



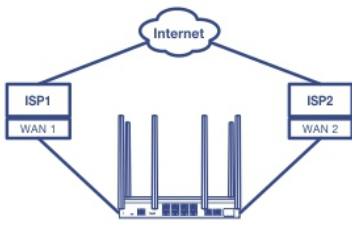
## AC3000 Tri-Band Wireless Gigabit Dual-WAN VPN SMB Router

TEW-829DRU (v1.0R)

- Dual-WAN ports support load-balancing and fail-over modes
- 8 x Gigabit LAN ports, 1 x Console port
- SSL, IPsec, PPTP, and L2TP w/IPsec VPN support
- IEEE 802.1Q inter-VLAN routing
- Three concurrent WiFi bands maximize device networking speeds
- AC3000 Tri-Band: 1733Mbps (5GHz1) + 867Mbps (5GHz2) + 400Mbps (2.4GHz) bands
- Pre-encrypted WiFi for your convenience
- Wireless client isolation
- Web browser and CLI management
- Online firmware notification and upgrade
- NDAA / TAA compliant (U.S. and Canada only)

TRENDnet's AC3000 Tri-Band Wireless Gigabit Dual-WAN VPN SMB Router, model TEW-829DRU, features three concurrent WiFi bands to maximize device networking speeds: two separate high performance 802.11ac networks (5GHz1: 1733Mbps / 5GHz2: 867Mbps), and a 400Mbps Wireless N network. It features dual-WAN ports for load balancing or fail-over modes, and encrypted Virtual Private Network (VPN) access for remote users. Dual-WAN ports smooth network loading, minimize network downtime, and allow employees to access your network from the Internet—all with a single router.

This wireless router features advanced management, QoS, VLAN, VPN, and other capabilities to ensure optimal performance, scalability, and protection of your network.



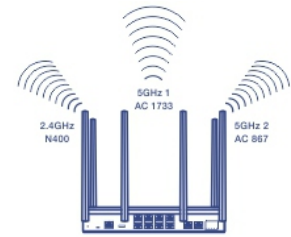
### Dual-WAN

Connect up to two separate WAN internet connections to efficiently load-balance traffic by distributing network traffic to the best available link, or configure for redundancy using the WAN fail-over mode.



### VPN

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



### AC3000 Tri-Band WiFi

Three concurrent WiFi bands maximize device networking speeds: two separate high performance 802.11ac networks 1733Mbps (5GHz1) + 867Mbps (5GHz2) + 400Mbps (2.4GHz) bands.

## NETWORKING SOLUTION



## FEATURES



### Dual-WAN

Supports up to two separate WAN internet connections for load-balancing or fail-over modes



### Ports

2 x Gigabit WAN ports, 8 x Gigabit LAN ports, 1 x USB 3.0 port, 1 x Console port



### Tri-Band WiFi

Three concurrent WiFi bands maximize device networking speeds: two separate high performance 802.11ac networks 1733Mbps (5GHz1) + 867Mbps (5GHz2) + 400Mbps (2.4GHz) bands



### Pre-Encrypted Wireless

For your convenience the router's WiFi bands are pre-encrypted with their own unique passwords



### VPN

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



### Inter-VLAN Routing

Provides routing capabilities between VLANs



### QoS

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



### Rack Mount Design

Sturdy metal housing with rack mount brackets included



### Wall Mountable

Wall mount ready



### Online Firmware Updates

Automatic notification of firmware updates



### Management

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

## SPECIFICATIONS

### Standards

- IEEE 802.3
- IEEE 802.3u
- IEEE 802.3x
- IEEE 802.3ab
- IEEE 802.1Q
- IEEE 802.1X
- IEEE 802.11a
- IEEE 802.11b
- IEEE 802.11g
- IEEE 802.11n (up to 400 Mbps @ 256QAM)\*
- IEEE 802.11ac (5GHz1: up to 1733 Mbps, 5GHz2: up to 867 Mbps @ 256QAM)\*

### Device Interface

- 8 x Gigabit LAN ports
- 2 x Gigabit WAN ports (WAN failover / Load balancing)
- 1 x USB 3.0 (Samba)
- 1 x RJ-45 console port
- Power switch
- Reset button
- LED indicators

### Performance

- NAT (LAN-to-WAN) throughput: 900Mbps
- Routing performance: 900Mbps
- Maximum concurrent sessions: 32,000
- Maximum number of VLANs: 8 (ID: 1-4094)
- IPsec VPN (AES-256/SHA-256/LAN-to-LAN) throughput: 90Mbps
- SSL VPN (OpenVPN®) Throughput (Blowfish/SHA-1/Bridge): 15Mbps

