IP Technology Labs
Secure Connectivity Simplified™

*Fast*Lane™ 8000 Point Source Secure Network Gateway
Cyber Resilient Hardware with TPM 2.0 Secure Element, PoE+ IN, & PoE+ OUT

Secure Connectivity Simplified™

1. **BEST Tunneling & Stable VPN**
2. **SUPERIOR Connectivity End-to-End**
3. **HIGHEST Redundancy & Availability**
4. **BEST Device Management**
5. **HIGHEST Security & Privacy**

Model 8000 Series Highlights

- Supports Local and Remote Access connections – private over the LAN
- Hacker Hardened Secure Element with integrated hardware TPM 2.0
- Key vault for Secure Boot, Secure Password, Key & Cert Storage, True Random Number Generator
- 802.1at PoE+ power in (PD)
- 802.1at PoE+ power out (PSE)
- Remote out-of-band manageable
- No Fans or moving parts
- Compatible with all IpTL remote and server appliances
- Clientless Connectivity & Security for Headless Devices

Applications

- Ransomware C2 IoT device protection including SCADA, PLCs, and Controllers
- Network protection from Backdoors, Snooping, & Spoofing, Tampering
- IP Camera protection & Identity
- NVR backhaul & Secure WAN offload
- Off-site access to Video surveillance via private VPN networking
- Microsegmentation and Zero Trust

The First Defense-in-Depth Point Source Appliance providing Cyber Resilient Device Hardening, Secure Communications, & True PoE Power & Source.

Highest Security TPM 2.0
Hardware Secure Element with TPM 2.0 **hardened against cyber tampering**

802.1at PoE+ PD IN
Easily **powers the *appliance*** from your network switch or PoE source
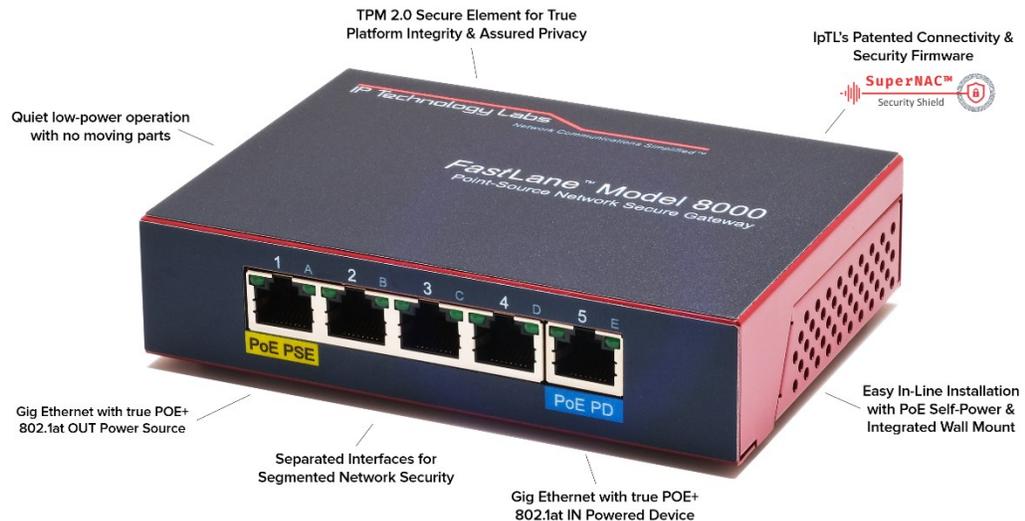
802.1at PoE+ PSE OUT
Easily **powers *your* devices** without injectors or extra adapters

Seamlessly add true end-point security to your network-based devices with the IpTL Model 8000 series Point-Source Secure Access Gateway. With integrated hardware TPM 2.0 you get secure boot, secure credentials, and true random number generator ensuring no backdoors, alteration, or insecure communication.

For maximum flexibility, we've included true standards based PoE in and out – *not* a gimmick passthrough scheme – and without external power supplies – ensuring compatibility & reliability to your entire network infrastructure.

Only IpTL provides Trust-and-Control™ by combining leading state-of-the-art hardware with our patented firmware to deliver the best tightly integrated low-cost secure connectivity solution.

TPM 2.0 Secure Element for True Platform Integrity & Assured Privacy

IpTL's Patented Connectivity & Security Firmware

SuperNAC™ Security Shield

Quiet low-power operation with no moving parts

Easy In-Line Installation with PoE Self-Power & Integrated Wall Mount

Gig Ethernet with true POE+ 802.1at OUT Power Source

Separated Interfaces for Segmented Network Security

Gig Ethernet with true POE+ 802.1at IN Powered Device

Device Overview

- All-metal Enclosure with fan less quite operation
- Per port LED for Ethernet Link Status and five System status indicators
- Integrated hardware TPM 2.0 security root-of-trust, crypto processor, True random number generator
- 802.1at Class 4 PoE+ IN (PD Powered Device) – port 5 only
- 802.1at Class 4 PoE+ OUT (PSE Powered Sourcing Equipment) – port 1 only
- Software expandable connection & tunnel licenses; one connection included
- Provides a transparent Point-to-Point Ethernet tunnel bridged L2 or L3 Routed links, full-duplex, and transparent operation
- Unlimited hosts, users, networks, VLANs
- User configurable compulsory tunnels or split-tunnel operation
- Full access router – DHCP client/server, DNS client/server, NetFlow, QoS, multicast, Port forward, full routing table & virtual routers; secondary IP's. NAT/PAT/SNAT/DNAT
- Firewall and ACL's provide granular traffic management as well as protection for both Local, Uplink, and each Tunnel, L2-L7
- VRRP, FlexPath redundancy, Tunnel bonding
- vGate™ IPsec Server

Network Interface

- 5x Gig-E Shielded Ethernet RJ-45 Ports, full duplex, autosensing, Auto-MDI-X
- Port 5 interface is physically isolated from ports 1-4 switch; each port can be independently logically isolated.

