



# SafeStream Gigabit Multi-WAN VPN Router

MODEL: TL-ER6020



## Highlights

- 64-bit dual core dedicated processor for outstanding performance
- Equipped with 1 Gigabit WAN port, 3 Gigabit WAN/LAN ports and 1 Gigabit LAN port
- Supports multiple VPN protocols including IPsec/PPTP/L2TP, helping users to establish VPN connections more flexibly
- Supports up to 64 IPsec VPN tunnels with a hardware-based VPN engine
- Captive portal provides a convenient method for guest authentication
- Abundant features including load balance, bandwidth control and access control
- Professional 4KV lightning protection keeps your investments as safe as possible

## Overview

The TL-ER6020 SafeStream Gigabit Multi-WAN VPN Router from TP-Link boasts excellent data processing capabilities and an array of powerful functions, including IPsec/PPTP/L2TP VPN, Load Balance, Access Control, DoS Defense and Bandwidth Control. The TL-ER6020 is ideal for small and medium businesses, along with hotels and other settings where a large number of users require a stable, secure connection.

## Enterprise-Standard VPN

The TL-ER6020 supports pass-through traffic together with multiple VPN protocols including IPsec, PPTP and L2TP in Client/Server mode. It also features built-in VPN engine hardware, allowing the router to support and manage up to 64 LAN-to-LAN/Client-to-LAN IPsec VPN connections. Advanced VPN features include DES/3DES/AES128/AES192/AES256 encryption, MD5/SHA1 authentication, and Main/Aggressive negotiation modes.

## Superior Hardware

With a 64-bit dual core network processor, TL-ER6020 is able to handle multiple tasks while maintaining excellent performance.

## Intelligent Bandwidth Allocation

The TL-ER6020 features 1 WAN port and 3 WAN/LAN ports, allowing one device to meet multiple requirements. Intelligent Load Balancing distributes data streams according to the bandwidth proportion of each WAN port to make the most of multi-line broadband. IP-based Bandwidth Control and Session Limit functions give network administrators the power to flexibly manage how their bandwidth is used.

## Peace of Mind Whatever the Weather

Professional-standard lightning protection prevents electrical surges from penetrating your network equipment, instead discharging them harmlessly into the Earth. Designed to withstand 4KV of electricity when well-grounded, this router ensures your network investments remain as safe as possible from the wrath of Mother Nature.

# Specifications

Hardware	
Standards and Protocols	IEEE 802.3, IEEE802.3u, IEEE802.3ab TCP/IP, DHCP, ICMP, NAT, PPPoE, SNTP, HTTP, DNS, IPsec, PPTP, L2TP
Interface	1 Gigabit WAN port 3 Gigabit LAN/WAN ports 1 Gigabit LAN port
Network Media	10BASE-T: UTP category 3, 4, 5 cable (Max 100m) EIA/TIA-568 100Ω STP (Max 100m) 100BASE-TX: UTP category 5, 5e cable (Max 100m) EIA/TIA-568 100Ω STP (Max 100m) 1000BASE-T: UTP category 5, 5e, 6 cable (Max 100m)
Button	Reset Button
Power Supply	Internal Universal Power Supply AC100-240V~ 50/60Hz Input
Flash	32MB
DRAM	DDRIII 256MB
LED	PWR, SYS, Link/Act, Speed,
Dimensions ( W x D x H )	11.6x7.1x1.7 in.( 294*180*44 mm)
Performance	
Concurrent Session	40000
NAT Throughput	940Mbps
IPsec VPN Throughput (3DES)	99Mbps
Basic Functions	
WAN Connection Type	Static/Dynamic IP, PPPoE/Russian PPPoE, PPTP/Russian PPTP, L2TP/Russian L2TP, Bigpond Cable
DHCP	DHCP Server/Client DHCP Address Reservation
MAC Clone	Modify WAN MAC Address
IPTV	Bridge, Custom
IPv6	IPv6 Support
VLAN	802.1Q VLAN, Port VLAN
Transmission	
Load Balance	Intelligent Load Balance Link Backup (Timing, Failover) Online Detection
NAT	One-to-One NAT, Multi-nets NAT, Virtual Server, Port Triggering FTP/H.323/SIP/IPsec/PPTP ALG, UPnP
Routing	Static Routing Policy Routing
Session Limit	IP-based Session Limit
Bandwidth Control	IP-based Bandwidth Control

VPN	
IPsec VPN	64 IPsec VPN Tunnels LAN-to-LAN, Client-to-LAN Main, Aggressive Negotiation Mode DES, 3DES, AES128, AES192, AES256 Encryption Algorithm MD5, SHA1 Authentication Algorithm 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
Security	
Attack Defense	TCP/UDP/ICMP Flood Defense Block TCP Scan (Stealth FIN/Xmas/Null) Block Ping from WAN
Filtering	MAC Filtering URL/Keywords Filtering
ARP Inspection	Sending GARP Packets ARP Scanning by WAN/LAN IP-MAC Binding
Access Control	Source/Destination IP Based Access Control
Authentication	
Web Authentication	Local User Authentication, Radius Sever Authentication, Onekey Online
Management	
Service	Dynamic DNS (Dyndns, No-IP, Peanuthull, Comexe)
Maintenance	Web Management Interface, Remote Management Export & Import Configuration, SNMP Diagnostics(Ping & Traceroute), NTP Synchronize Syslog Support
Others	
Certification	CE, FCC, RoHS
Package Contents	TL-ER6020, Power Cord, Rack-mount Kit, Installation Guide
System Requirements	Microsoft Windows 98SE, NT, 2000, XP, Vista™ or Windows 7/8/8.1/10 MAC OS, NetWare, UNIX or Linux
Environment	Operating Temperature: 0 C to 40C (32 F to 104F) Storage Temperature: -40 C to 70C (-40F to 158F) Operating Humidity: 10% to 90% non-condensing Storage Humidity: 5% to 90% non-condensing