NEOX NETWORKS
NEXT GENERATION NETWORK VISIBILITY

NEOX**PacketRaven Multimode Fiber Network TAPs**

100% PASSIVE | DATA DIODE FUNCTION | CRITIS-APPROVED
FULL NETWORK TRANSPARENCY FROM 100M TO 400G

PACKET**RAVEN**

SECURE
MODELS
AVAILABLE

SecurITy
made in Germany
Trust Seal
www.lsletrust.de/itsmig

Our Multimode Fiber Network TAPs are decoupling elements for the secure and reliable tapping of network data in optical networks. These TAPs are looped into the network line to be monitored and transmit the entire data traffic without interruption and without packet loss, while maintaining data integrity.

Using conventional SPAN ports, also known as mirror ports, on the other hand, can distort the result, as this copying process works in store-and-forward mode and, for example, discards FCS/CRC faulty packets on OSI layer 2 instead of providing these Ethernet frames to the security or monitoring tool.

Our Network TAPs do not have a MAC or IP address, but work entirely on OSI Layer 1 and cannot be traced in the network without special and expensive measuring equipment. Hackers and attackers therefore have no chance. As the integrity of the outgoing data remains unaltered due to this tapping method, our Network TAPs are increasingly used in the areas of network forensics, security and monitoring.

Fiber TAPs do not require their own power supply and are 100% passive in the network.

These models in the PacketRaven Network TAPs product family were designed as portable TAPs, but can also be installed in a 19" mounting frame in data centers using a mounting kit or on a DIN rail using a DIN rail clip.

Our passive Fiber TAPs support network speeds from 100Mbps to 400Gbps.

These Fiber TAPs are also available in an extra-safe version (Secure TAPs). By means of an optical isolator and an optical filter, they are additionally protected against unwanted light interference.

With PacketRaven Network TAPs you get permanent network access without risk and provide e.g. your monitoring tools with 100% reliable network data - without introducing a single point of failure.

Up to 400 Gbps

Full Network Transparency

No impairment of Data Traffic

100% Network Data

Invisible for Attackers

Flexible to Use

Plug-n-Play

Failure Protection on Power Loss

Various Split Ratios

Fast and Precise

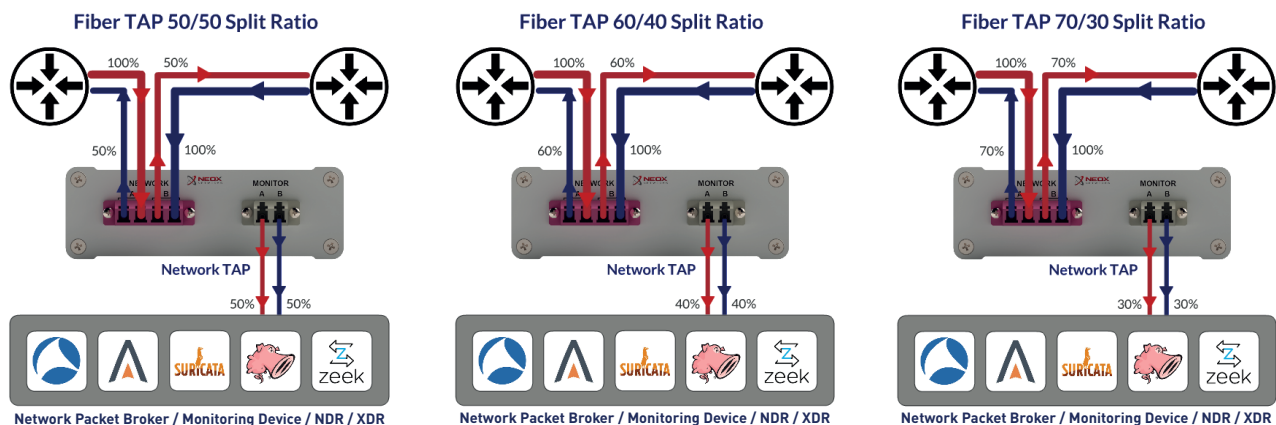Support Jumbo Frames

Made in Germany

HIGHLIGHTS

Supported network speeds: 100M, 1G, 2.5G, 5G, 10G, 25G, 40G, 50G, 100G, 200G and 400G

