NEOX NETWORKS
NEXT GENERATION NETWORK VISIBILITY

NEOXPacketHawk - Intelligent Inline Bypass TAP

10G/40G/100G | Modular Chassis | Service Chaining | Filtering Support

PACKETHAWK

A Network Bypass TAP/Switch is essential for maintaining uninterrupted connectivity and ensuring seamless network operations. It serves as a fail-safe mechanism in case of equipment failures or maintenance activities, allowing traffic to continue flowing without disruption.

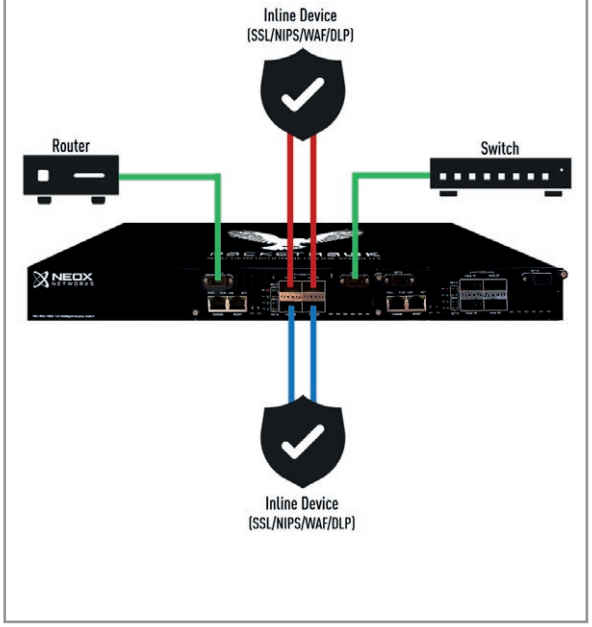
Additionally, it provides the flexibility to reroute traffic for security monitoring or analysis purposes without impacting network performance.

In essence, investing in a network Bypass TAP is crucial for enhancing reliability, security, and operational efficiency in any network infrastructure.

PRODUCT HIGHLIGHTS

Supports 10G/40G/100G networks
Supports 2 Inline devices on a single network line
Heartbeat packet: ICMP, IPX, UDP, firewall support
Network and Inline port health check, speed and duplex monitoring
6 bypass modes: automatic, semi-automatic, force inline, force bypass, separate TAP, aggregate TAP
Console, Telnet, SSH, HTTP, HTTPS interfaces
Link Loss Detection (LLD) behaviour in the event of a network connection failure
Redundant bypass behaviour in the event of a bypass TAP failure: active bypass, passive bypass
Supports TAP mode: assign network A, network B traffic as required
Supports mirror mode: mapping of Inline 1 to Inline 2, Inline 2 to Inline 1 port traffic
Filtering by Inline port IP, port: include or exclude
Syslog support (registration of up to 5 Syslog servers)
Supports ACL (Access Control List) policies for the management port

