

PacketLogic™ 7000 Series Platforms

Up to 5 Gbps Subscriber Experience Intelligence and Policy Enforcement for Broadband Networks

Sandvine's PacketLogic software enables support for a full suite of network intelligence and policy enforcement use cases.

KEY SYSTEM BENEFITS

- Granular awareness for applications with superior accuracy using DRDL™
- Unsurpassed real-time visibility with LiveView™
- Flexible deployment options including support for asymmetric traffic through FlowSync™ and QueueSync™
- Up to 5 Gbps of Subscriber Experience Intelligence for all network access and core technologies

The PL7810 and PL7340 are ideal for network operators implementing congestion and traffic management at peering points or in their distributed access networks, as well as for higher education and enterprise networks. Their small form factor and low power requirements make it more easily deployable in decentralized networks than larger, more expensive chassis-based systems.

These compact (1RU) appliances offer a range of throughput speeds and capacities—from 1 Gbps to 5 Gbps of network traffic throughput accessible through either 2 x 1000Base-T channel fixed form factor (PL7340) platform or three fixed 1000BASE-T Ethernet channels and two expansion slots, which can be populated with either dual or quad channel gigabit expansion modules (PL7810). The interface expansion modules are available with or without integrated support for internal bypass configurations, allowing for flexible network redundancy deployments. Both platforms also support high-availability options, including configuration synchronization and clustering.

Designed for entry-level network deployments, the PL7000 platforms offer the performance and capacity to handle many different personalized services in a policy enforcement configuration. This enables growth without sacrificing service flexibility—removing limitations for subscriber provisioning, policy interactions, policy enforcement, charging, application identification, analytics, and congestion management that have constrained network services and profitability.

HIGH-VALUE USE CASES

Sandvine's PacketLogic software enables support for a full suite of network intelligence and policy enforcement use cases, including:

- Content-aware services
- Congestion management
- Traffic prioritization
- Attack Mitigation
- Statistics collection
- Volume-based shaping
- Application delivery networking via advanced traffic steering

PL7000 PLATFORM



POWERFUL ENFORCEMENT CAPABILITIES

The PL7000 platforms are turnkey hardware solutions optimized to support Sandvine's (PRE) PacketLogic Real-time Enforcer software, delivering unparalleled Subscriber Experience Intelligence with policy enforcement capabilities to enhance the subscriber experience.

Intelligence Center Key Features

- **REAL-TIME DYNAMIC LIVEVIEW QUERY ENGINE AND PACKETLOGIC CLIENT** enables sophisticated real-time forensics to manage Quality of Experience, Network Congestion, and Network Security issues.
- **DRDL™ (DATASTREAM RECOGNITION DEFINITION LANGUAGE)** processing to identify properties of individual session flows in real time, enabling operators to create and define services on-the-fly.
- **POLICY-BASED TRAFFIC MANAGEMENT CAPABILITIES**, including asymmetric traffic control, traffic shaping and filtering, traffic flow classification and prioritization, traffic monitoring and packet re-write.
- **ADVANCED PACKET QUEUING**, including parallel queuing to enable more flexible traffic management policies which ensure predictable delay and jitter enabling operators to meet their customers' QoE expectations.
- **STATISTICS GATHERING** for individual flows to enable real-time and historical reporting, including real-time Quality of Experience (QoE) updates.
- **CONTENT INTELLIGENCE** enables network operators, cloud providers, and high-speed enterprises to combine the policy management capabilities of PacketLogic with industry-leading URL content categorization functionality.
- **ADVANCED TRAFFIC STEERING** that combines PacketLogic Real-time Enforcer capabilities with Application Delivery Networking functionality to provide a single Application Delivery Controller solution with unmatched performance and scalability, enabling service chaining with subscriber, service plan, charging, and Layer 7 awareness.
- **EVENT BASED TRIGGERS** that automatically change policy in response to specified real-time network traffic conditions by dynamically enabling DoS/DDoS connection limits, traffic shaping or filtering.
- **BGP INTEGRATION** enables Peering and CDN visibility, including QoE metrics Support for Origin-AS and Transit analysis.

