



# TP-LINK SafeStream™ Gigabit Dual-WAN VPN Router

TL-ER6020

## ▣ Highlights

- 2 Gigabit WAN ports, 2 Gigabit LAN ports and 1 Gigabit LAN/DMZ port
- Supports multiple VPN protocols including IPsec/PPTP/L2TP, which help users establish their VPN more flexibly
- Supports up to 50 IPsec VPN tunnels with a hardware-based VPN engine
- Abundant security features include ARP Inspection, DoS Defense, URL/Keyword Domain Filter and Access Control
- Deploys One-Click restriction of IM/P2P applications to manage staff online behavior
- Professional 4KV lightning protection keeps your investments as safe as possible

**VPN**

- Up to 50 IPsec VPN Tunnels
- IPsec, PPTP, L2TP, L2TP over IPsec
- IPsec NAT Traversal (NAT-T)
- DES, 3DES, AES128, AES192, AES256 Encryption
- MD5, SHA1 Authentication
- Manual, IKE Key Management Mode
- LAN-to-LAN, Client-to-LAN IPsec VPN
- PPTP/L2TP VPN Server/Client

**Security**

- Hardware DMZ port
- One-to-One NAT
- FTP/H.323/SIP/IPsec/PPTP ALG
- IM/P2P Application Blocking
- URL/Keywords Filtering
- Web Content Filtering (Java, ActiveX, Cookies)
- ARP Inspection
- DoS/DDoS Defense

**Load Balance**

- Intelligent Load Balance
- Policy Routing
- Link Backup (Timing, Failover)

**Traffic Control**

- IP-based Bandwidth Control
- Guarantee & Limited Bandwidth
- IP-based Session Limit

**Others**

- Port VLAN, Port Mirror
- Static Routing, RIP v1/v2
- PPPoE Server
- E-Bulletin



- Details: <http://www.tplink.com/en/Support/>
- German/Austrian/Swiss users are not included



**SafeStream™ Gigabit Dual-WAN VPN Router**

**TL-ER6020**

The TL-ER6020 SafeStream™ Gigabit Dual-WAN VPN Router from TP-LINK possesses excellent data processing capabilities and multiple powerful functions including IPsec/PPTP/L2TP VPN, Load Balance, Access Control, IM/P2P Blocking, DoS Defense, Bandwidth Control, Session Limit, PPPoE Server and so on, which consumedly meet the needs of small and medium enterprises, hotels and communities with large volumes of users demanding an efficient and easy-to-manage network with high security.

**High VPN Performance**

The TL-ER6020 supports multiple VPN protocols including IPsec, PPTP and L2TP in Client/Server mode and can handle pass-through traffic as well. It also features a built-in hardware-based VPN engine allowing the router to support and manage up to 50 LAN-to-LAN/Client-to-LAN IPsec VPN connections. Advanced VPN features include: DES/3DES/AES128/AES192/AES256 encryption, MD5/SHA1 authentication, Manual/IKE key management, and Main/Aggressive negotiation modes.

**Abundant Security Features**

For defense against external threats, TL-ER6020 features an automatic protection to detect and block Denial of service (DoS) attacks such as TCP/UDP/ICMP Flooding, TCP Scanning, Ping of Death and other related threats. Moreover, this router offers a hardware DMZ port, which allows you to setup public servers without exposing your internal network, to avoid attacks from external threats. For better management of the internal network, TL-ER6020 allows administrators to set rules to block specific web sites and IM/P2P applications with just one-click, and restrict staff to use specific services such as FTP, HTTP and SMTP.

**Optimizing Bandwidth Usage**

The TL-ER6020 features 2 WAN ports, allowing the router to satisfy various Internet access requirements through one device. The Intelligent Load Balancing function can distribute data streams according to the bandwidth proportion of every WAN port to raise the utilization rate of multi-line broadband. With IP-based Bandwidth Control and Session Limit functions, network administrators can flexibly manage network bandwidth to optimize bandwidth usage.

**Safety Minded Enterprise Investments**

Professional lightning protection technology is designed to prevent electrical surges from penetrating the interior of the electrical equipment and is discharged harmlessly into the Earth. This router is designed to prevent lightning up to 4Kv in well-grounded connection conditions. This feature ensures that networking infrastructure investments remain as safe as possible from one of mother nature's more violent situations.