EXAMPLE SCENARIO



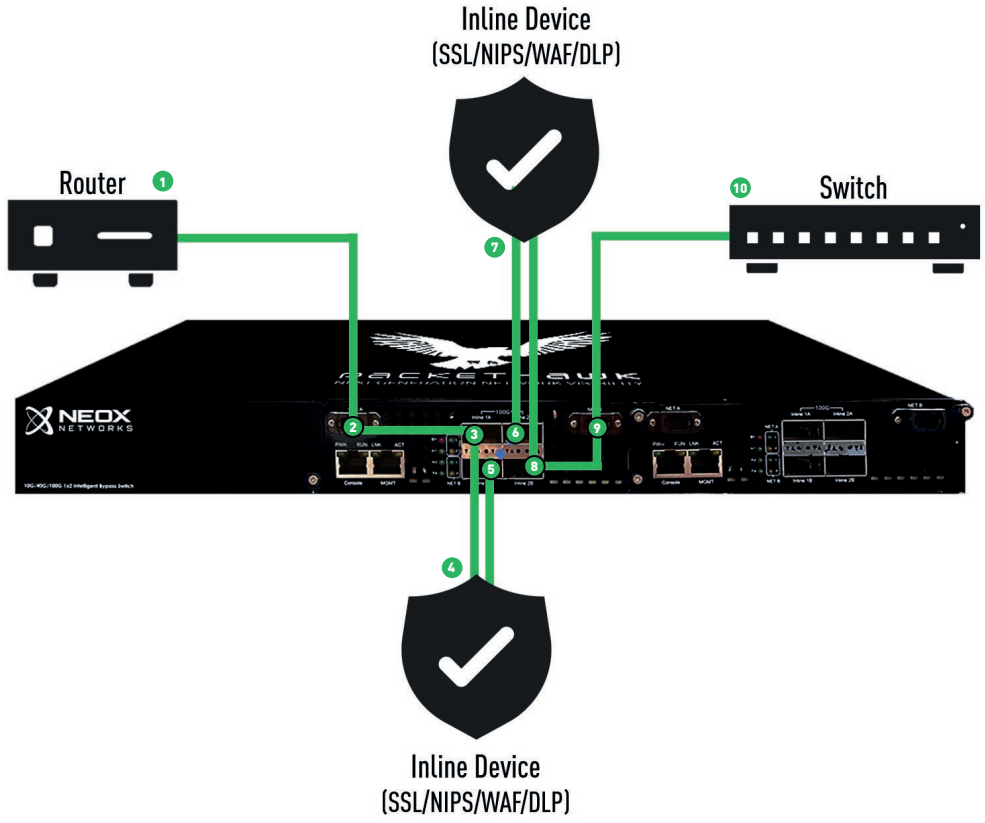
// NEOX**PacketHawk**

KEY FEATURES

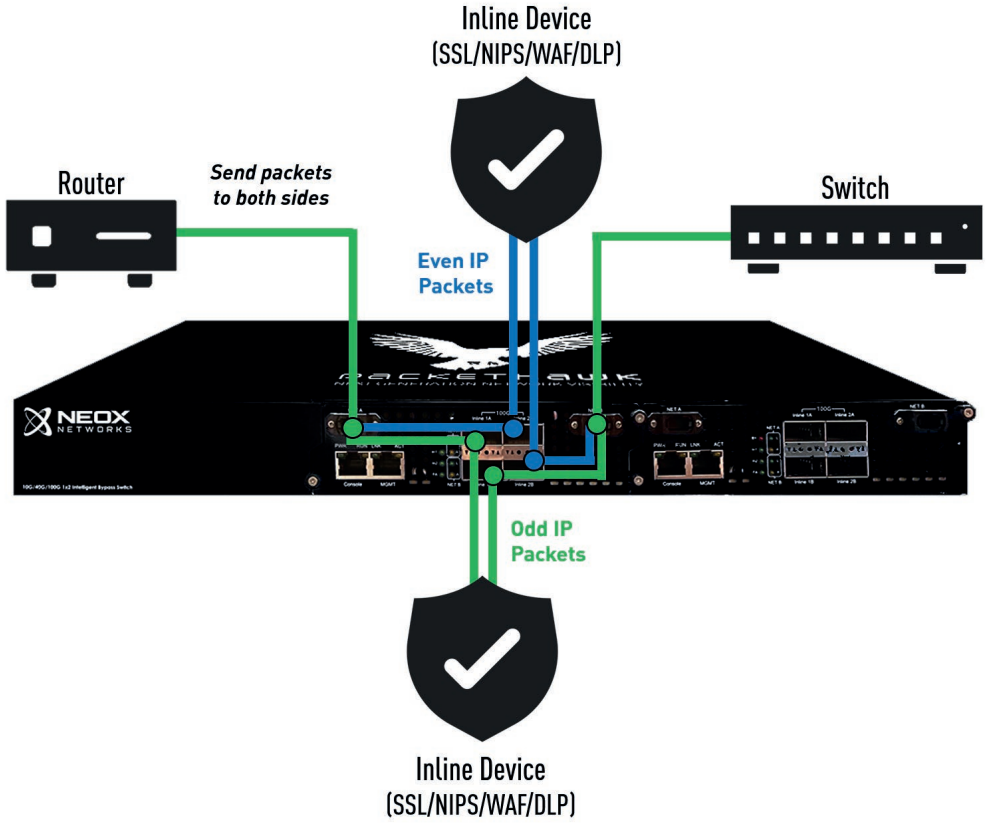
- 19" 1U rack mount 2-slots chassis, modular type
- High-Availability: 1×2 Inline bypass TAP supporting (1) Network line (2) Inline devices.
- Inline device heartbeat health check: Unidirectional, Bidirectional
- Supported Heartbeat packet: ICMP, IPX, UDP(* TCP) and Firewall health check (* special feature)
- System health LED indicators:
  - Network/Inline port link/activity, operation mode (Bypass/Inline), power, fan
- Supported packet size: 64~9,000 byte
- Traffic auto-refresh statistics per port: Byte/bps/pps, Uni/Multi/Broadcast packet, packet size, utilization%, Runt/Jumbo packet, CRC error, drop count
- Operation mode:
  - Network: Auto, Semi-Auto, force Inline, force bypass
  - Inline: Single, Service-chain, load balance, Active/Standby and TAP(mirror) mode
  - Combine In-line and TAP mode: "2 x Inline" or "1 x Inline + 1 x TAP" or "2 x TAP"
- In-line port TAP(mirror) mode support:
  - Net A, Net B traffic Any-to-Any mapping
  - Breakout, Aggregation
- Redundant bypass operation in case of Bypass TAP failure: active bypass, passive bypass
- LLD (Link Loss Detection) operation in case of network link failure
- Link-Drop operation: Inline device failure or network link failure
- Inline port L3/L4 filtering: include or exclude
- Syslog (internal: logging & viewer, external – up to 3 Syslog servers)
- SNMP v2/3, NTP, RADIUS/TACACS(*)
- 2x Management ports: serial console, Ethernet
- Management access: Telnet, SSH, HTTP, HTTPS (enable/disable, Service Port Custom)
- ACL (Access Control List) on management port (based on host & network address)
- Port DDM (Digital Diagnostic Monitoring)
- System health monitoring LED indicator: power, fan, port link/activity, operation mode
- Configuration export/import
- Hot-swappable redundant power supply & fan module