Alternative to SPAN ports - mirrors 100% of traffic including FCS/CRC erroneous packets that may be discarded by SPANs

Invisible on the network, no IP address, no MAC address, cannot be hacked

Guaranteed no packet loss

100% passive without affecting the active network connection, no additional latency

Available in different split ratios: e.g. 50:50, 60:40, 70:30, 80:20, 90:10

No power supply needed, 100% passive

Plug-n-Play, no configuration required

Support up to 16k Jumbo Frames

Various mounting options available

Designed, assembled, certified and tested in Germany

SPLIT RATIOS / LIGHT EXTRACTION

In order to tap data from an optical network connection, it is necessary to decouple or split off a part of the available light signal.

The split ratio is the ratio of the amount of light that is still available for the Fiber network connection in relation to the amount of light that is diverted or split off to the monitoring ports of the Fiber Network TAPs.

A split ratio of e.g. 70/30 means that 70% of the light is still available for the network connection and 30% is split off for the monitoring ports.

Fiber TAP 50/50 Split Ratio

100% 50%
50% 100%

Network TAP

50% 50%

Network Packet Broker / Monitoring Device / NDR / XDR

Fiber TAP 60/40 Split Ratio

100% 60%
60% 100%

Network TAP

40% 40%

Network Packet Broker / Monitoring Device / NDR / XDR

Fiber TAP 70/30 Split Ratio

100% 70%
70% 100%

Network TAP

30% 30%

Network Packet Broker / Monitoring Device / NDR / XDR

ADVANCED FEATURES OF THE **SECURE** FIBER TAPS

**Optical Isolator**

Optical Filter

Secure Fiber TAPs have both an additional optical isolator (Data Diode Functionality) and an optical filter to ensure that unwanted incoming light signals are blocked at the monitoring port to protect the network from compromise.

This protects your IT infrastructure from arbitrary or accidental tampering and ensures full data integrity.

They thus provide an additional security layer that offers increased protection against attackers and faulty configurations.

Optical Intruder / Faulty Light Feed

Switch

Network TAP

Router
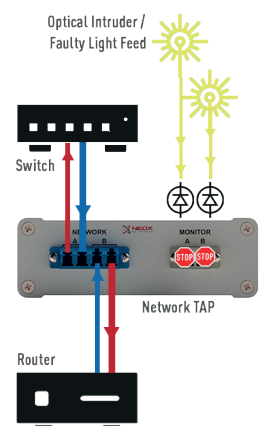
MOUNTING OPTIONS

⚠ TAPs with rack mount frame bracket or DIN rail clip can of course also be used in mobile applications!

1. Mobile Use

Portable models - these models have no special mounting options and are primarily designed for mobile use.

PacketRaven Network TAP for mobile use

Handy & portable
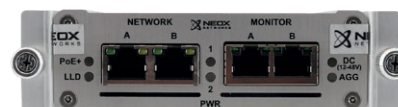
2. Server Rack Mounting

To install our portable TAPs in a server rack, you need our server rack mounting frame with item number **PRP-1U3-V2**, as well as a rack-mount frame mounting kit (item number **PRP-1U3-CLIP**) for the TAP.

The server rack mounting frame PRP-1U3-V2 provides space for up to 3 portable PacketRaven Network TAPs.

Both components are available as accessories.

Server rack mounting frame PRP-1U3-V2
for up to 3 PacketRaven portable Network TAPs

TAP with rack mounting kit for
server rack mounting frame PRP-1U3-V2

3. DIN Rail Mounting

As a further alternative, we also offer a top-hat rail clip for our TAPs for mounting on a TS35/7.5 DIN top-hat rail. This clip can be rotated by 180° so that the connections of the TAP can be aligned according to the respective requirements. This DIN rail clip, available as an accessory, has the item number **PRP-DIN-CLIP**.

