TREND MICRO™

Trend Micro™
TippingPoint™ Threat Protection System Family

Real-time detection, enforcement, and remediation without compromising security or performance

Your organization is in the constant shadow of evolving and sophisticated cyber threats. In some cases, these threats are not only more complex than those of the past, but they are also targeted and rely on newly discovered vulnerabilities or exploits. In other cases, threats take advantage of older vulnerabilities that you thought were long forgotten. Safeguarding your network assets and data from such risks involves detailed visibility into all your network layers and resources. It requires comprehensive, up-to-date security intelligence and a dynamic approach that uses awareness and automation to adapt to new threats, new vulnerabilities, and everyday network changes.

These vastly different threats require a multi-pronged approach to security. Your organization benefits from robust security solutions at the edge of, and inside, your networks. This prevents malicious attacks from getting to critical resources. Comprehensive threat intelligence protects your environment against known, unknown, and undisclosed vulnerabilities.

Trend Micro™ TippingPoint™ Threat Protection System (TPS) is a powerful network security platform that delivers comprehensive threat protection against known and undisclosed vulnerabilities with high accuracy. TippingPoint TPS provides your organization with industry-leading coverage across different threat vectors with extreme flexibility and high performance, keeping you resilient against advanced threats like malware and phishing. The TippingPoint TPS uses a combination of technologies--including deep packet inspection, threat reputation, URL reputation, and advanced malware analysis on a flow-by-flow basis– to detect and prevent attacks on your network. The TippingPoint TPS enables your teams to take a proactive approach to security, providing you with comprehensive contextual awareness and deeper analysis of network traffic. This complete contextual awareness, combined with the threat intelligence from Trend Micro™ TippingPoint™ Digital Vaccine™ (DV) threat intelligence provides the visibility and agility necessary to keep pace with today's dynamic, evolving enterprise and data center networks.

Key Features

TippingPoint Threat Protection Extended to the Cloud: Trend Micro™ Cloud Network Protection, powered by TippingPoint, is a robust, inline security solution that allows your enterprise to extend your existing TippingPoint network protection to your hybrid cloud environments. Offering comprehensive threat protection–including virtual patching, shielding against vulnerabilities, blocking exploits, and defending against known and zero-day attacks with high accuracy–you get industry-leading coverage across multiple threat vectors. Apply your TippingPoint security controls and policies to your cloud environments via your existing Security Management System (SMS).

On-Box SSL Inspection: Sophisticated and targeted attacks are increasingly using encryption to evade detection. TippingPoint TPS reduces your security blind spots created by encrypted traffic with on-box SSL inspection.

Performance Scalability: The increase in data center consolidation and proliferation of cloud environments requires security solutions that can scale as network demands increase. TippingPoint TPS delivers unprecedented security and performance for your high-capacity networks. This includees a scalable deployment model, featuring the industry's first 40 Gbps next-generation intrusion prevention system (NGIPS) in a 1U form factor--with the ability to scale up to 120 Gbps aggregate in a 3U form factor.

Flexible Licensing Model: Easily scale performance and security requirements with a pay-as-you-grow approach and flexible licenses that can be reassigned across TippingPoint TPS deployments without changing your network infrastructure.

NetSec ✅ **PEN**
Certified

Certified by NetSecOpen for powerful performance capabilities and a verified 100% block rate against the public and private CVE lists

Gartner®

Ranked #1 in Gartner IDPS Market Share worldwide @ 23.5% share

Market Share: Enterprise Network Equipment by Market Segment, Worldwide, 4Q20 and 2020, Christian Canales, Naresh Singh, Joe Skorupa, Gartner (March 2021)

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Leader in global vulnerability research and discovery since 2007

" Trend Micro™ Deep Discovery™ was a no brainer. It outperformed all competitors and was well-respected by Gartner™. When Trend Micro purchased TippingPoint, we knew we had the best of both worlds. "

Frank Bunton,
Vice President and CISO, MedImpact

MedImpact

Real-Time Machine Learning: Many security threats are short-lived and constantly evolving, at times limiting the effectiveness of traditional signature and hash-based detection mechanisms. TippingPoint TPS uses statistical models, developed with machine learning techniques, so you can detect and mitigate threats in real time.

Enterprise Vulnerability Remediation (eVR): Quickly remediate vulnerabilities by integrating third-party vulnerability assessments with the TippingPoint solution portfolio. Your team can pull in information from various vulnerability management and incident response vendors (Rapid7, Qualys, Tenable) to map Common Vulnerabilities and Exposures (CVE) to TippingPoint DV filters and act accordingly.

Advanced Threat Analysis: Extend protection from unknown threats through integration with Trend Micro™ Deep Discovery™ Analyzer. TippingPoint TPS pre-filters known threats, forwards potential threats for automated sandbox analysis, and remediates in real time upon confirmation of malicious content.

High Availability: Ideal for inline deployment, TippingPoint TPS provides you with multiple fault-tolerant features, including hot swappable power supplies, watchdog timers to continuously monitor security and management engines, built-in inspection bypass, and zero power high availability (ZPHA). In addition, you can provision TippingPoint TPS using redundant links in a transparent active-active or active-passive high availability (HA) mode.