USE CASE SCENARIOS

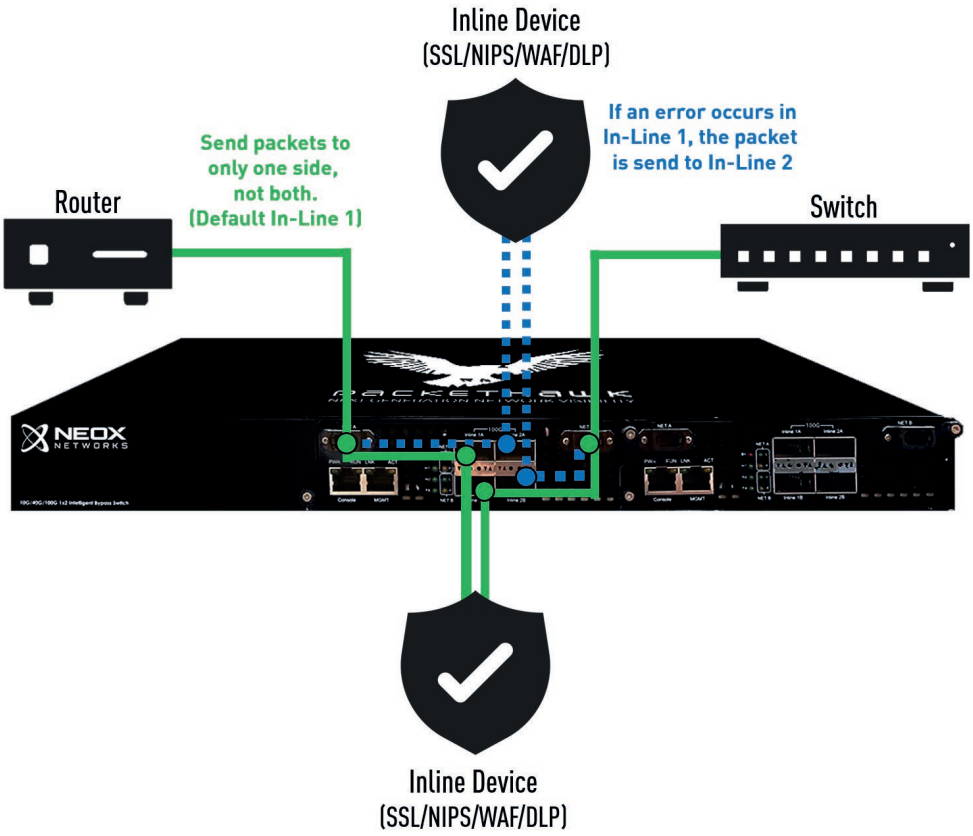
Auto Mode: Service Chain (Cascade)