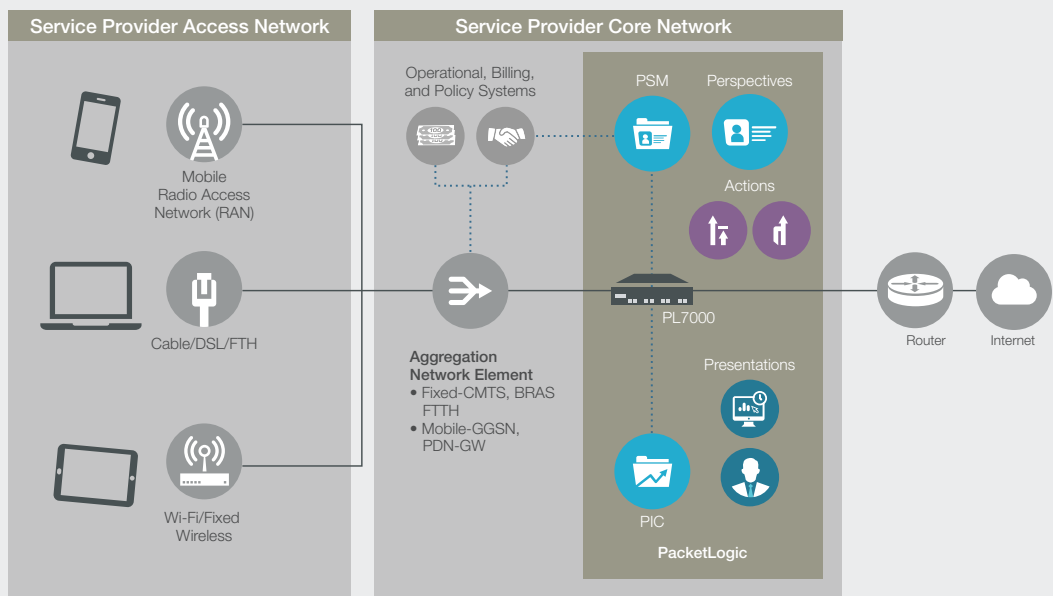
NETWORK INTEGRATION

The PL7000 tightly integrates with other PacketLogic software within the operator's core network to deliver analytics and enforcement solutions.

- **ACTIONS** are run directly on the PL7000 to perform intelligent policy enforcement. Congestion Management, Filtering, and Traffic Steering. In a mobile policy environment, the PL7000 acts as a 3GPP Policy and Charging Enforcement Function (PCEF)
- **PERSPECTIVES** integration to support powerful intelligent policy enforcement at the different subscriber, location, or other Perspective levels. The PL7000 gleans subscriber information during login to dynamically create policies, traffic control, or service packages for each user on the network. Other Perspectives enable fine-grained visibility and control for individual locations, content types, devices, etc.
- **INSIGHTS** to provide rich intelligence and analytics visualization for networks, subscribers, devices, and application performance. The network intelligence gathered by deployed PL7000s enables operators to make informed business decisions on network conditions, congestion management, and innovative new services.

Figure 1

TYPICAL PACKETLOGIC DEPLOYMENT



PL7000 SERIES SPECIFICATIONS



	PL7340	PL7810
Connections	400,000 ¹	2,000,000 ¹
Connections/sec	20,000 ¹	100,000 ¹
Throughput	1 Gbps ¹	5 Gbps ¹
Subscribers	20,000 ¹	100,000 ¹
Management Interfaces	2 x 1000Base-T	2 x 1000Base-T
Max # of Channels	2 x GE	11 x GE
Physical Interfaces	1000Base-T	1000Base-T, 1000Base-SX, 1000Base-LX
Console Port	RJ-45 Console	RJ-45 Console
Redundancy	Bypass, FlowSync	Bypass, FlowSync
Bandwidth Licensing	10 and 100Mbps increments	10, 100Mbps and 1 Gbps increments
Network Intelligence	Intelligence Center	Intelligence Center
Subscriber Management	Subscriber Manager	Subscriber Manager
Hardware	1 rack unit (RU), 19" rack-mounted	1 rack unit (RU), 19" rack-mounted
Components	Appliance, 2 x 1000Base-T channels fixed form factor	Appliance, 3 x 1000Base-T channels fixed form factor with 2 additional I/O module expansion slots
Size	1.7" (h) x 17" (w) x 12.56" (d) / 4.4cm (h) x 42.6cm (w) x 31.9cm (d)	1.7" (h) x 17" (w) x 19.6" (d) / 4.4cm (h) x 44.0cm (w) x 49.9cm (d)
Weight	9.9 lbs/4.5 kg	22 lbs/10 kg
Power	Wattage: 100W; Voltage: 100-240 VAC; Frequency: 50-60Hz; Current: 1-0.40A	Wattage: 250W; Voltage: 100-240 VAC or 36-72 VDC; Frequency: 50-60Hz; Current: 5A-2.5A
Environmentals	Temperature: Operating: 0°C to 40°C; Storage: -20°C to 80°C; Operating humidity: 5% to 85% (non-condensing)	Temperature: Operating: 0°C to 40°C; Storage: -20°C to 75°C; Operating humidity: 5% to 85% (non-condensing)

¹ Depending on configuration/features used

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ABOUT SANDVINE

Sandvine helps organizations run world-class networks with Active Network Intelligence, leveraging machine learning analytics and closed-loop automation to identify and adapt to network behavior in real-time. With Sandvine, organizations have the power of a highly automated platform from a single vendor that delivers a deep understanding of their network data to drive faster, better decisions. For more information, visit sandvine.com or follow Sandvine on Twitter at [@Sandvine](https://twitter.com/Sandvine).



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