### VPN

- SSL VPN Server (Up to 10 tunnels)
- OpenVPN Encryption: BF-CBC, AES-128-CBC, AES-256-CBC
- OpenVPN HMAC Authentication: SHA1, SHA256
- SSL VPN Certificate: RSA
- IPsec VPN Server / Site-to-Site (Up to 15 tunnels)
- IPsec Encryption: DES, 3DES, AES-128/256
- IPsec Authentication: MD5, SHA1, SHA2-256, Certificate: X.509v3
- IPsec Key Exchange: IKE: IKEv1/2, Main Mode, Pre-shared Key, DH Groups 1/2/5/14
- IPsec Protocols: ESP (Transport/Tunnel), PFS, DH Groups 1/2/5/14, DPD, Local/Remote ID: IP Address, FQDN
- IPsec NAT Traversal
- IPsec VPN failover support
- PPTP/L2TP VPN Server (Up to 10 tunnels)
- L2TP with IPsec VPN Server (Up to 8 tunnels shared with L2TP)
- 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, One-to-One NAT
- WiFi client bridge mode
- ISP IPv4 WAN Modes: DHCP, Static IP, PPPoE, PPTP, L2TP
- ISP IPv6 WAN Modes: Static, Auto-configuration (SLAAC/DHCPv6), Link-Local, PPPoE
- VLAN ID assignment on WAN interface
- Routing: Static, RIPv1/v2, OSPFv2, routing policies (Up to 20 entries)
- Static ARP (Up to 32 entries)
- Inter-VLAN Routing (Up to 8 VLANs, 8 IP interfaces)
- SSID per VLAN assignment
- DHCP Server/Relay
- Dynamic DNS: dyn.com, no-ip.com
- WAN Failover
- WAN Load Balancing
- VPN passthrough: IPsec, PPTP, L2TP

### Access Control

- Wireless encryption: WPA/WPA2-PSK, WPA/WPA2-RADIUS
- NAT, virtual server/port forwarding, port triggering, firewall traffic rules, DMZ host, UPnP/NAT-PMP, allow/deny ping on WAN interfaces
- ALG: PPTP/L2TP/IPsec VPN passthrough, FTP/TFTP/SIP/RTSP/IRC/H.323 passthrough
- MAC & IP filtering
- Custom scheduling for access control rules
- Wireless client isolation
- DoS prevention

### Quality of Service

- User defined classification rules with 4 priority queues
- WMM

### Management/Monitoring

- CLI (Console/Telnet/SSH) command line management
- HTTP/HTTPS web based management
- Scheduled automatic reboot
- Scheduled Wake-on-LAN (WoL)
- View ARP and routing table entries
- View CPU load, traffic/wireless usage, and NAT sessions
- Internal system logging
- Manual or online firmware upgrade and notification
- Backup and restore configuration
- Internal logging
- Ping watchdog
- Diagnostic tools: Built-in ping, traceroute, and ns-lookup network utilities

### Frequency

- 2.412 - 2.472 GHz
- 5.180 – 5.825 GHz

### Modulation

- 802.11b: CCK, DQPSK, DBPSK
- 802.11a/g: OFDM with BPSK, QPSK and 16/64-QAM
- 802.11n: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM with OFDM
- 802.11ac: OFDM with BPSK, QPSK and 16/64/256-QAM

### Media Access Protocol

- CSMA/CA with ACK

### Antenna Gain

- 2.4 GHz: 2 x 2.9 dBi (max.) / 5 GHz: 4 x 4.4 dBi detachable/external

**Wireless Output Power (max output power without antenna gain)**

- 802.11a: FCC: 25 dBm (max.) / IC: 23 dBm (max.)
- 802.11b: FCC: 26 dBm (max.) / IC: 26 dBm (max.)
- 802.11g: FCC: 23 dBm (max.) / IC: 23 dBm (max.)
- 802.11n (2.4 GHz): FCC: 23 dBm (max.) / IC: 23 dBm (max.)
- 802.11n (5 GHz): FCC: 23 dBm (max.) / IC: 23 dBm (max.)
- 802.11ac: FCC: 23dBm (max.) / IC: 23dBm (max.)

**Receiving Sensitivity (per chain)**

- 802.11a: -70 dBm (typical) @ 54 Mbps
- 802.11b: -83 dBm (typical) @ 11 Mbps
- 802.11g: -70 dBm (typical) @ 54 Mbps
- 802.11n (2.4 GHz): -59 dBm (typical) @ 400 Mbps
- 802.11n (5 GHz): -59 dBm (typical) @ 800 Mbps
- 802.11ac: -55 dBm (typical) @ 1733 Mbps

**Wireless Channels**

- 2.4 GHz: FCC: 1-11
- 5 GHz: FCC: 36, 40, 44, 48, 149, 153, 157, 161, 165

**Power**

- Input: 100 – 240 V AC, 50 - 60 Hz, 1A
- Output: 12V DC, 3A external power adapter
- Consumption: 17.4W (max.)

**Operating Temperature**

- 0 – 50 °C (32 – 122 °F)

**Operating Humidity**

- Max. 95% non-condensing

**Certifications**

- FCC
- IC

**Dimensions**

- 280 x 170 x 44.45 mm (11 x 6.7 x 1.75 in.)
- Rack mountable 1U height

**Weight**

- 1.24 kg (2.74 lbs.)

**Warranty**

- 3 year

**Package Contents**

- TEW-829DRU
- Quick Installation Guide
- 6 x detachable high gain antennas
- Network cable (1.5 m/5 ft.)
- RJ-45 to RS-232 console cable (1.5m / 5 ft.)
- Power adapter (12V DC, 3 A)
- Rack mount kit

\*Maximum wireless signal rates are referenced from IEEE 802.11 theoretical specifications. Actual data throughput and coverage will vary depending on interference, network traffic, building materials and other conditions. For maximum performance of up to 1.733 Gbps use with a 1.733 Gbps 802.11ac wireless adapter. For maximum performance of up to 867 Mbps, use with an 867 Mbps 802.11n wireless adapter. For maximum performance of up to 400 Mbps, use with an 400 Mbps 802.11n wireless adapter. Multi-User MIMO (MU-MIMO) requires the use of multiple MU-MIMO enabled wireless adapters.

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.