

NEOXPacketLion NX-PBPL-1SC

EFFICIENT MONITORING OF SEVERAL 1G/10G LINES WITH YOUR 10M-10G ANALYSIS AND SECURITY TOOLS



NX-PBPL-1SC

Network Packet Brokers, also called Data (Network) Monitoring Switches, help you to intelligently manage your passively tapped network data and - through innovative technology - provide the analysis tools with the data packets reliably and in optimised form.

In the world of the Internet of Things (IoT), the Internet of Medical Things (IoMT), and Operational Technology (OT), managing and securing networks of numerous low-rate devices presents unique challenges for which the NX-PBPL-1S2 can provide an essential addition to existing monitoring tools.

PacketLion NX-PBPL-1SC built on the advanced Trident 3 switch offers high-density form factor and robust functionality. NX-PBPL-1SC supports a wide range of connection rates, from 10/100/1000BASE-T Copper to 10G Fiber.

Additionally, it features advanced capabilities such as GRE/VXLAN Termination, Nanosecond Timestamping and Packet Slicing for optimized data processing.

By filtering out the data with hardware-based filtering mechanisms before it is routed out, this allows you to evaluate multiple 10G lines with existing 1G analysis tools, for example, while reducing the amount of data for hassle-free and secure analysis.

Data that is not of interest is either discarded or sent to other tools for further analysis.

KEY FEATURES

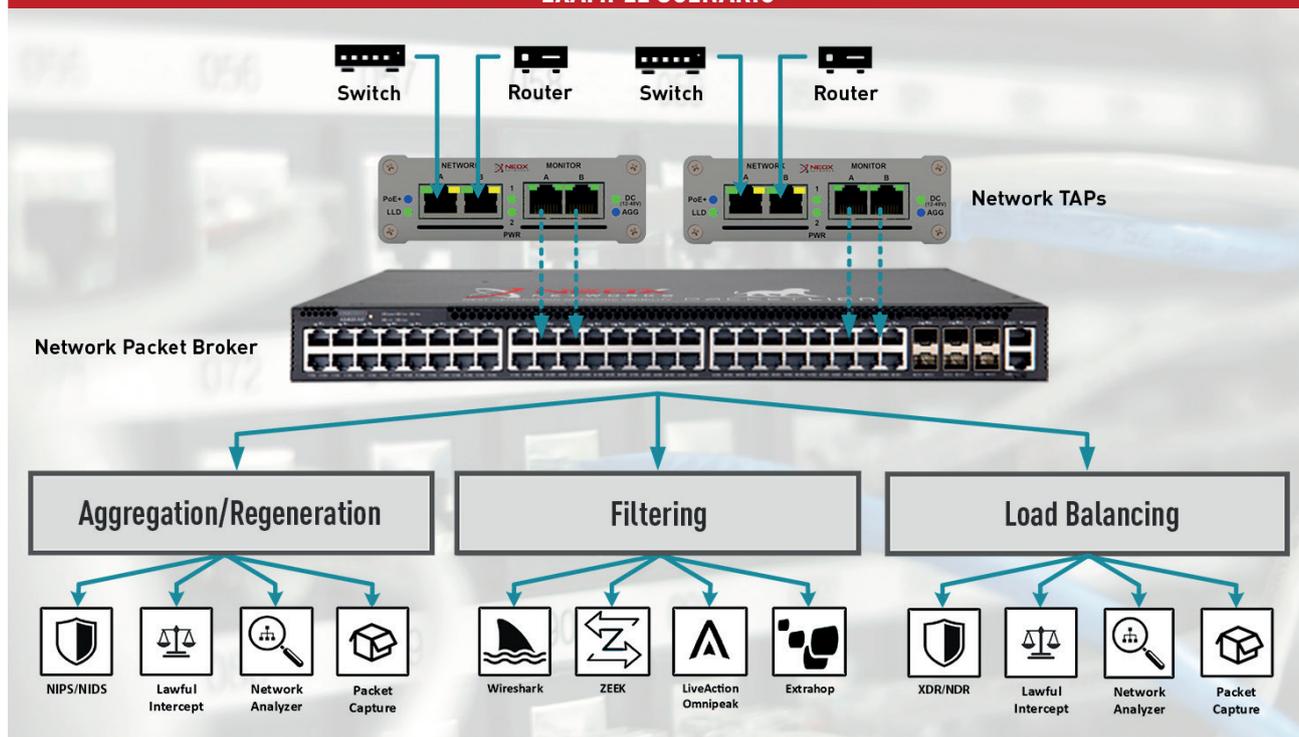
- 48x 10/100/1000 Mbps RJ45 and 6x 1/10 Gbps SFP+
- Flexible Port Assignment (1:1, N:N, N:1, 1:N)
- Aggregation, L2-L4 including 5-tuple Filtering, L2GRE/VXLAN Tunnelling/Termination, Slicing
- TRIDENT 3 platform with 216GBps capacity and 4MB Buffer Size
- Full range of rates supported in a 1U platform: 10/100/1000Mbps, 1G/10G
- Non-blocking backplane architecture with N+1 redundancy
- Line rate performance without packet loss
- Stacking of multiple Network Packet Brokers
- Service/Tool chain for Inline tools use cases
- Nanosecond Timestamping
- Support for L2GRE tunnelling protocol and filtering within a tunnel (GTP, L2TP, MPLS, GRE, VxLAN, etc.)
- Load distribution based on 5-tuple criteria
- Port Splitting (Simplex Mode), Port Labeling
- Support for Jumbo Frames
- MAC Replace and Packet Slicing
- Support for VXLAN interfaces
- Support for filter rules (MAC, VLAN, IPv4/IPv6, TCP/UDP, DSCP, TCP flags, MPLS, Ingress, Egress)
- Management Ports: 1x RJ-45 serial console, 1x RJ45 100/1000Base-T
- Enhanced productivity with Drag & Drop Filter Editor
- Unified management including CLI, SNMP, WEB UI, Net CONF and REST API
- Radius and TACACS+



