



## Gigabit Multi-WAN VPN Business Router

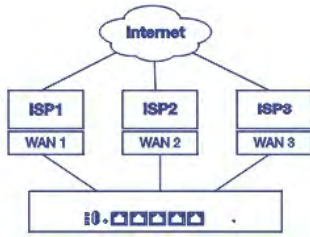
TWG-431BR (v1.0R)

- Multi-WAN support
- High Availability
- IEEE 802.1Q inter-VLAN routing
- WAN load-balancing and fail-over modes
- SSL, IPsec, PPTP, and L2TP w/IPsec VPN support
- Web browser and Command Line Interface (CLI) Management
- Advanced web content filtering service powered by Router Limits™
- Online firmware notification and upgrade
- QoS for VoIP and media streaming

TRENDnet's Gigabit Multi-WAN VPN Business Router, model TWG-431BR, features internet WAN load balancing, a network fail-safe backup, and encrypted Virtual Private Network (VPN) access for remote users. Improve peak-network-loading performance and eliminates network downtime with the use of the VPN router's multiple WAN ports. Smooth network loading, minimize network downtime, and allow employees to access your network from the Internet—all with a single router. The VPN router features advanced management, high availability, QoS, VLAN, VPN, and other capabilities to ensure optimal performance, scalability, and protection of your network. Advanced SPI, NAT and SNAT protects against Internet attacks.

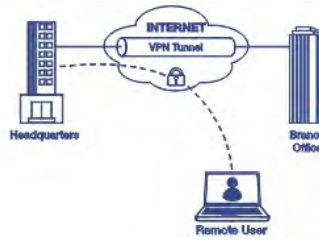
The TWG-431BR comes fully integrated with Router Limits' comprehensive web management system, designed to give users more control over the activity on their network. Manage screen time, filter content, track web use and browsing history, as well as device level controls and more. Router Limits' software is also available for mobile devices, providing you better management of your connected network.

The latest software upgrade adds support for DPI and speed test. DPI analyzes data traffic and provides more detailed information on specific devices or users, such as bandwidth usage, content being downloaded or viewed, apps that are used, and more. This allows both IT administrators at work and parents in the home to better monitor and manage network traffic. Conveniently run speed tests remotely between your TRENDnet router and ISP to check your Internet connection speeds for connectivity or bandwidth issues.



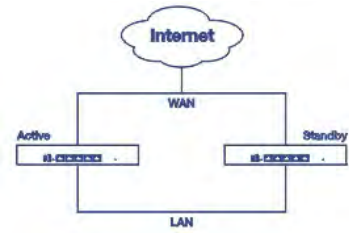
### Multi-WAN

Connect up to four separate WAN internet connections to efficiently load-balance traffic by distributing network traffic to the best available link.



### VPN Router

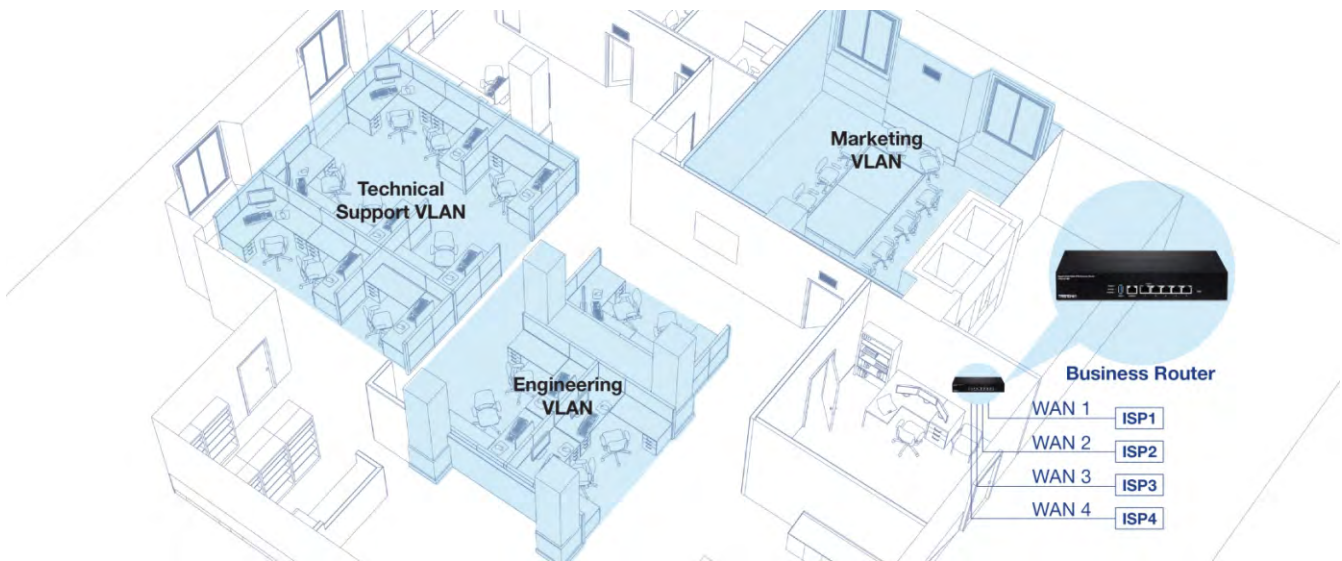
The VPN router creates an encrypted VPN tunnel to access local area network resources remotely using IPSec, PPTP, L2TP w/ IPsec, and SSL VPN protocols.



### High Availability

Group multiple TWG-431BR routers together to create a high availability network with router redundancy to minimize downtime.