TS35/7.5 DIN rail

Network TAP
with DIN rail clip

CONNECTION RELIABILITY IN CASE OF POWER LOSS

All our Fiber Network TAPs are 100% passive and do not require a power supply.
A power failure in a circuit has no effect on the TAP as it is a physical process that disconnects the network signal. Thus, there is no impairment of the network and monitoring ports, but neighbouring devices could be affected by the power failure.

TECHNICAL SPECIFICATIONS

NETWORK TAP			
Dimensions:	10.60 cm x 3.50 cm x 16.40 cm	Operating temperature:	0° to 55°C
Weight:	370 g	Storage temperature:	-40° to 70°C
Certifications:	CE, FCC, RoHS, WEEE	Relative humidity in operation:	20% to 80%, non-condensing

ATTENUATION VALUES			
SPLIT RATIO (OTHERS ON REQUEST)	**50:50**	**60:40**	**70:30**
Multimode OM3, OM4, OM5	3.8 dB / 3.8 dB	2.8 dB / 4.8 dB	2.2 dB / 6.1 dB

TAP MODELS

⚠️ If you need a TAP with DIN rail mounting clip, please additionally order the mounting clip **PRP-DIN-CLIP**!
If you need a TAP with rackmount frame front panel, please order the **PRP-1U3-CLIP** front panel additionally!
(see „Mounting Options")!

PRP-OM4-SLL-x

PRP-OM4-DLL-x

MULTIMODE OM4 LC - STANDARD MODELS

ITEM NO.	NETWORK	FIBER TYPE	WAVE-LENGTH	INTERFACE NETWORK	INTERFACE MONITOR.	TAP-VERSION
PRP-OM4-SLL-*	100M/1G/10G/25G	OM4	850 / 1310 nm	LC Multimode	LC Multimode	Single-TAP
PRP-OM4-DLL-*	100M/1G/10G/25G	OM4	850 / 1310 nm	LC Multimode	LC Multimode	Dual-TAP

All TAPs for fiber type OM4 are also OM3 compatible!

* *respective split ratio - e.g. „**70**" for a split ratio of 70:30, „**60**" for 60:40, and „**50**" for 50:50*

MULTIMODE OM4 LC - SECURE MODELS

ITEM NO.	NETWORK	FIBER TYPE	WAVE-LENGTH	INTERFACE NETWORK	INTERFACE MONITOR.	TAP-VERSION
PRP-OM4-SLL-*-S	100M/1G/10G/25G	OM4	850 nm	LC Multimode	LC Multimode	Single-TAP
PRP-OM4-DLL-*-S	100M/1G/10G/25G	OM4	850 nm	LC Multimode	LC Multimode	Dual-TAP

All TAPs for fiber type OM4 are also OM3 compatible!

* *respective split ratio - e.g. „**70**" for a split ratio of 70:30, „**60**" for 60:40, and „**50**" for 50:50*

CRITIS APPROVED

PRP-OM4-SMM-x

PRP-OM4-DMM-x

MULTIMODE OM4 MTP®/MPO - STANDARD MODELS

ITEM NO.	NETWORK	FIBER TYPE	WAVE-LENGTH	INTERFACE NETWORK	INTERFACE MONITOR.	TAP-VERSION
PRP-OM4-SMM-*	100M/1G/10G/25G/40G/50G/100G	OM4	850 nm	MTP® Multimode	MTP® Multimode	Single-TAP
PRP-OM4-DMM-*	100M/1G/10G/25G/40G/50G/100G	OM4	850 nm	MTP® Multimode	MTP® Multimode	Dual-TAP

All TAPs for fiber type OM4 are also OM3 compatible!

