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 CC-Link IE Field

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 in-line 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.

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

empowering communication

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	
EtherCAT	9200	512	Bytes I/O-Data
EtherNet/IP	11472	1008	Bytes I/O-Data
POWERLINK		1490	Bytes I/O-Data
PROFINET	11472	2048	Bytes I/O-Data
Sercos	11472	240	Bytes I/O-Data
Modbus TCP	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 if I/O Data.

Product Overview

NT 151-RE-RE	1722.122	Loadable device for any Slave/Slave protocol combination (incl. Modbus TCP master)
NT 151-RE-RE/+ML	1722.122/+ML	Loadable device for any Slave/Master or Slave/Slave protocol combination
NT 151-CCIES-RE/PNS	1724.122/PNS	Coupler netTAP 151 CC-Link IE Field Slave to PROFINET IO-Device
SD-CARD	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

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