netTAP 100

High-end Gateway for Industrial Automation networks

- **For Fieldbus to Fieldbus, to Serial or Ethernet conversions**

- **Combines Master and Slave in any variation**

- **Loadable firmware for flexible use of other conversions**

- **Device replacement in seconds via memory card based loading**

CANopen CC-Link DeviceNet EtherCAT EtherNet/IP

Modbus ETHERNET POWERLINK sercos the automation bus PROFINET PROFIBUS

I/O protocol gateway for demanding conversions

netTAP 100 is the protocol converter for sophisticated conversions and supports 2-port Real-Time Ethernet to serial, Fieldbus to Fieldbus, Real-Time Ethernet to Fieldbus and Real-Time Ethernet to Ethernet automation protocols. It supports slave and master functionality in any combination. Master functionality is unrestricted when licensed.

A memory card slot allows the user to save firmware and configuration data on a removable card. In case of failure all that is necessary to bring the plant back on line within seconds is to move the memory card from the old netTAP 100 onto a spare unit.

Apart from standard protocols, netTAP 100 supports the creation of serial protocols with the Lua-based scripting language netSCRIPT. A full featured development environment is included within the delivery. It allows the comfortable and rapid programming of any proprietary serial protocol as well as the I/O data pre-processing during the conversion into the other field protocol.

hilscher
COMPETENCE IN COMMUNICATION

PRODUCT INFORMATION
TECHNICAL DATA

Technical Data

Operating temperature
±0 ... +60 °C

Power Supply
+18 ... +30 V / 130 mA @ +24 V

Dimensions (L x W x H)
100 x 52 x 70 mm (without connector)

Weight
150 g

Diagnostic Interface
Mini-USB

Displays
SYS, COM, LINK, Rx/Tx, protocol specific

Configuration
SYCON.net, Windows® 7 or higher

Connector
Mini-COMBICON 2-pin

Mounting
DIN-Rail, DIN EN 60715

Certification
CE Sign, UL 508

Emission | Noise Immunity
CISPR 11 Class A | EN 61131-2:2003

Maximum Cyclic Process Data

	Master	Slave	
ASCII	2024		Bytes I/O-Data
CANopen	7168	1024	Bytes I/O-Data
CC-Link		736	Bytes I/O-Data
DeviceNet	7168	510	Bytes I/O-Data
EtherCAT	11472	400	Bytes I/O-Data
EtherNet/IP	11472	1008	Bytes I/O-Data
Modbus RTU	11520	11520	Bytes I/O-Data
Modbus TCP	11520	11520	Bytes I/O-Data
netSCRIPT	2048		Bytes I/O-Data
POWERLINK		2980	Bytes I/O-Data
PROFIBUS	11472	488	Bytes I/O-Data
PROFINET	11472	2048	Bytes I/O-Data
Sercos	11472	256	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.

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

Article Overview

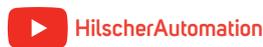**NXLIC-MASTER**
8211.000 | Master license

