPv6

### LAN

- LAN 1 ~ LAN100
- Port-based & Tag-based VLAN
- Bind IP to MAC Address
- Hotspot Web Portal
- LAN Port Mirror/Packet Capturing
- PPPoE Server

### Network Feature

- DHCP Client/Relay/Server
- DHCP Option:  
1,3,6,51,53,54,58,59,60,61,66,125
- DHCP Pool Support B-Class
- IGMP v2/v3
- Dynamic DNS
- NTP Client
- RADIUS Server/Client
- LDAP Client Support Anonymous & Simple Credentials
- Wake on LAN
- Smart Action
- High Availability (HA)
- DNS Security
- LAN DNS/DNS Forwarding
- SMS/Mail Alert
- Bonjour
- IPv4/IPv6 Static Route
- Dynamic Routing Protocol
  - RIP v1/v2/ng, OSPFv2, BGP
- Policy-based Routing

### VPN

- 500 Concurrent VPN Tunnels (include 200 SSL VPN)
- VPN Trunk with Backup/Load Balance
- Protocol: WireGuard, SSL, OpenVPN, IPsec, GRE over IPsec, PPTP, L2TP, L2TP over IPsec
- Encryption:
  - AES-GCM, AES-CBC, 3DES, DES, MPPE
- Authentication:
  - SHA-512, SHA-256, SHA-1, MD5
- IKE v1/v2 Authentication:
  - Pre-shared Key, X.509, Xauth, EAP
- PPP Authentication:
  - TOTP/mOTP, PAP, CHAP, MS-CHAPv2
- Connection: Remote Dial-In, LAN-to-LAN
- VPN Pass-through: IPsec, PPTP, L2TP
- NAT-traversal (NAT-T)
- VPN Wizard
- VPN from LAN
- VPN Isolation
- VPN Packets Capture
- VPN 2FA for Dial-in User & AD/LDAP Server
- VPN Traffic Graph

### Linux Applications (Vigor3912S)

(based on Ubuntu)

- Entry Level IDS with Suricata/ Web Notification/Smart Action
  - 60000+ Rules Including 6000+ CVE Rules
  - Rulesets/engine can be automatically updated
  - The following network/system anomaly can be detected and then either get an alert via e.g. Web Notification or get an action (e.g. IP block)
    - DoS (Denial of Service) Attack
    - Unauthorized Access Attempts
    - Suspicious Activity e.g DNS Tunnelling
    - Network Trojan and Malware Activities
- Docker Applications
  - VigorConnect
  - Portainer CE

### Firewall

- User-based Firewall
- Rule-based and Object-based (IP/Country/Service) Firewall
- DoS Defense
- Time Schedule Control
- DNS Filter Enhancement

### Management

- Web-based User Interface (HTTP/HTTPS)
- Quick Start Wizard
- CLI (Command Line Interface, Telnet/SSH)
- Configuration Backup/Restore
- Built-in Diagnostic Function
- Firmware Upgrade via WUI (HTTPS/HTTP) /ACS (TR-069)/Utility (TFTP)
- Logging via Syslog
- SNMP Management (MIB-II)
- Session Time Out Management
- Multi-level Management Admin/User
- Time Schedule Control
- User Management
- TR-069

### Content Security Management

- Object-based:
  - URL Content Filter
  - Web Content Filter
  - APP Enforcement (IM/P2P Blocking)

### Bandwidth Management

- QoS
  - Guarantee bandwidth for VoIP
  - Class-based bandwidth guarantee by user-defined traffic categories
  - DiffServ Code Point Classifying
  - 4-level priority for each direction (Inbound/Outbound)
- Bandwidth Limitation
- Sessions Limitation
- 802.1p and Layer-3 (TOS/DSCP)

### Device Management

- AP Management: 50
- Switch Management : 30
- External Devices : 80

### Hardware Interface

- 8 LAN/WAN Configurable Ports (2 x 1G/2.5G/10G SFP+, 2 x 10M/100M/1G/2.5G RJ-45, 4 x 10M/100M/1G RJ-45)  
(each port configured to be WAN or LAN independently)
- 4 x 10/100/1000Base-Tx LAN Switch, RJ-45
- 2 x USB Host 3.0
- 1 x Console Port, RJ-45
- 1 x Factory Reset Button