FEATURES

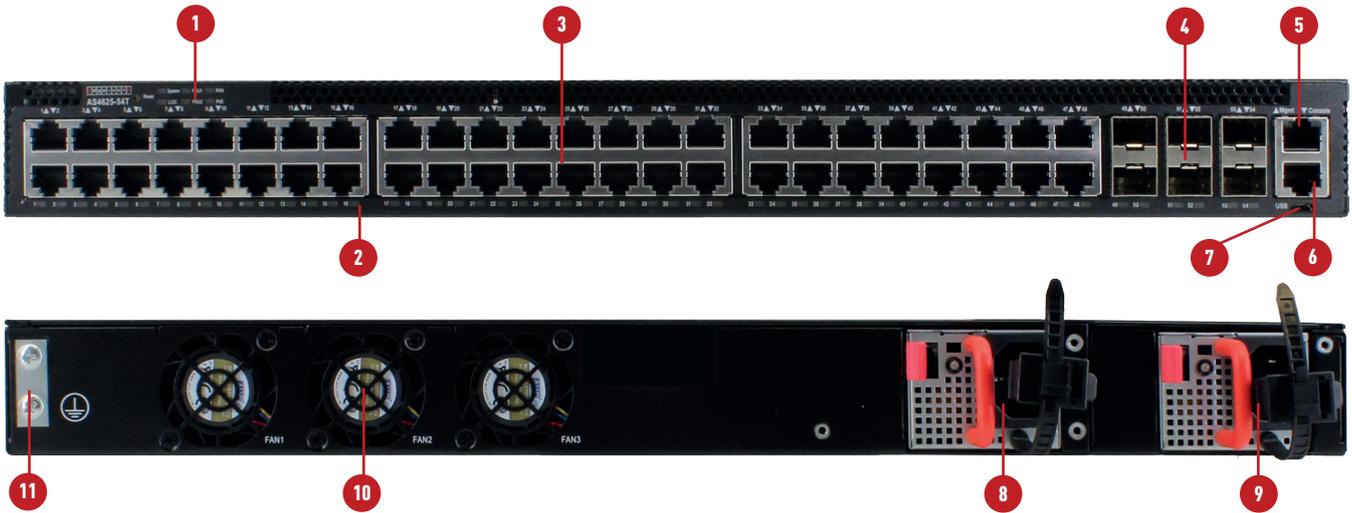
- Aggregation** - Aggregate and redirect network traffic on all rates for further processing. One-to-One, One-to-Many, Many-to-Many
- Replication** - Enable multiple tools to analyse the same traffic. Replication is supported according to the maximum ports on the device.
- Inner Tunnel Filtering** - Filtering according to Inner tunnel parameters of MPLS, GTP, L2TP, GRE, PPPoE, VXLAN
- Filtering** - Filtering out unnecessary network traffic with conditional L2-L4 including 5-tuple Filtering classifiers from any to any ports mapping
- Egress Filtering** - Second stage of filtering traffic before it is transmitted to the tools
- GRE/VXLAN Tunnelling** - Interconnect packet brokers across multiple sites with L2GRE/VXLAN protocol and tunnel stripping
- AND/OR/NOT Operators** - Simplify packet broker operation with logic filter actions
- Copy** - Enable orthogonal filter paths on the same traffic
- MAC Replace** - Enable device tracking, identification, or authentication by setting MAC address
- User Defined Filters** - Track packets that match a certain „window“ in the incoming traffic
- Load Balancing** - Maximize the return on tools by performing symmetric/asymmetric load balancing of network traffic to multiple tools with configurable hashing
- Port Labeling** - Add / Remove / Replace Tag to mark & track Ingress port or flow
- Timestamping** - Enhances network visibility with nanosecond time stamping capabilities
- Packet Slicing** - Improve monitoring and network data analysis performance by reducing packet size and maintaining the required packet slice for further processing
- Stacking** - Connecting multiple NPBs to operate as a single entity, resulting in increased capacity and redundancy in the visibility network.
- Reliability** - Hot/cold aisle with port-to-power and power-to-port airflow
- Redundancy** - Hot-swappable, load-sharing, redundant AC PSU and N+1 fan modules
- User Management** - Support both local and remote management with Radius and TACACS+
- Management** - Web UI, CLI, SNMP, NETCONF, REST API
- Support** - inclusive 1 year Silver Support