SD-CARD
1719.003 | SD Card

NT 100-		CANopen		CC-Link		DeviceNet		PROFIBUS		PROFINET		EtherCAT Sercos		EtherNet/IP		Modbus TCP		POWERLINK		Modbus RTU		ASCII netSCRIPT
		Master*	Slave	/	Slave	Master*	Slave	Master*	Slave	Master*	Slave	Master*	Slave	Master*	Slave	Master	Slave	Master*	Slave	Master	Slave	
CANopen	Master*	/	CO-CO	/	CO-CC	/	DN-CO	/	DP-CO	/	RE-CO	/	RE-CO	/	RE-CO	RE-CO	RE-CO	/	RE-CO	CO-RS	CO-RS	CO-RS
	Slave	CO-CO	CO-CO	/	CO-CC	DN-CO	DN-CO	DP-CO	DP-CO	RE-CO	RE-CO	RE-CO	RE-CO	RE-CO	RE-CO	RE-CO	RE-CO	/	RE-CO	CO-RS	CO-RS	CO-RS
CC-Link	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
	Slave	CO-CC	CO-CC	/	/	DN-CC	DN-CC	DP-CC	DP-CC	RE-CC	RE-CC	RE-CC	RE-CC	RE-CC	RE-CC	RE-CC	RE-CC	/	RE-CC	/	/	/
DeviceNet	Master*	/	CO-DN	/	DN-CC	/	DN-DN	/	DN-DP	/	RE-DN	/	RE-DN	/	RE-DN	RE-DN	RE-DN	/	RE-DN	DN-RS	DN-RS	DN-RS
	Slave	CO-DN	CO-DN	/	DN-CC	DN-DN	DN-DN	DN-DP	DN-DP	RE-DN	RE-DN	RE-DN	RE-DN	RE-DN	RE-DN	RE-DN	RE-DN	/	RE-DN	DN-RS	DN-RS	DN-RS
PROFIBUS	Master*	/	CO-DP	/	DP-CC	/	DN-DP	/	DP-DP	/	RE-DP	/	RE-DP	/	RE-DP	RE-DP	RE-DP	/	RE-DP	DP-RS	DP-RS	DP-RS
	Slave	CO-DP	CO-DP	/	DP-CC	DN-DP	DN-DP	DP-DP	DP-DP	RE-DP	RE-DP	RE-DP	RE-DP	RE-DP	RE-DP	RE-DP	RE-DP	/	RE-DP	DP-RS	DP-RS	DP-RS
PROFINET	Master*	/	RE-CO	/	RE-CC	/	RE-DN	/	RE-DP	/	/	/	/	/	/	/	RE-EN	RE-EN	RE-EN	/	/	RE-RS	RE-RS	RE-RS
	Slave	RE-CO	RE-CO	/	RE-CC	/	RE-DN	RE-DP	RE-DP	/	/	/	/	/	RE-EN	RE-EN	RE-EN	RE-EN	/	/	RE-RS	RE-RS	RE-RS
EtherCAT Sercos	Master*	/	RE-CO	/	RE-CC	/	RE-DN	/	RE-DP	/	/	/	/	/	/	/	RE-EN	RE-EN	RE-EN	/	/	RE-RS	RE-RS	RE-RS
	Slave	RE-CO	RE-CO	/	RE-CC	RE-DN	RE-DN	RE-DP	RE-DP	/	/	/	/	/	RE-EN	RE-EN	RE-EN	/	/	RE-RS	RE-RS	RE-RS
EtherNet/IP	Master*	/	RE-CO	/	RE-CC	/	RE-DN	/	RE-DP	RE-EN	/	/	/	/	/	RE-EN	RE-EN	RE-EN	/	/	RE-RS	RE-RS	RE-RS
	Slave	RE-CO	RE-CO	/	RE-CC	RE-DN	RE-DN	RE-DP	RE-DP	RE-EN	RE-EN	RE-EN	RE-EN	RE-EN	RE-EN	RE-EN	RE-EN	/	RE-EN	RE-RS	RE-RS	RE-RS
Modbus TCP	Master	RE-CO	RE-CO	/	RE-CC	RE-DN	RE-DN	RE-DP	RE-DP	RE-EN	RE-EN	RE-EN	RE-EN	RE-EN	RE-EN	RE-EN	RE-EN	/	RE-EN	RE-RS	RE-RS	RE-RS
	Slave	RE-CO	RE-CO	/	RE-CC	RE-DN	RE-DN	RE-DP	RE-DP	RE-EN	RE-EN	RE-EN	RE-EN	RE-EN	RE-EN	RE-EN	RE-EN	/	RE-EN	RE-RS	RE-RS	RE-RS
POWERLINK	Master*	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
	Slave	RE-CO	RE-CO	/	RE-CC	RE-DN	RE-DN	RE-DP	RE-DP	/	/	/	/	/	RE-EN	RE-EN	RE-EN	/	/	RE-RS	RE-RS	RE-RS
Modbus RTU	Master	CO-RS	CO-RS	/	/	DN-RS	DN-RS	DP-RS	DP-RS	RE-RS	RE-RS	RE-RS	RE-RS	RE-RS	RE-RS	RE-RS	RE-RS	/	RE-RS	/	/	/
	Slave	CO-RS	CO-RS	/	/	DN-RS	DN-RS	DP-RS	DP-RS	RE-RS	RE-RS	RE-RS	RE-RS	RE-RS	RE-RS	RE-RS	RE-RS	/	RE-RS	/	/	/
ASCII netSCRIPT	/	CO-RS	CO-RS	/	/	DN-RS	DN-RS	DP-RS	DP-RS	RE-RS	RE-RS	RE-RS	RE-RS	RE-RS	RE-RS	RE-RS	RE-RS	/	RE-RS	/	/	/

Ordering example: PROFIBUS Master to EtherNet/IP Slave = NT 100-RE-DP   * Master license must be ordered separately (Modbus RTU/TCP without limitations)

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