

# netTAP 151

High-end Gateway for Real-Time Ethernet Networks

- Bridging between two Real-Time Ethernet networks
- Flexible choice of operating modes Slave/Master or Slave/Slave
- Effortless integration as standard I/O device
- Secure network segregation via internal data buffer
- Fast conversion time less than 10 milliseconds

EtherNet/IP™

EtherCAT®

Modbus

PROFINET

ETHERNET  
POWERLINK

sercos  
the automation bus



## I/O protocol gateway for Real-Time Ethernet conversions

The gateway netTAP 151 transmits IO data bidirectionally between any two industrial Real-Time Ethernet networks. It is the ideal solution for installations with heterogeneous networks or such of the same kind to exchange data across given network boundaries. With more than 25 different combinations of the protocols PROFINET, EtherCAT, EtherNet/IP, POWERLINK, Sercos, CC-Link IE Field and Modbus TCP, the device series provides a solution for any conversion.

The integration as simple I/O device into the primary network makes the converter compatible with any common PLC. On the secondary side it works either as I/O device too or controls a subordinate network as a bus master. The length of the I/O data can be scaled to any application and the data in between can be mapped on byte level arbitrarily.

Secure network separation is provided by two Ethernet controllers, each connected to a Dual Ethernet port with integrated switch. That allows realizing star, ring and inline network topologies without further peripherals. Both controllers handle the protocols independent from each other and exchange only the I/O data across a data buffer. An overall data processing time lower than 10 milliseconds is achieved.

The devices can be ordered preloaded with firmware and license or unloaded. Unloaded devices minimize the storage costs. Subsequent loading of a firmware configures these devices for any conversion most flexible. All devices are commissioned and diagnosed network independent over USB.



→ netTAP 151-RE-RE  
Service-Hotline: +49 (0) 6190 9907-90  
[www.hilscher.com](http://www.hilscher.com)

# Product Information

## Technical Data

### Technical Data

#### Operating temperature

-20 ... +60 °C

#### Power Supply

+18 ... +30 V / 190 mA @ +24 V

#### Dimensions (L x W x H)

99 × 22,5 × 114,5 mm (without connector)

#### Weight

121 g

#### Service Interface

Mini USB

#### Displays

LED SYS, APL, protocol specific

#### Configuration

SYCON.net, Windows® 7

#### Connector

Mini-COMBICON 5-pin

#### Mounting

DIN-Rail, DIN EN 60715

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

### Technische Daten

#### Emission

EN55011 / CISPR 11; Class A

#### Noise Immunity

EN 61000-6-2

#### Certification

CE Sign, UL, cUL, UKCA

#### Card Slot

SD card

### Maximum Cyclic Process Data

	Master	Slave	
<b>EtherCAT</b>	9200	512	Bytes I/O-Data
<b>EtherNet/IP</b>	11472	1008	Bytes I/O-Data
<b>POWERLINK</b>		1490	Bytes I/O-Data
<b>PROFINET</b>	11472	2048	Bytes I/O-Data
<b>Sercos</b>	11472	240	Bytes I/O-Data
<b>Modbus TCP</b>	11520	11520	Bytes I/O-Data

*The maximum convertible number of I/O data of a protocol combination is determined by the protocol with the lower amount of I/O Data.*

### Product Overview

<b>NT 151-RE-RE</b>	1722.122	Loadable device for any Slave/Slave protocol combination (incl. Modbus TCP master)
<b>NT 151-RE-RE/+ML</b>	1722.122/+ML	Loadable device for any Slave/Master or Slave/Slave protocol combination
<b>SD-CARD</b>	1719.003	SD card to realize the backup and restore functions

NT 151-		EtherCAT	EtherNet/IP	POWERLINK	PROFINET	Sercos
		Slave	Slave	Slave	Slave	Slave
EtherCAT	Slave	/ECS/ECS	/EIS/ECS	/PLS/ECS	/EIS/PNS	/S3S/ECS
	Master	/ECS/ECM	/EIS/ECM	/PLS/ECM	/PNS/ECM	/S3S/ECM
EtherNet/IP	Slave	/EIS/ECS	/EIS/EIS	/PLS/EIS	/EIS/PNS	/EIS/S3S
	Master	/ECS/EIM	/EIS/EIM	/PLS/EIM	/PNS/EIM	/S3S/EIM
POWERLINK	Slave	/PLS/ECS	/PLS/EIS	/	/PLS/PNS	/PLS/S3S
	Master	/	/	/	/	/
PROFINET	Slave	/ECS/PNS	/EIS/PNS	/PLS/PNS	/PNS/PNS	/S3S/PNS
	Master	/ECS/PNM	/EIS/PNM	/PLS/PNM	/PNS/PNM	/S3S/PNM
Sercos	Slave	/S3S/ECS	/EIS/S3S	/PLS/S3S	/S3S/PNS	/S3S/S3S
	Master	/ECS/S3M	/EIS/S3M	/PLS/S3M	/PNS/S3M	/S3S/S3M
Modbus TCP	Slave / Master	/ECS/OMB	/EIS/OMB	/PLS/OMB	/PNS/OMB	/S3S/OMB



→ netTAP 151-RE-RE  
Service-Hotline: +49 (0) 6190 9907-90  
www.hilscher.com