* *respective split ratio - e.g. „**70**" for a split ratio of 70:30, „**60**" for 60:40, and „**50**" for 50:50*

CRITIS APPROVED

MULTIMODE OM4 MTP®/MPO - SECURE MODELS

ITEM NO.	NETWORK	FIBER TYPE	WAVE-LENGTH	INTERFACE NETWORK	INTERFACE MONITOR.	TAP-VERSION
PRP-OM4-SMM-*-S	100M/1G/10G/25G/40G/50G/100G	OM4	850 nm	MTP® Multimode	MTP® Multimode	Single-TAP
PRP-OM4-DMM-*	100M/1G/10G/25G/40G/50G/100G	OM4	850 nm	MTP® Multimode	MTP® Multimode	Dual-TAP

All TAPs for fiber type OM4 are also OM3 compatible!

* *respective split ratio - e.g. „**70**" for a split ratio of 70:30, „**60**" for 60:40, and „**50**" for 50:50*

PRP-OM5-SLL-x
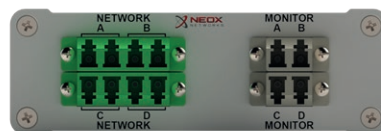
PRP-OM5-DLL-x

MULTIMODE **OM5 LC - STANDARD** MODELS						
All TAPs for fiber type OM5 are also OM4 and OM3 compatible!						
ITEM NO.	NETWORK	FIBER TYPE	WAVE-LENGTH	INTERFACE NETWORK	INTERFACE MONITOR.	TAP-VERSION
PRP-OM5-SLL-*	100M/1G/10G/25G/40G/50G/100G	OM5	850 nm – 950 nm	LC Multimode	LC Multimode	Single-TAP
PRP-OM5-DLL-*	100M/1G/10G/25G/40G/50G/100G	OM5	850 nm – 950 nm	LC Multimode	LC Multimode	Dual-TAP

* respective split ratio - e.g. „70" for a split ratio of 70:30, „60" for 60:40, and „50" for 50:50
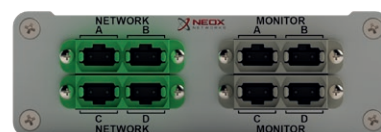
MULTIMODE **OM5 LC - SECURE** MODELS						
All TAPs for fiber type OM5 are also OM4 and OM3 compatible!						
ITEM NO.	NETWORK	FIBER TYPE	WAVE-LENGTH	INTERFACE NETWORK	INTERFACE MONITOR.	TAP-VERSION
PRP-OM5-SLL-*-S	100M/1G/10G/25G/40G/50G/100G	OM5	850 nm – 950 nm	LC Multimode	LC Multimode	Single-TAP
PRP-OM5-DLL-*-S	100M/1G/10G/25G/40G/50G/100G	OM5	850 nm – 950 nm	LC Multimode	LC Multimode	Dual-TAP

* respective split ratio - e.g. „70" for a split ratio of 70:30, „60" for 60:40, and „50" for 50:50

(CRITIS APPROVED)

PRP-OM5-SMM-x

PRP-OM5-DMM-x

MULTIMODE **OM5 MTP®/MPO - STANDARD** MODELS						
All TAPs for fiber type OM5 are also OM4 and OM3 compatible!						
ITEM NO.	NETWORK	FIBER TYPE	WAVE-LENGTH	INTERFACE NETWORK	INTERFACE MONITOR.	TAP-VERSION
PRP-OM5-SMM-*	1G/10G/25G/40G/50G/100G/200G/400G	OM5	850 nm – 950 nm	MTP® Multimode	MTP® Multimode	Single-TAP
PRP-OM5-DMM-*	1G/10G/25G/40G/50G/100G/200G/400G	OM5	850 nm – 950 nm	MTP® Multimode	MTP® Multimode	Dual-TAP

* respective split ratio - e.g. „70" for a split ratio of 70:30, „60" for 60:40, and „50" for 50:50