Integrated Advanced Threat Prevention: TippingPoint TPS integrates with Deep Discovery advanced threat detection solutions.

Asymmetric Traffic Inspection: Traffic asymmetry is widespread and pervasive throughout enterprise and data center networks. To fully protect your networks, you must overcome challenges from both flow and routing asymmetry . By default, TippingPoint TPS inspects all types of traffic, including asymmetric traffic, and applies security policies to ensure comprehensive protection.

Agility and Flexibility: TippingPoint TPS embraces software-defined network protection by deploying an intrusion prevention system (IPS) as a service. TippingPoint TPS also protects virtualized applications from within your virtualized infrastructure (VMware, KVM).

Best-in-Class Threat Intelligence: Trend™ Research provides cutting-edge threat analysis and security filters that cover an entire vulnerability to protect against all potential attack permutations, not just specific exploits. In addition, you have exclusive access to vulnerability information from our Trend Micro™ Zero Day Initiative™ (ZDI)—for advanced zero-day threat protection. The ZDI is the largest vendor-agnostic bug bounty program. With more than 1,604 vulnerabilities published in 2020, TippingPoint customers are protected an average of 102 days ahead of a vulnerability being patched by the affected vendors.

Virtual Patching: Leverage a powerful and scalable frontline defense mechanism that protects your network from known threats. Vulnerability-based filters provides your team with an effective barrier from all attempts to exploit a particular vulnerability at the network level—rather than the end-user level. This helps you gain control of your patch management strategy with pre-emptive coverage between the discovery of a vulnerability and the availability of a patch, as well as added protection for legacy, out-of-support software.

Support for a Broad Set of Traffic Types: The TippingPoint TPS platform supports a wide variety of traffic types and protocols. It provides uncompromising IPv6/v4 simultaneous payload inspection and support for related tunneling variants (4in6, 6in4, and 6in6). It also supports inspection of IPv6/v4 traffic with VLAN and MPLS tags, mobile IPv4 traffic, GRE and GTP (GPRS tunneling), and jumbo frames. This breadth of coverage gives your IT and security administrators the flexibility to deploy protection wherever it is needed.

Centralized Management: The Trend Micro™ TippingPoint™ Security Management System (SMS) delivers a unified policy and element management graphical user interface. This provides you with a single mechanism for monitoring operational information, editing network security policies, configuring elements, and deploying network security policy across your entire infrastructure, whether physical or virtual.

Key Benefits

Pre-emptive threat prevention

TippingPoint TPS, deployed inline, inspects and blocks all directions of traffic (inbound, outbound, and lateral) in real time, protecting your environment against known, unknown, and undisclosed vulnerabilities.

Threat insight and prioritization

Visibility and insight are crucial to making the best security policy decisions. TippingPoint TPS delivers complete visibility across your network and provides you with the insight and context needed to measure and drive threat prioritization.

Real-time enforcement and remediation

Defend your network from the edge to the data center and the cloud with real-time, inline enforcement and automated remediation of vulnerable systems.

TippingPoint TPS achieves a new level of inline, real-time protection, so you have proactive network security for today's and tomorrow's real-world network traffic and data centers. The Threat Suppression Engine (TSE) architecture performs high-speed, inline deep packet traffic inspection, and the purpose-built appliance's modular design enables the convergence of additional security services.

Operational simplicity

With flexible deployment options that are easy to set up and manage through a centralized management interface, you're given immediate and ongoing threat protection with out- of-the-box recommended settings.