## Specifications

### Hardware Features

- Standards and Protocols: IEEE 802.3, 802.3u, 802.3ab, TCP/IP, DHCP, ICMP, NAT, PPPoE, SNMP, HTTP, DNS, IPsec, PPTP, L2TP
- Network Media: 10BASE-T: UTP category 3, 4, 5 cable (Max 100m), 100BASE-TX: UTP category 5, 5e cable (Max 100m), 1000BASE-T: UTP category 5, 5e cable (Max 100m)
- Interface: 2 Gigabit WAN ports, 2 Gigabit LAN ports, 1 Gigabit LAN/DMZ port, 1 Console Port (RJ45 On RS232)
- Flash/DRAM: 16MB/128MB (DDRII)
- LEDs: PWR, SYS, Link/Act, Speed, DMZ
- Dimensions: 11.6x7.1x1.7 in.(294x180x44 mm), 19-inch Standard Rack-Mount Width, 1U Height
- Power Supply: Internal Universal Power Supply, AC100-240V~ 50/60Hz Input

### Performance

- Concurrent Session: 30000
- NAT Throughput: 180Mbps
- IPsec VPN Throughput (3DES): 80Mbps

### Basic Functions

- WAN Connection Type: Dynamic IP, Static IP, PPPoE, PPTP, L2TP, Dual Access, BigPond
- MAC Clone: Modify WAN/LAN/DMZ MAC Address
- DHCP: DHCP Server/Client, DHCP Reservation
- Switch Setting: Port Mirror, Rate Control, Port Configuration, Port VLAN

### Advanced Functions

- System Mode: NAT, Non-NAT, Classical Routing
- NAT: One-to-One NAT, Multi-nets NAT, Virtual Server, DMZ Host, Port Triggering, UPnP, FTP/H.323/SIP/IPsec/PPTP ALG
- Traffic Control: IP-based Bandwidth Control, Guarantee & Limited Bandwidth, Time-scheduled Policy, IP-based Session Limit

- Load Balance: Intelligent Load Balance, Policy Routing, Protocol Binding, Link Backup (Timing, Failover), Online Detection
- Routing: Static Routing, Dynamic Routing (RIP v1/v2)

### VPN (Virtual Private Network)

- IPsec VPN: 50 IPsec VPN Tunnels, LAN-to-LAN and Client-to-LAN IPsec VPN, Main, Aggressive Negotiation Mode, DES, 3DES, AES128, AES192, AES256 Encryption Algorithm, MD5, SHA1 Authentication Algorithm, Manual, IKE Key Management Mode, IPsec NAT Traversal (NAT-T), Dead Peer Detection (DPD), Perfect Forward Secrecy (PFS)
- PPTP VPN: 16 PPTP VPN Tunnels, PPTP VPN Server/Client, PPTP with MPPE Encryption
- L2TP VPN: 16 L2TP VPN Tunnels, L2TP VPN Server/Client, L2TP over IPsec
- VPN Pass-through: IPsec (ESP), PPTP, L2TP

### Firewall

- DMZ Port: 1 Hardware DMZ Port
- Application Control: IM, P2P, Web IM, Web SNS, Web Media, Protocol, Proxy Blocking
- Filtering: MAC Filtering, URL/Keywords Filtering, Web Content Filtering (Java, ActiveX, Cookies)
- ARP Inspection: Sending GARP Packets, ARP Scanning by WAN/LAN, IP-MAC Binding
- Attack Defense: TCP/UDP/ICMP Flood Defense, Block TCP Scan (Stealth FIN/Xmas/Null), Block Ping from WAN

### Management

- Service: PPPoE Server, E-Bulletin, Dynamic DNS (Dyndns, No-IP, Peanuthull, Comexe)
- Maintenance: Web/CLI/Telnet Management Interface, Remote Management, Export & Import Configuration, NTP Synchronize, Syslog Support

- Others

- Certification: CE, FCC, RoHS
- Package Contents: TL-ER6020, Resource CD, Power Cord, Ground Cable, Rack-mount Kit, Installation Guide
- System Requirement: Microsoft® Windows® 98SE, NT, 2000, XP, Vista™ or Windows 7, MAC® OS, NetWare®, UNIX® or Linux

- Environment:

- Operating Temperature: 0°C~40°C (32°F~104°F),
- Storage Temperature: -40°C~70°C (-40°F~158°F),
- Operating Humidity: 10%~90% non-condensing,
- Storage Humidity: 5%~90% non-condensing

## Ordering Information

Product Model	Description
TL-ER6020	SafeStream™ Gigabit Dual-WAN VPN Router