DrayTek

Vigor1100 Series

Single-WAN VPN Router for GPON Network Application

Vigor1100 series is designed for fulfilling FTTH and triple play service demand of fixed network operators or cable operators. The box is based on the mature Gigabit GPON technology, which have high ratio of performance to price. The device supports multi WAN connection of bridge or route, IPv4 and IPv6 protocol stack, multicast protocol, QoS and firewall function and TR069 management protocol. The device adopts the latest 802.11ax WiFi 6 technology standard and is compatible with 802.11ac/b/g/n, support 3000Mbps connecting rate. They are large transmission capacity and fast speed, highly reliable and easy to maintain, with guaranteed QoS for different service. And It is fully compliant with technical regulations such as ITU-T G.984.x .

Connectivity

GPON
- ITU-T G.984.2 / ITU-T G.984.3 / ITU-T G.988 Class B+
- PON RX Rate: 2.488Gbps
- PON TX Rate: 1.244Gbps
- Wavelength: TX 1310 +/- 20nm, RX 1490 +/- 10nm
- Output Optical Power: 0.5 ~ 5 dBm @1310 nm
- Optical Receiver Sensitivity: -28 dBm @1490 nm
- Connection Type: SC/APC
- Return Loss: >= 50dB
- Insertion Loss: <= 0.4 dB

Ethernet WAN
- IPv4
  · DHCP Client, Static IP, PPPoE
- IPv6
  · Tunnel Mode: TSPC, 6rd, Static 6in4
  · Dual Stack: PPP, DHCPv6 Client, Static IPv6
- WAN Function
  · WAN Connection Fail-over
  · WAN Budgets
  · Load Balance/Route Policy
  · 802.1q Multi-VLAN Tagging

Ethernet LAN
- IPv4/IPv6 DHCP Server
- Static Routing/RIP
- Multiple Subnet
- Port/Tag-based VLAN

NAT

- NAT Session: up to 50,000
- NAT Throughput: >= 1Gbps
- Application Layer Gateway (ALG)

LAN Switch

- 8 × VLAN
- 4 × LAN Subnet
- DHCP supports 253 IP addresses on each subnet
- Port-Based VLAN
- Tag-Based VLAN
- VLAN Tagging (802.1q) on LAN
- Bind-IP to MAC Address: 300 entries
- Wired 802.1X

Firewall

- Port Forwarding
- Rule-Based Firewall
- Object-Based Firewall
- DoS Defense
- Time Schedule Control
- Logging via Syslog
- IP Address Anti-Spoofing
- IPv6 Firewall

Multi WAN

- WAN Connection Fail-over
- Physical WAN interfaces, Only ONE interface can be set to Always On.
  · Primary WAN is GPON WAN and set to Always On by default.
- Virtual WAN Interfaces
  · VLAN for Ethernet feature

IP Protocol

- IPv4
- IPv6

VPN

- Up to 2 VPN Tunnels
- Protocol: IPsec
- Encryption: Hardware-based AES/DES/3DES
- Authentication : SHA-1, SHA256
- IKE Authentication : Pre-shared Key and Digital Signature (X.509)
- LAN-to-LAN, Teleworker-to-LAN
- IPsec NAT-traversal (NAT-T)
- Dead Peer Detection (DPD)

Object Settings

- IP Object / Group
- IPv6 Object / Group
- Service Type Object
- Keyword Object
- Object Backup / Restore

CSM

- APP Enforcement
  · Support apply Apps to Content Filter
- URL Content Filter
  · Access Control: URL Keyword Blocking (by White / Black List)
- Web Content Filter (by purchasing license)
  · Support apply to Content Filter

Network Feature

- DHCP Client / Relay / Server
- Customize DHCP Option
- DHCPv6 Server
- Static IPv6 Address Configuration
- IGMP Proxy v2 / v3
- IGMP Snooping
- Dynamic DNS
- DNS Cache / Proxy
- DNS Security
- DNS forwarding
- LAN DNS
- NTP Client
- Hotspot Web Portal (1 profile)
- RADIUS Client
- UPnP
- Wake on LAN

Network Management

- Web-Based User Interface (HTTP / HTTPS)
- Command Line Interface (Telnet / SSH)
- Auto Logout
- Dashboard
- Administration Access Control
- Configuration Backup / Restore
- Built-In Diagnostic Function
- Firmware Upgrade via HTTP / TFTP / TR-069
- Logging via Syslog
- Syslog Explorer
- SNMP v2c / v3
- Object-Based SMS / Mail Alert
- Management Session Time Out
- Multi-Level Management (admin / user)
- External Device Detection (Master Mode)
- TR-069
- Self-Signed Certificate
- Support Multi-Firmware Upgrade Utility

WLAN (ax model)

- 2x2 WiFi 6 Support Concurrent 2.4GHz Band + 5GHz Band
  - ・2.4GHz Band: IEEE 802.11b / g / n / ax
  - ・5GHz Band: IEEE 802.11a / n / ac / ax
- Channels
  - ・Auto Channel Selection by default
  - ・Variant by country regulation
- Encryption
  - ・WPA / WPA2 / WPA3 / OWE
- Security mode
  - ・WPA3 Personal
  - ・WPA3/WPA2 Personal
  - ・WPA2 Personal
  - ・WPA2/WPA Personal
  - ・WPA3 Enterprise
  - ・WPA2 Enterprise
  - ・WPA2/WPA Enterprise
  - ・OWE
  - ・WPA Personal
  - ・WPA Enterprise
- Authentication
  - ・Pre-shared Key
  - ・802.1X
- Multiple SSID
  - ・4 x SSID for each band
- SSID VLAN Grouping with LAN Port
- Hidden SSID
- WPS
- Wireless Client List
- Wireless LAN Isolation
- MAC Address Control
  - ・Support MAC Filtering Profile (Access List and Block List)
- Access Point Discovery
- WDS
  - ・Repeater
- WMM
- Airtime Fairness

Bandwidth Management

- APP QoS
- Sessions Limitation

Routing

- Route Policy: 30 profiles
  - ・Support over LAN subnet / VPN / Virtual WAN interface
- Static Route: IPv4 20 entries, IPv6 40 entries
- Routing Protocol: RIPv1 / v2 / RIPng

Hardware Interface

- 1 × GPON WAN
- 1 × GbE WAN/LAN switchable (P1), 10/100/1000Base-T, RJ-45
- 3 x GbE LAN (P2~P4), 10/100/1000 Base-T, RJ45
- 1 × Factory Reset Button
- 1 × Wireless On / Off / WPS Button (WLAN model)
- 2 × Antennas for 2.4GHz + 2 × Antennas for 5GHz & 1 x Internal Antenna for 5GHz (WLAN model)