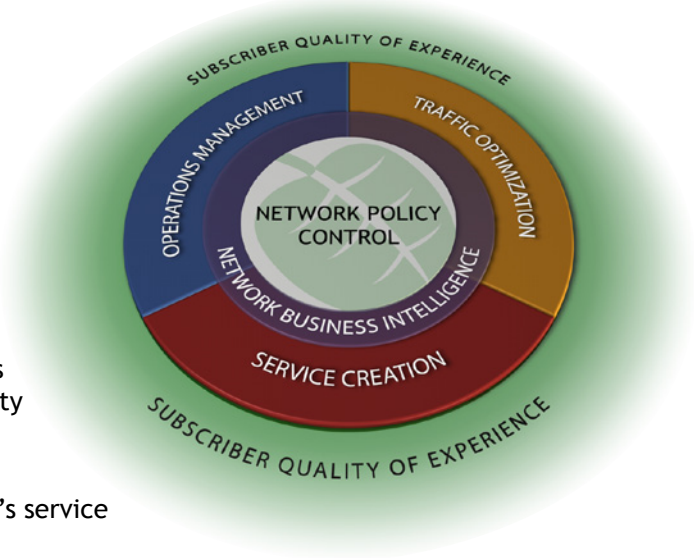
sandvine
Intelligent Broadband Networks

Sandvine Policy Traffic Switch 24000

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 24000

With intersection throughput capacity of 80 Gbps per unit and 480 Gbps per cluster, the PTS 24000 is ideally suited for large 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 24000 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 up to 480 Gbps
- 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 24000 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	PTS 24500	PTS 24300	PTS 24100
Maximum Intersection Throughput	480 Gbps	80 Gbps	80 Gbps	80 Gbps
Maximum Inspection Throughput	360 Gbps	60 Gbps	40 Gbps	27 Gbps
Maximum New Flows per Second	9 M	1.5 M	1 M	500 K
Maximum Concurrent Flows	270 M	50 M	25 M	15 M
Maximum Subscribers	5 M	5 M	2 M	1 M
Typical Power Consumption	11400 W	1900 W	1495 W	1284 W
Maximum Power Consumption	13200 W	2200 W	1700 W	1400 W

PTS 24000 Port and Interface Options

The PTS 24000 has two Ethernet interface blades available and two bypass blades. Any combination of these blades can occupy the two interface slots.

BLD 24010 (20 Gbps)		Interface Characteristics			BLD 24020 (40 Gbps)	
12 ports (cluster or data)	SFP	1 GE	Copper	10/100/1000T	SFP	8 ports (cluster)
			Optical	SX (MM)		
				LX (SM)		
				ZX (SM)		
	SFP+	10 GE	Optical	SR (MM)	SFP+	
				LRM (MM)		
				LR (SM)		
				ER (SM)		
2 ports (cluster or data)	XFP	10 GE	Optical	SR (MM)	SFP+	4 ports (data)
				LRM (MM)		
				LR (SM)		
				ER (SM)		

Interface blade options

BLD 24030	62.5 µm	MM	6 Link
BLD 24050	50 µm		
BLD 24040	9 µm	SM	
BLD 24032	62.5 µm	MM	2 Link
BLD 24052	50 µm		
BLD 24042	9 µm	SM	

Bypass blade options

The PTS 24000 also features N:N+1 clustering, dual console ports, dual management ports and redundant/field-replaceable components.

External Interface Specifications

The PTS 24000 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 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 24000 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: 35 kg / 77 lbs
- Power Supply: AC 100-240 V or DC 42-60 V input
- Temperature: 0˚C to +40˚C / +32˚F to +104˚F
- Humidity: 5% to 85% non-condensing

Certifications and Approvals

The PTS 24000 is NEBS Level 3 certified. Product Safety and EMC approvals are available upon request.

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