EXAMPLE SCENARIO



USE CASES

Aggregation of TAP/SPAN network traffic to a centralized location where tools are deployed	Regenerate network traffic to multiple tools
Replace MAC address to enable device identification, authentication, and tracking	Optimize tools performance by filtering network traffic
Small and medium Enterprises with dozens low-rate devices	Compliance for high frequency trading
Monitor and optimize 5G networks with nanosecond timestamping	



DESCRIPTION

1	System LEDs	5	1x RJ45 100/1000Base-T Management Port	9	PSU 2: 150W AC (80Plus Platinum compliant)
2	Port Indicators	6	1x RJ45 Serial Console Management Port	10	Fixed 2 + 1 redundant fans
3	48 x 10/100/1000M RJ45 Ports	7	Micro-USB Storage Port	11	Grounding Point
4	6x 1/10G SFP+ Ports	8	PSU 1: 150W AC (80Plus Platinum compliant)		

TECH SPECS

CHIPSET	DIMENSIONS (WxHxD) / RU	WEIGHT
Broadcom Trident 3 (BCM56277)	44.0 cm x 4.4 cm x 35.0 cm / 17.3" x 1.7" x 13.8" / 1RU	7.5 kg

POWER SUPPLY

AC input range: 100-240 VAC at 50-60 Hz. Maximum power consumption: 93.5 W, typical power consumption: 37.1 W

OPERATING TEMPERATURE	STORAGE TEMPERATURE	OPERATING HUMIDITY
0°C to 40°C / 32°F to 104°F	-40°C bis 70°C / -40°F to 158°F	5% to 95% non-condensing

CERTIFICATIONS

EN 55032 Class A / EN 61000-3-2 / EN 61000-3-3 / FCC Class A / VCCI Class A / CCC GB 9254-2008, Class A / BSMI Class A, CNS 13438 / IEC 61000-4-2/3/4/5/6/8/11 / EN 55024 / EN 55035 / UL (UL 62368-1 and CSA C22.2 No. 62368-1) / CB (IEC/EN 60950-1, IEC/EN 62368-1) / CCC GB4943.1-2011 / BSMI, CNS 14336-1

SKU	10/100/1000M	1G/10G
NX-PBPL-1SC	48x RJ45	6x SFP+



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