

Sandvine Policy Traffic Switch 14000

Your Platform for Network Policy Control

Sandvine is dedicated to building solutions that allow today's fixed and mobile data service providers to increase network profitability while improving the quality of experience (QoE) for the Internet subscriber.

The Policy Traffic Switch (PTS) platform is a key component of the network policy control strategy for many of the world's most successful broadband service providers.

Customers worldwide have selected Sandvine's PTS platform for its consistent architecture, reliability, and industry-leading port-density - all of which contribute to a low total cost of ownership (TCO).

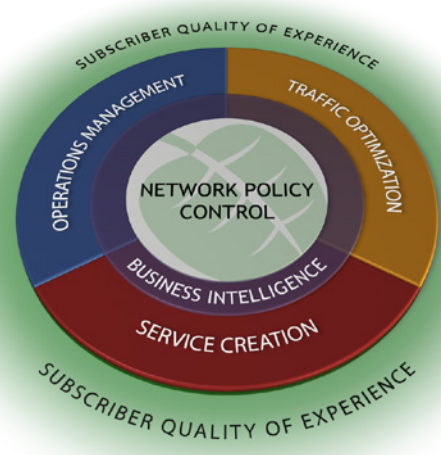
The Policy Traffic Switch leverages a powerful array of technology features that combine to address specific problems faced by today's service providers, including:

- Subscriber Awareness - true subscriber awareness, even with multiple IP addresses spread across many devices
- Traffic Identification - accurate, application-aware, traffic identification in any routing environment
- Policy Decision - identification of network conditions and real-time rule evaluation to make policy decisions locally
- Policy Enforcement - broad range of actions to define and enforce your network policies
- Any Access - deploy anywhere, regardless of what last-mile technologies your network uses
- Smart Scalability - linear scaling and seamless clustering up to 480 Gbps
- Safe Switching - ensures traffic flow continues, even if operating parameters are exceeded
- Partner Enablement - proven Solutions Partner Ecosystem integration simplifies value-added service deployment

Together, these features provide a powerful toolset which supports deployment of traffic optimization, service creation and deployment, operations management, and business intelligence solutions, and have helped the Policy Traffic Switch become the industry's most widely deployed network intelligence platform.

Sandvine PTS 14000

With intersection throughput of 20 Gbps per unit, the PTS 14000 is perfectly suited for subscriber edge or aggregation layer deployments in larger networks. Whether a service provider is operating in an emerging market where sustainable growth is the primary issue, or fighting in a competitive landscape where rapid innovation is the key to success, the PTS 14000 is the platform that can take the network to the next level.



Key Benefits

- Low lifetime Total Cost of Ownership through operational stability, architectural consistency and port density
- Innovative clustering enables linear scaling
- Unsurpassed application identification, even in asymmetric environments, means you can manage traffic confidently
- Subscriber awareness ensures accurate billing and network usage statistics
- Integration with Solutions Partner Ecosystem for simplified deployment of new value-added services

Technical Details and Specifications

The Policy Traffic Switch platform is a highly scalable network element that enables Sandvine's full suite of network policy control solutions. With stateful traffic identification, subscriber-awareness, standards-based interfaces and the broadest range of policy management options available, the PTS lets service providers protect or enhance subscriber quality of experience while simultaneously achieving business and operational objectives.

PTS 14000 Performance

The following table provides performance metrics under typical network conditions. Actual inspection throughput performance may vary based upon the software licenses and policies enabled, and deployment characteristics.

	Cluster (exclusively PTS 14000)	PTS 14500	PTS 14200
Maximum Intersection Throughput	160 Gbps	20 Gbps	8 Gbps
Maximum Inspection Throughput	148 Gbps	18.5 Gbps	7.4 Gbps
Maximum New Flows per Second	4 M	500 K	100 K
Maximum Concurrent Flows	120 M	15 M	6 M
Maximum Subscribers	5 M	1 M	400 K
Typical Power Consumption	9600 W	1200 W	600 W
Maximum Power Consumption	12000 W	1500 W at 100 V	1500 W at 100 V
	11520 W	1440 W at 120 V	1440 W at 120 V
	13440 W	1680 W at 240 V	1680 W at 240 V

PTS 14000 Port and Interface Options

The PTS 14000 is available with 10 GE or 1 GE data ports and cluster ports. Cluster ports can also be used to integrate with third-party equipment, including solutions ecosystems partners.

		PTS 1452x	PTS 1451x	PTS 1421x
Data Ports	1 GE	---	8 or 12*	8 or 12*
	10 GE	2	---	---
Cluster Ports	1 GE	4*	8*	8*
	10 GE	6	2	2

*Requires Quad Expander card

A variety of interface options are available, listed below.

1 GE	Copper	10/100/1000T
	Optical	
		LX (SM)
		ZX (SM)
10 GE	Optical	SR (MM)
		LR (SM)
		ER (SM)

Interface options

In addition to N:N+1 clustering and redundant/field-replaceable components, the PTS 14000 features an optional bypass module for power failures and major system events.

Certifications and Approvals

The PTS 14000 is NEBS Level 3 certified. Product Safety and EMC approvals are available upon request.

External Interface Specifications

The PTS 14000 offers a broad range of standards-based interfaces:

- RADIUS interface to AAA, DHCP, LDAP systems
- IETF standard-compliant alarm MIBs to Network Operations Center
- 3GPP standard-compliant Gx interface to Policy and Charging Rules Function (PCRF)*
- 3GPP standard-compliant Gy interface to Online Charging Systems (OCS)*
- Support for mobile data intersection for 3GPP Gn, Gi, Gp, S5, S8, S2
- Support for mobile data intersection for 3GPP2 Pi, PDN
- Usage Data Records (UDR) to Offline Charging Systems (OFCS)*
- SOAP and SQL interface, CSV files to external reporting and Operations Support Systems (OSS)*

*Requires separate license

PTS 14000 Physical Specifications

- Dimensions: 432 mm x 177.8 mm x 584.2 mm / 17" x 7" x 23" (Width x Height x Depth)
- Mounting: Standard 19" rack (4 RU)
- Weight: 34 kg / 77 lbs
- Power Supply: AC 100-240 V or DC 42-60 V input