Management & Configuration

- Internal webserver management with selectable HTTP/HTTPS port. User-configurable admin and monitor passwords & multilevel user credentials
- SNMP v1 MIB-II; User selectable enable/disable, SNMP Variables, Tunnel Status & Tunnel Octet In/Out, Ethernet Status & Ethernet Octet In/Out. SNMP Traps for device and tunnel events.
- Syslog output and NetFlow with the configurable server
- Configuration export/import (encrypted) and system upgrade.
- Definable IP Address or VLAN for management
- User-selectable enable/disable SupportServer™ or Real-Time-Resource™ options
- Use with IpTL ViewPoint™ management support server for independent positive control and management of fielded appliances

Operating

- Desktop or wall-mount operation mounting.
- Appliance power: PoE+ In (PD) models: 802.1at Class 4 at 48VDC at 10 watts; For External power Models: 48VDC@600mA power via barrel jack; For PoE+ Out (PSE) models, appliance will regenerate power from PD or barrel jack. External hi-power supply required for full 802.1at Class 2/Type 4 30-Watt PSE output.
- Operating Temperature: 0° to 50°C Humidity: up to 5-90% non-condensing
- 1.3H" x 5"W x 3.5L" (H:33mm x W:127mm x L:89.6mm); bottom wall-mount mounting holes are 3.5" (90mm) center-to-center
- Weight 1.0 pounds

Operational Features

- TLSv1.2/1.3, L2TPv3, AES-256 CBC/GCM with SHA-1/SHA-2(256/384) AEAD ECDSA & ECDHE Perfect Forward Secrecy options; IPsec IKEv2 Server
- Dynamic keying and automatic rekeying (every 5 minutes, user adjustable) with X.509v3 certificates mutual authentication. Username/Password option for tunnel authorization. Separate per-tunnel password for link authorization. User-configurable rekey based on time and/or data throughput.
- Configurable Tunnel Auth Passphrase to create closed tunnel user group; enables additional HMAC on tunnel to prevent connection or discovery
- Configurable TCP/UDP tunnel with single port for all control & payload.
- Auto-learning with 8,192 MAC address table and unlimited hosts and networks support between LANs.
- Jumbo Ethernet frames with default MTU of 2K. VLAN (4,096) tagging on Client or Server; VLAN trunking out single Ethernet; InterVLAN routing. Will pass VLANs, VTP, & ISL.
- User configurable L2 and L3 filters on IP/Port or MAC Address. Stateful inspection processing and filtering with new, established, or related operation. Quick access buttons for immediate config.
- Integrated DHCP client and server, DNS server, PPPoE client, and NTP client; RealTimeResource™ DNS services & AutoConnect™ standard. Built in DynDNS client; IPShare™ with Tunnel NAT.
- Detached Ethernet/WAN interfaces with NAT and user-defined port forwarding. L3 Routed tunnel mode supports full IPv4 routing and subnetting
- Tunnel bandwidth bonding for multiple physical connections or 64 logical connections
- BlackNoise™ Multilevel Tunnel Obfuscation with configurable codes
- SystemMonitor™ failover/restore with tunable network features. Full redundancy with bonded tunnel, roll-over, and VRRP. Eliminate any single point of failure.
- SuperNAC™ Clientless Identity Based Software Defined Perimeter Network Access Control features
- RealTimeResource™ DNS services & AutoConnect™ standard. Built-in DynDNS client.
- IPShare™ LAN Virtualization with Ethernet/Routing Half-bridge with Tunnel NAT Permits/Forwards.
- DNS SecureSwitch™ URL based Filtering & Switching with Dynamic IP population
- Hardware Trusted Platform Module - TPM 2.0
- User configurable L2 and L3 filters on IP/Port or MAC Address. Stateful inspection processing and filtering with new, established, or related operations. Quick access buttons for immediate config.
- QoS for optimized traffic management with user-configurable queues, filtering, and switching.

Regulatory Compliance & Certifications

- CE Mark, RoHS, WEEE, FCC Class A, UL
- Covered by one or more of the following Patents 9294434, 9391881, 9876757, 10154005, 10469444, 10659430 and other patents pending

To learn more, contact your IPTL Representative, Authorized Reseller, or Sales Agent or visit our Web site at www.IpTechnologyLabs.com

IP Technology Labs

Network Communications Simplified™

1201 S. Sharp St #303
Baltimore Maryland USA 21230
T: +1 301 570 6611
F: +1 301 570 8049
W: http://IpTechnologyLabs.com
E: sales@IpTechnologyLabs.com