TippingPoint TPS Technical Specifications

FEATURES	1100TX (TPNN0321)	5500TX (TPNN0322)	8200TX (TPNN0090)	8400TX (TPNN0091)
Supported IPS Inspection Throughput	250/500 Mbps/1 Gbps	1/2/3/5 Gbps	3/5/10/15/20/30/40 Gbps	
SSL Inspection(2K Keys with ECDHE-RSA-AES256-GCM-SHA384)	Not available	Up to 3.5 Gbps (capped by IPS inspection throughput)	Up to 8 Gbps (capped by IPS inspection throughput)	
New SSL Connections per Second	Not available	3,500	7,000	
SSL Concurrent Connections	Not available	80,000	100,000	
Latency	<100 µs	<60 µs	<40 µs	
Concurrent Sessions	15,000,000	30,000,000	120,000,000	
New Connections per Second	100,000	400,000	650,000	
MTBF (Mean Time Between Failures)	93,177 hours @ 25°C ambient	75,660 hours @ 25°C ambient	88,706 hours @ 25°C ambient	
Form Factor	1RU			2RU
Weight	14.5 lb (6.58 Kg)	17.5 lb (7.94 Kg)	32 lb (max including IOMs) 29 lbs (w/ blank IOMs)	50 lb (max. including IOMs) 41.5 lb (w/ blank IOMs)
Dimensions (W x D x H)	18.54" (W) x 17.90" (D) x 1.73" (H) 47.09 cm x 45.47 cm x 4.40 cm		16.78" (W) x 17.3" (D) x 1.72" (H) 42.62 cm x 45.00 cm x 4.40 cm	16.77" (W) x 18.70" (D) x 3.46" (H) 42.60 cm x 47.50 cm x 8.80 cm
Management Ports	One out-of-band 10/100/1000 RJ-45, one RJ-45 serial			
Management Interface	SMS, local web console, command-line, SNMPv2c, SNMPv3 (TippingPoint MIB available)			
Network I/O Module Slots	1	2	2	4
Network Connectivity	Mix of modules listed below			
On-Box Storage	8 GB internal CFAST / 8 GB external 1.8" SSD	32 GB Internal CFAST / 32 GB External 1.8" SSD	32 GB hot-swappable 1.8" SSD module	
Voltage	100-240 VAC, 50-60 Hz		100 to 240 VAC/-40 to -60 VDC	
Current (max. fused power)	4-2 A		12/6 amps AC, 24/16 amps DC	
Max. Power Consumption	130 W (443 BTU/hour)	220W (751 BTU/hour)	550 W (1,875 BTU/hour)	750 W (2,557BTU/hour)
Power Supply	Single field replaceable	Dual/ redundant hot-swappable/field replaceable	Dual/redundant hot-swappable	
Operating Temperature	32°F to 104°F (0°C to 40°C)			
Operating Relative Humidity	5% to 95% non-condensing			
Non-Operating/Storage Temperature	-4°F to 158°F (-20°C to 70°C)			
Non-Operating/Storage Relative Humidity	5% to 95% non-condensing			
Altitude	Up to 10,000 feet above MSL (3,048 m)			
Safety	UL 60950-1, IEC 60950-1EN 60950-1,CSA 22.2 60950-1RoHS compliance			
EMC	Class A, FCC, VCCI, KC EN55022, CISPR 22, EN55024 CISPR 24, EN61000-3-2 EN61000-3-3, CE marking			

Cloud Network IPS Technical Specifications

AMAZON WEB SERVICES (AWS) INSTANCE TYPE	C5.2XLARGE	C5.9XLARGE AND F1.2XLARGE
IPS Inspection Throughput	2.5 Gbps	Up to 10 Gbps*
Latency	<100 µs	
Concurrent Connections	7.5M	12M
New Connections per Second	75,000	100,000

*AWS infrastructure may restrict sustained throughput rates to lower amounts. This is specific to the Amazon Elastic Compute Cloud (EC2) instance type. For more information, please contact AWS. Note: we test using our recommended default policy with representative traffic mixes. Your deployment may vary—infrastructure changes, policy, or changes from the representative traffic mix may impact your results. Additionally, your EC2 instance type may enforce sustained throughput restrictions.

vTPS Technical Specifications

FEATURES	VTPS STANDARD	VTPS PERFORMANCE
Supported IPS Inspection Throughput	250 Mbps/500 Mbps/1 Gbps (VMware, KVM), 2 Gbps (VMware)	
SSL Inspection	Not available	1 Gbps (VMware), 900 Mbps (KVM)
SSL Connections per Second	Not available	1500 (VMware), 900 (KVM)
SSL Concurrent Connections	Not available	6500 (VMware, KVM)
Number of Logical Cores	2 or 3	4
Memory	8 GB	16 GB
Disk Space	16 GB	
IPS Connections per Second	120,000 (VMware), 60,000 (KVM)	
IPS Concurrent Connections	10,000,000 (VMware), 1,000,000 (KVM)	
Virtual Platform Support	VMWare ESXi 5.5, 6.0, 6.5, 6.7 (NSX is not required for transparent inspection and enforcement) & KVM – Redhat Enterprise Linux 6, 7	
Network Drivers	VMware- VMNet3 KVM- virtIO	
Number of Network Segments	1	
Number of Virtual Segments	No limit	
Dedicated Management vNIC	Yes	

TippingPoint I/O Modules

TIPPINGPOINT IO MODULE DESCRIPTION	PRODUCT SKU
TippingPoint IO Module: 6-segment Gig-T Rev B	TPNN0196
TippingPoint IO Module: 6-segment GbE SFP	TPNN0068
TippingPoint IO Module: 4-segment 10 GbE SFP+	TPNN0060
TippingPoint IO Module: 1-segment 40 GbE QSFP+	TPNN0069
TippingPoint IO Module: 4-segment Gig-T Bypass	TPNN0070
TippingPoint IO Module: 2-segment 1 G Fiber SR Bypass	TPNN0071
TippingPoint IO Module: 2-segment 1 G Fiber LR Bypass	TPNN0072
TippingPoint IO Module: 2-segment 10 G Fiber SR Bypass	TPNN0073
TippingPoint IO Module: 2-segment 10 G Fiber LR Bypass	TPNN0074
TippingPoint IO Module: 1-segment 40GbE LR4 Bypass	TPNM0132
TippingPoint IO Module: 1-segment 40GbE SR4 Bypass	TPNM0131

For more information, please visit
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