## NETWORKING SOLUTION



## FEATURES



### Multi-WAN

Supports up to four separate WAN internet connections for load-balancing or fault-tolerance modes



### High Availability

Create a high availability network by grouping two or more routers on the network for redundancy



### Inter-VLAN Routing

Provides routing capabilities between VLANs



### QoS

Intelligently prioritize voice, video, and other data traffic to improve network efficiency and overall performance



### Online Firmware Updates

Automatic notification of firmware updates



### Ports

5 x Gigabit ports, 1x Console port



### Rack Mount Design

Sturdy metal housing with rack mount brackets included



### VPN Router

The VPN router supports IPsec, PPTP, L2TP w/ IPsec, and SSL VPN protocols for encrypted remote access to local area network (LAN) resources over the internet



### Management

Supports web browser (HTTP, HTTPS), CLI, SSH and Telnet management



### Content Filtering

Manage screen time, filter content, track web use and browsing history, as well as device level controls and more. Advanced web content filtering service powered by Router Limits™

## SPECIFICATIONS

### Standards

- IEEE 802.3
- IEEE 802.3u
- IEEE 802.3x
- IEEE 802.3ab
- IEEE 802.1Q

### Device Interface

- 5 x Gigabit ports (Modes: 4 WAN ports / 1 LAN port or 1 WAN port / 4 LAN ports)
- 1 x USB 3.0 port (Backup & Restore Configuration / Export Logging)
- 1 x RJ-45 console port
- Reset button
- LED indicators
- On/off switch

### Performance

- NAT (LAN-to-WAN) Throughput: 900Mbps
- Routing Performance: 900Mbps
- Maximum Concurrent Sessions: 50,000
- Maximum Number of VLANs: 8 (ID: 1-4093)
- IPsec VPN (AES-256/SHA-256/LAN-to-LAN) Throughput: 200Mbps
- SSL VPN Throughput (Blowfish/SHA-1/Bridge): 20Mbps

### VPN

- SSL VPN Client-to-Site (Up to 30 tunnels)
- IPsec VPN Site-to-Site / Client-to-Site (Up to 40 tunnels)
- PPTP/L2TP VPN Server / Client-to-Site (Up to 40 tunnels)
- L2TP with IPsec VPN Server / Client-to-Site (Up to 40 tunnels shared with L2TP)
- IPsec Encryption: 3DES, AES-128/192/256
- IPsec Authentication: MD5, SHA-1, SHA-256
- IPsec Key Exchange: IKE: Main/Aggressive Mode, Pre-shared Key, DH Groups 1/2/5/14
- IPsec Protocols: ESP, PFS DH Groups 1/2/5/14, DPD, Local/Remote ID: IP Address, FQDN
- IPsec NAT Traversal
- SSL VPN Encryption: AES
- SSL VPN Certificate: RSA
- PPTP/L2TP Encryption: MPPE 40-bit, 128-bit, IPsec
- PPTP/L2TP Authentication: MS-CHAPv1/2

### Networking

- WAN Modes: NAT, Classical Routing
- NAT Modes: NAT, PAT
- IPv4 WAN Modes: DHCP, Static IP, PPPoE, PPTP
- IPv6 WAN Modes: Static, Auto-configuration (SLAAC/DHCPv6), Link-Local, PPPoE, 6to4, 6rd
- Routing: Static, dynamic RIPv2, OSPFv1/2, distribute RIPv2 over OSPFv1/2, routing policies (Up to 20 entries)
- Inter-VLAN Routing (Up to 8 VLANs, 8 IP interfaces)
- DHCP Server/Relay
- Dynamic DNS: dyn.com, no-ip.com
- WAN Failover
- WAN Load Balancing: Assign weight by percentage or bandwidth, source IP based, source & destination IP based, session based
- High Availability: Supports 1 active-passive cluster up to a total of 6 units (1 master + 5 standby)
- VPN passthrough: IPsec, PPTP, L2TP

## Access Control

- MAC address filtering (Up to 64 entries)
- IP address filtering: TCP, UDP, ICMP (Up to 64 entries)
- Content filtering: URL (HTTP only), Keyword, P2P, IM (Up to 64 entries)
- Virtual server/port forwarding (Up to 64 entries)
- Advanced web content filtering service powered by Router Limits™
- Scheduling: IP/MAC/Content filters, virtual server (Up to 10 entries)
- DMZ host

## Quality of Service

- Bandwidth Control: applicable by IP network, IP range, TCP/UDP port, SIP, RTSP, RTP, web

## Management

- CLI (Console/Telnet/SSHv2) command line management
- HTTP/HTTPS (SSL v2/3 TLS) web based management, upload custom SSL certificate
- SNMP v1, v2c, v3
- SNMP trap (Up to 4 receivers)
- Scheduled automatic reboot
- Scheduled Wake-on-LAN (WoL) to remote network device
- Internal logging or send logging to external syslog server
- Manual or online firmware upgrade and notification
- Backup and restore configuration
- Diagnostic tools: Built-in ping & traceroute network utilities

## MIB

- MIB II RFC 1213

## Power

- Input: 100 – 240V AC, 50/60Hz, 0.5A
- Output: 12V DC, 1.5A external power adapter
- Max. consumption: 17.4W

## MTBF

- 318,350 hours

## Operating Temperature

- 0 – 50°C (32 – 122°F)

## Operating Humidity

- Max. 80% non-condensing

## Certifications

- CE
- FCC

## Dimensions

- 265 x 185 x 44.45mm (10.4 x 7.28 x 1.75 in.)
- Rack mountable 1U height

## Weight

- 1.1kg (2.44 lbs.)

## Warranty

- 3 years

## Package Contents

- TWG-431BR
- Quick Installation Guide
- RJ-45 to RS-232 console cable (1.5m / 5 ft.)
- Power adapter (12V DC, 1A)
- Rackmount kit

All references to speed are for comparison purposes only. Product specifications, size, and shape are subject to change without notice, and actual product appearance may differ from that depicted herein.