

netMIRROR

10/100 MBit Ethernet Mirror-TAP

- 💡 Fully passive network access
- 💡 For 10BASE-T and 100BASE-TX networks
- 💡 Real zero-delay on network side (< 1 ns)
- 💡 Network connection stays active, even without attached power supply
- 💡 Usable as a permanent diagnostic access point



EtherCAT

EtherNet/IP

ETHERNET
POWERLINK

Modbus

SERCOS
the automation bus

PROFI
NET

INDUSTRIAL
ETHERNET



Permanent diagnostic access to industrial networks

Thanks to the use of the proven Ethernet technology, industrial networks have become very robust against interference. Nevertheless, also Ethernet based industrial networks require the possibility to have a quick and easy to use trouble-shooting access in case of disturbance. Unlike the traditional field busses, Ethernet based systems are connected in daisy-chain topologies, thus a diagnostic device cannot be connected at any point of the network, as not the whole telegram traffic can be observed at every network node. Due to this fact, network access is typically done directly behind the controller. In order to connect a diagnostic device, Ethernet's point to point connection must be disconnected shortly, this leads to a disruption of the controller-device communication, and thus to a break-down of the plant.

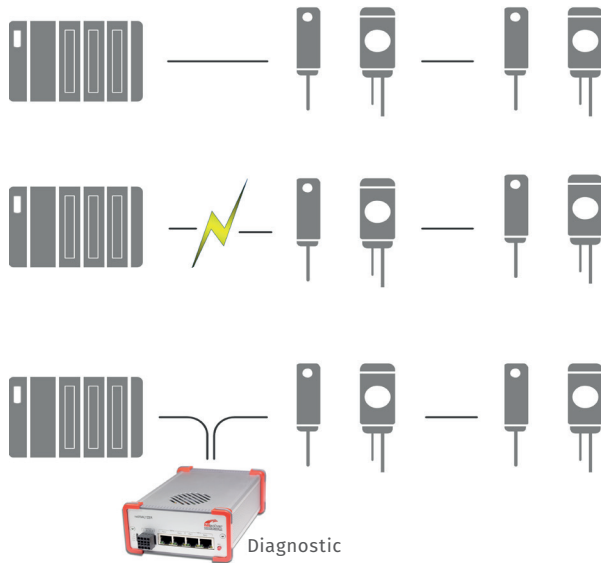
To eliminate the need of performing network disruptions, the netMIRROR Test-Access-Point (TAP) allows continuous mirroring of the Ethernet traffic without influencing the network itself. A TAP is built in permanently, typically directly on the controllers outgoing Ethernet connection and thus allows the disruption-free connection of a diagnostic device during run-time. Additionally TAPs ensure that a connected diagnostic device or PC for telegram capture would not interfere the network by accidentally injected Ethernet traffic.

TAPs, compared to switches with activated mirror port, guarantee that the timing of the network traffic is maintained, and that no traffic will be rejected at high network load or telegram errors.

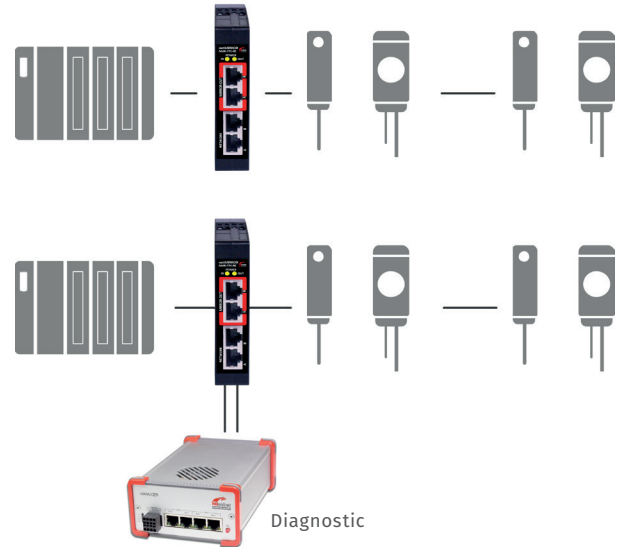


PRODUCT INFORMATION

TECHNICAL DATA



Network diagnosis without TAP, during analysis the Ethernet connection, means the plant operation, must be disrupted shortly.



Network diagnosis with netMIRROR TAP, analysis is always possible without disrupting the plant operation.

Technical Data

Operating temperature

-20 ... +70 °C

Dimensions (L x W x H)

120 mm x 22,5 mm x 107 mm

Certification

CE, RoHS (UL being prepared)

Protection class

IP20

Forwarding delay network side

Real Zero-Delay TAP < 1 ns signal delay

LEDs

Power supply input and output active

Mounting

DIN rail, DIN EN 60715

Technical Data

Network ports

10BASE-T or 100BASE-TX Ethernet, 2x RJ45

(e.g. PROFINET, EtherNet/IP, EtherCAT, Sercos, Modbus/TCP, POWERLINK)

Mirror ports

10BASE-T or 100BASE-TX Ethernet, 2x RJ45, receive only, send suppressed

Operation without power supply

Network ports operational even without power supply
Mirror ports disabled without power supply

Power supply input

nominal +24 V, +18 ... +30 V, 1.5 W, Combicon

Power supply output

Forwarding of power supply, max. 1 A at +24 V, Combicon, for powering an attached diagnostic device

Note: All technical data may be changed without further notice.

Article Overview

NMR-TFE-RE

7340.100 | netMIRROR 10/100 MBit Ethernet Mirror-TAP

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