(CRITIS APPROVED)

| MULTIMODE **OM5 MTP®/MPO - SECURE** MODELS						
All TAPs for fiber type OM5 are also OM4 and OM3 compatible!						
ITEM NO.	NETWORK	FIBER TYPE	WAVE-LENGTH	INTERFACE NETWORK	INTERFACE MONITOR.	TAP-VERSION
PRP-OM5-SMM-*-S	1G/10G/25G/40G/50G/100G/200G/400G	OM5	850 nm – 950 nm	MTP® Multimode	MTP® Multimode	Single-TAP
PRP-OM5-DMM-*-S	1G/10G/25G/40G/50G/100G/200G/400G	OM5	850 nm – 950 nm	MTP® Multimode	MTP® Multimode	Dual-TAP

* respective split ratio - e.g. „70" for a split ratio of 70:30, „60" for 60:40, and „50" for 50:50
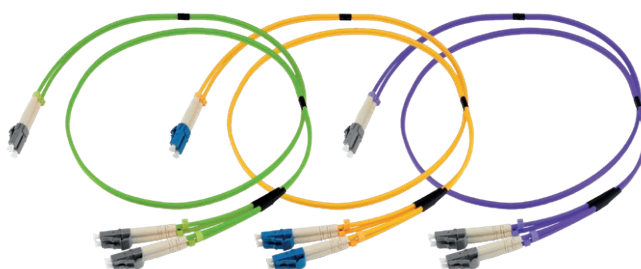
ACCESSORIES

INSTALLATION & MOUNTING

ITEM NO.	DESCRIPTION
PRP-1U3-V2	Server rack mounting frame for 3 portable TAPs
PRP-1U3-BP-V2	Blank plate for mounting frame PRP-1U3-V2
PRP-1U3-CLIP	TAP rackmount frame bracket for server rack monuting frame PRP-1U3-V2
PRP-DIN-CLIP	TAP DIN rail mounting clip

PRP-DIN-CLIP

PRP-1U3-V2

PRP-1U3-BP-V2

PRP-1U3-CLIP
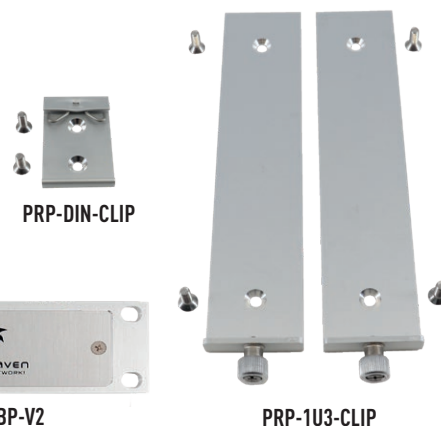
Y-CABLE

ITEM NO.	FIBRE TYPE	DIAMETER	LENGTH	DESCRIPTION
NX-LC-Y-PC-OM4-1M	OM4	3.0mm	1 meter	Y-Cable / Special Patchcord LC/PC-LC/PC Duplex
NX-LC-Y-PC-OM4-2M	OM4	3.0mm	2 meter	Y-Cable / Special Patchcord LC/PC-LC/PC Duplex
NX-LC-Y-PC-OM4-3M	OM4	3.0mm	3 meter	Y-Cable / Special Patchcord LC/PC-LC/PC Duplex
NX-LC-Y-PC-OM4-5M	OM4	3.0mm	5 meter	Y-Cable / Special Patchcord LC/PC-LC/PC Duplex
NX-LC-Y-PC-OM5-1M	OM5	3.0mm	1 meter	Y-Cable / Special Patchcord LC/PC-LC/PC Duplex
NX-LC-Y-PC-OM5-2M	OM5	3.0mm	2 meter	Y-Cable / Special Patchcord LC/PC-LC/PC Duplex
NX-LC-Y-PC-OM5-3M	OM5	3.0mm	3 meter	Y-Cable / Special Patchcord LC/PC-LC/PC Duplex
NX-LC-Y-PC-OM5-5M	OM5	3.0mm	5 meter	Y-Cable / Special Patchcord LC/PC-LC/PC Duplex

DOWNLOAD
Fiber TAP
Cabling Guide

Click here or visit
www.neoxn.eu/fo-cab-gui

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