



NEOXPacketProcessor 200/400

FPGA-based Advanced Packet Processing Appliance



Thanks to its FPGA-based architecture, the NEOXPacketProcessor is the ideal platform for advanced packet processing of network data up to 400G.

Designed to take advantage of advanced features such as Deduplication, Header Stripping, Packet Slicing and more, the PacketProcessor serves as a complement to a Network Packet Broker, such as our NEOXPacketLion.

The traffic for processing usually comes from a Packet Broker, but can also originate from other sources and is sent back on the same port by the PacketProcessor after processing.

The processing of the network packets is done on the FPGA in hardware and is performed lossless up to 400Gbps by the PacketProcessor.

PRODUCT HIGHLIGHTS

Small form factor (1U)

Up to 4x 100G QSFP28 interfaces

Supports network data processing up to 400Gbps

FPGA design and low latency

Supports nanosecond accurate timestamping

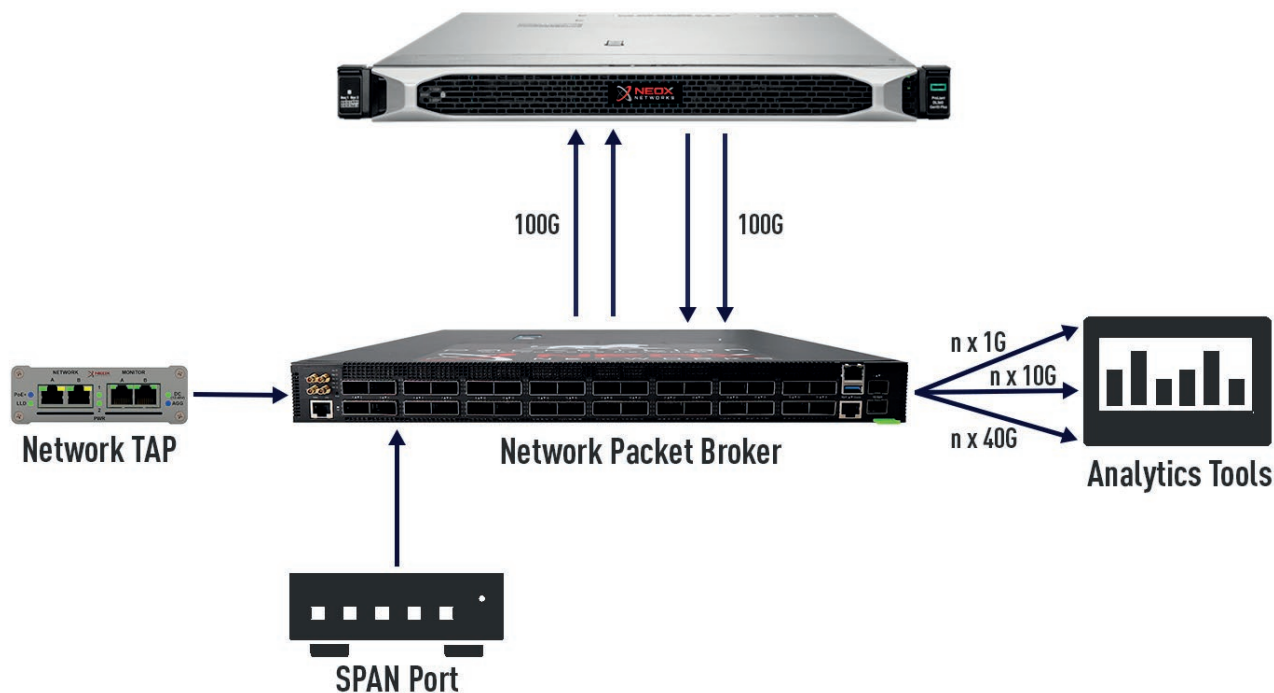
Scalable and easy commissioning

VALUE ADDED FUNCTIONS

Timestamping	A timestamp is applied to each processed packet with an accuracy of one nanosecond
Deduplication	Removal of duplicate packets with a programmable deduplication window from 1 millisecond to 250 milliseconds
Packet Slicing	Slicing of a packet to contain only the desired number of bytes or information, including a programmable number of bytes of offset
Netflow Export	Conversion of metadata and flow records to standard NetFlow formats such as NetFlow v5, v9, and IPFIX.
Deep Packet Inspection	DPI examines each flow to identify protocols and applications
Flow Shunting	A host application can make a decision to block specific IP flows via an API call based on DPI results.
Flow Mapping	A host application can forward traffic flows (by adding VLAN tags) to specific analysis tools based on the DPI results
Protocol Header Stripping	Remove protocol headers (e.g., VXLAN, MPLS) and extract IP packet payloads for the benefit of analysis tools that cannot process them
Packet Masking	Overwrite personally identifiable information (PII) such as credit card numbers, passwords and the like
Regex Matching	A method for finding and matching text patterns in packet data streams
GTP Filtering	Filtering of GTP packets by message type (e.g., mobility management, tunnel management, etc.)
GTP Correlation	Monitoring traffic in a GTP tunnel while simultaneously matching and correlating all identified subscriber control and data sessions

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NEOXPacketProcessor
offers the following additional functions such as:
Deduplication, Header Stripping, Packet Slicing



TECHNICAL SPECIFICATIONS & ARTICLE NUMBERS

HARDWARE

- 2x XEON Silver processors
- 1/10G LAN management port
- Redundant and hot-plugable AC power supplies
- 64GB DDR4 RAM
- 2x 500GB SSD storage for the operating system

POWER SUPPLY

- Input: 100 to 120 VAC - or - 200 to 240 VAC
- 2 power supply units with 500W each
- Output: 500W each at 100 VAC or 240 VAC

OPERATING TEMPERATURE

10° to 35° C (50° to 95° F) at sea level

RELATIVE HUMIDITY

Operating	8% to 90% relative humidity (Rh), 28°C (82.4°F) maximum temperature, non-condensing
Non-operating	5% to 95% relative humidity (Rh), 101.7°F (38.7°C) maximum temperature, non-condensing

ARTICLE NUMBER	DESCRIPTION	DIMENSIONS (HxWxD)	WEIGHT
NX-PP-200	2x 100G QSFP28 interfaces with 200G data throughput	4.29 x 43.46 x 70.7 cm	16.27 kg
NX-PP-400	4x 100G QSFP28 interfaces with 400G data throughput	1.69 x 17.11 x 27.83 in	28.74 lb