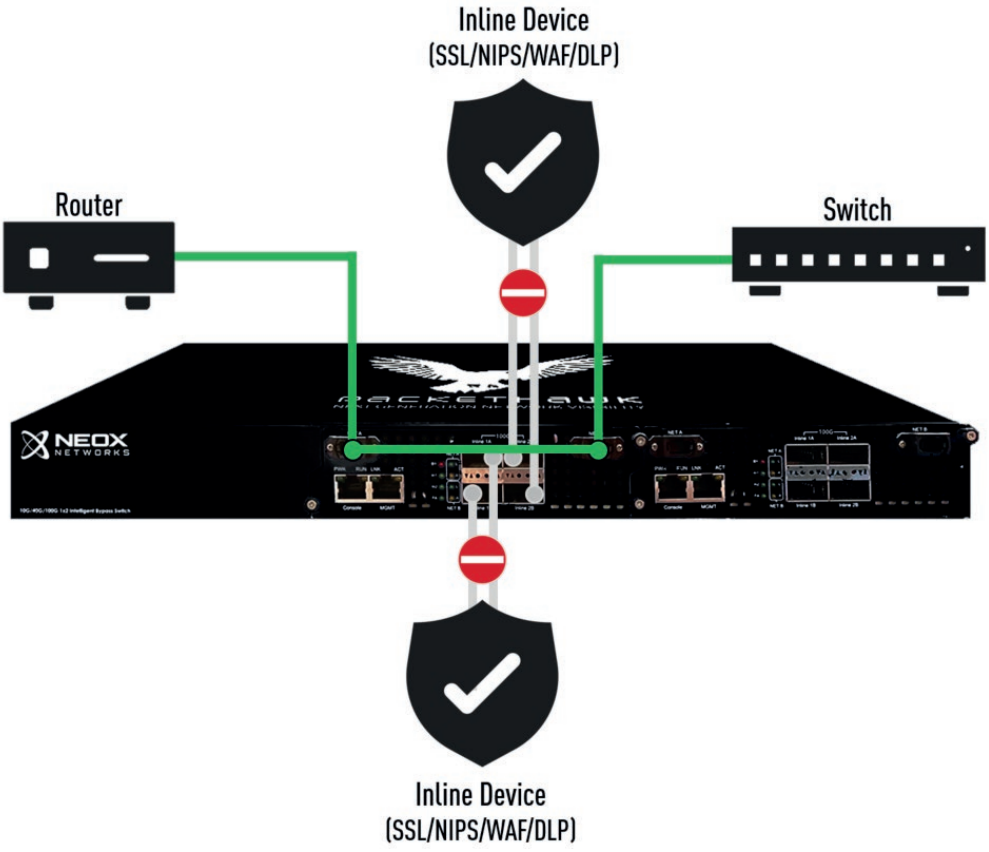
Auto Mode: Load Balance



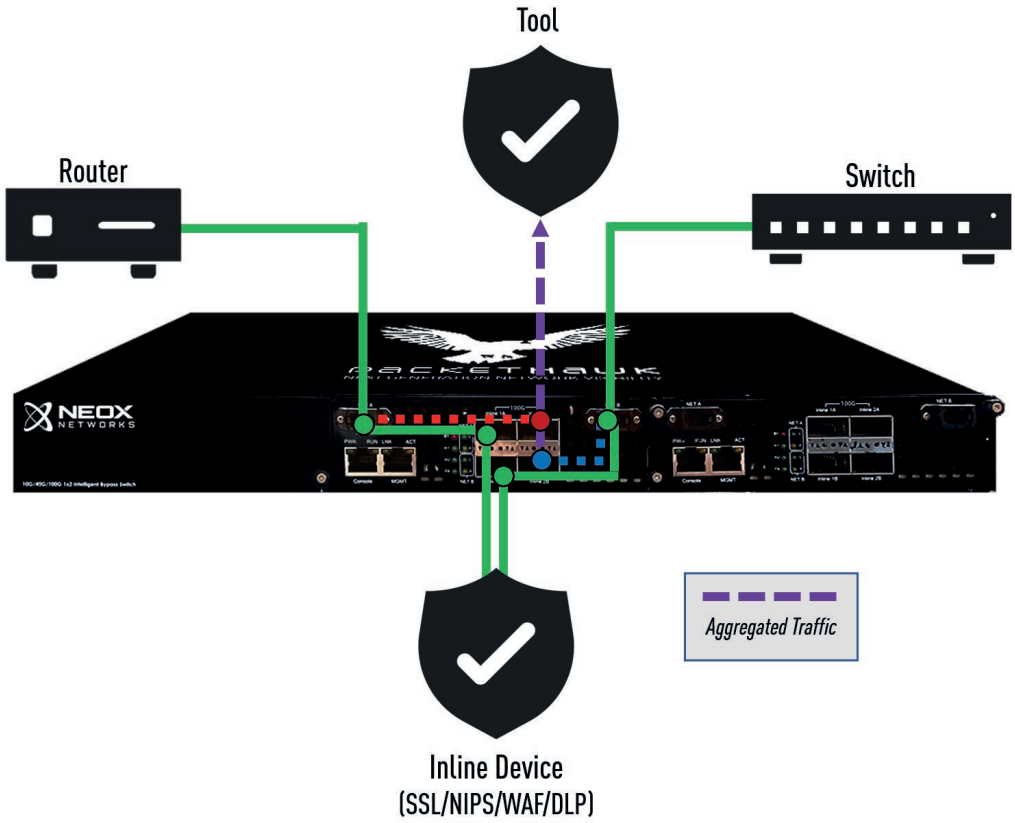
Auto Mode: Active/Standby



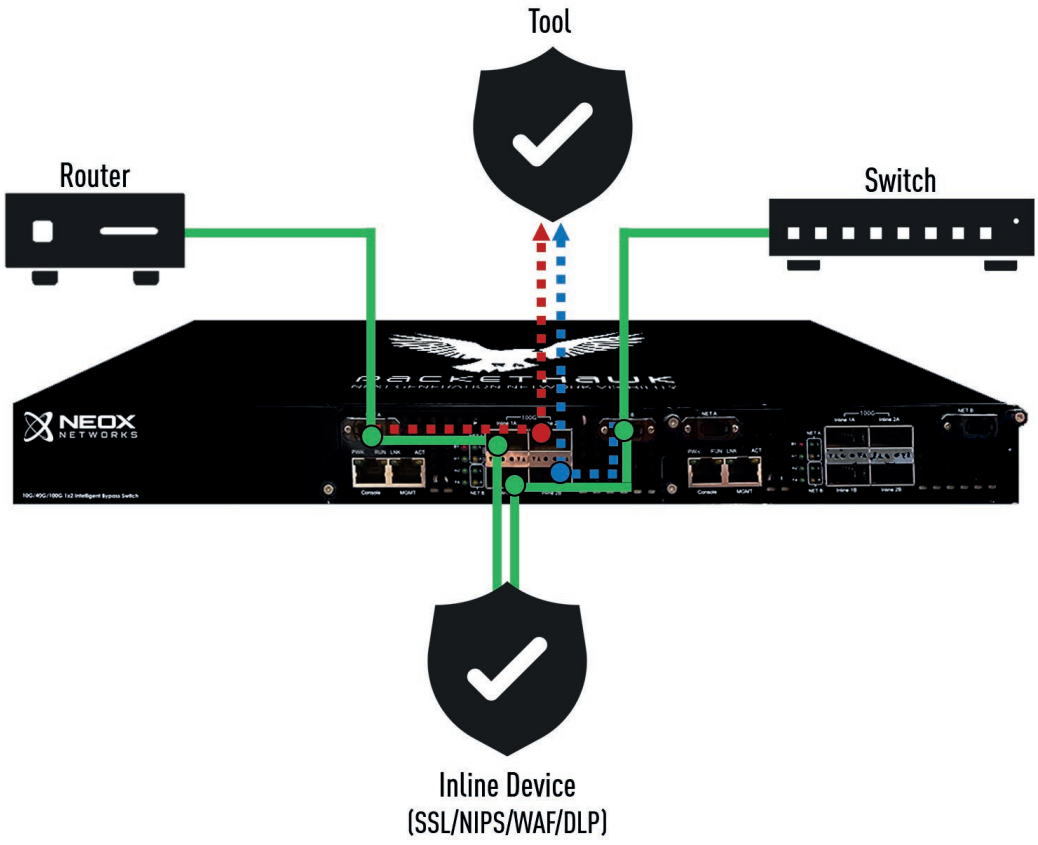
Auto Mode: Bypass Mode



Combine: 1x1 Inline & 1x1 Aggregation

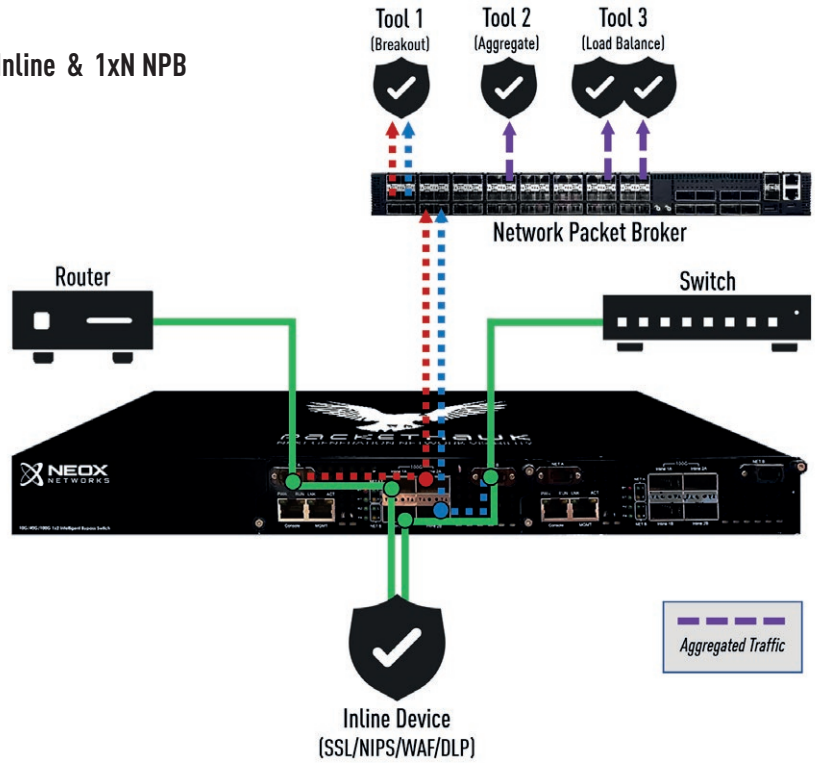


Combine: 1x1 Inline & 1x1 Breakout



// NEOX**PacketHawk**

Example Combine: 1x1 Inline & 1xN NPB



TECHNICAL SPECIFICATIONS

HARDWARE
Network: (2) 40G/100G ports, LC connector
Inline: (4) 40G/100G QSFP+/QSFP28 ports
Management: (1) RJ45 console port (1) RJ45 Ethernet port
LED: Port connection indicator, Bypass/Inline status indicator, power indicator, fan status indicator
Bi-directional throughput: 40G/100G 1220 Gbps
Certifications: CE, RoHS

POWER SUPPLY
Power: 100~240VAC, 2A,50/60Hz, typical: 70W, max: 90W
1+1 Redundant, hot-swappable power supply modules

OP. TEMPERATURE	RELATIVE HUMIDITY
0° to 50° C at sea level	10% to 90%, non-condensing

DIMENSIONS (WxDxH)	WEIGHT
440 mm x 410 mm x 44 mm	ca. 5.5 kg

MODEL & MODULES

ITEM NUMBER	DESCRIPTION	ITEM NUMBER	DESCRIPTION
NX-PH-BS-CH *	19" 1U 2-Slots, Bypass TAP Modular **chassis**	NX-PH-BS-M40S	40 Gigabit Bypass TAP I/F **module** (SR4)
		NX-PH-BS-M40L	40 Gigabit Bypass TAP I/F **module** (LR4)
NX-PH-BS-M10S	10 Gigabit Bypass TAP I/F **module** (SR)	NX-PH-BS-M100S	100 Gigabit Bypass TAP I/F **module** (SR4)
NX-PH-BS-M10L	10 Gigabit Bypass TAP I/F **module** (LR)	NX-PH-BS-M100L	100 Gigabit Bypass TAP I/F **module** (LR4)

** Any module configurations/combinations possible*

NEOX NETWORKS GmbH
Monzastr. 4 · 63225 Langen · Germany
+49 6103 / 37 215 910 · solutions@neox-networks.com · www.neox-networks.com