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**
- **Conversions**Loadable firmware for flexible use of other conversions
- Device replacement in seconds via memory card based loading









CANOPER









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.



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

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

SD-CARD

8211.000 | Master license

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	1
CANopen	Master*	1	CO-CO	/	CO-CC	1	DN-CO	1	DP-CO	/	RE-CO	1	RE-CO	/	RE-CO	RE-CO	RE-CO	1	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	1	/	/	/	1	/	1	1	/	/	1	/	1	/	/	1	/	1	/	1		1
	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	1	RE-CC	1	/	1
DeviceNet	Master*	/	CO-DN	/	DN-CC	1	DN-DN	1	DN-DP	/	RE-DN	1	RE-DN	/	RE-DN	RE-DN	RE-DN	1	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	1	RE-DN	DN-RS	DN-RS	DN-RS
PROFIBUS	Master*	1	CO-DP	/	DP-CC	/	DN-DP	1	DP-DP	/	RE-DP	/	RE-DP	/	RE-DP	RE-DP	RE-DP	1	RE-DP	DP-RS	DP-RS	DP-RS
PROFIBUS	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	1	RE-DP	DP-RS	DP-RS	DP-RS
PROFINET	Master*	/	RE-CO	/	RE-CC	/	RE-DN	1	RE-DP	/	1	/	1	/	RE-EN	RE-EN	RE-EN	1	/	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	Master*	/	RE-CO	/	RE-CC	/	RE-DN	1	RE-DP	/	1	/	1	/	RE-EN	RE-EN	RE-EN	1	/	RE-RS	RE-RS	RE-RS
Sercos	Slave	RE-CO	RE-CO	/	RE-CC	RE-DN	RE-DN	RE-DP	RE-DP	/	/	/	/	/	RE-EN	RE-EN	RE-EN	1	/	RE-RS	RE-RS	RE-RS
EtherNet/IP	Master*	/	RE-CO	/	RE-CC	/	RE-DN	1	RE-DP	/	RE-EN	/	/	/	RE-EN	RE-EN	RE-EN	1	/	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	1	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*	/	/	/	/	/	/	1	/	/	1	/	1	/	/	1	/	/	/	/	/	1
POWERLINK	Slave	RE-CO	RE-CO	/	RE-CC	RE-DN	RE-DN	RE-DP	RE-DP	/	/	1	/	/	RE-EN	RE-EN	RE-EN	/	/	RE-RS	RE-RS	RE-RS
Modbus	Master	CO-RS	CO-RS	/	1	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	1	1	1
RTU	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	1	RE-RS	/	/	1
ASCII netSCRIPT	/	CO-RS	CO-RS	1	1	DN-RS	DN-RS	DP-RS	DP-RS	RE-RS	RE-RS	RE-RS	RE-RS	RE-RS	RE-RS	RE-RS	RE-RS	1	RE-RS	1	1	1

Ordering example: PROFIBUS Master to EtherNet/IP Slave = NT 100-RE-DP

* Master license must be ordered separately (Modbus RTU/TCP without limitations)

Hilscher News:

DIN-Rail, DIN EN 60715

Emission | Noise Immunity

CISPR 11 Class A | EN 61131-2:2003

Certification

CE Sign, UL 508









HEADQUARTERS

Germany
Hilscher Gesellschaft für
Systemautomation mbH
Rheinstraße 15
65/95 Hattersheim
Phone: +49 (0) 6190 9907-0
Fax: +49 (0) 6190 9907-50
E-Mail: info@hilscher.com Web: www.hilscher.com

DISTRIBUTORS

More information at www.hilscher.com

SUBSIDIARIES

China
Hilscher Systemautomation
(Shanghai) Co. Ltd.
2000'10 Shanghai
Phone: +86 (0) 21-6355-5161
E-Mail: info@hilscher.cn

Hilscher France S.a.r.l. 69800 Saint Priest Phone: +33 (0) 4 72 37 98 40 E-Mail: info@hilscher.fr

Hilscher India Pvt. Ltd. Pune, Mumbai Phone: +91- 8888 750 777 E-Mail: info@hilscher.in

Hilscher Italia S.r.l. 20090 Vimodrone (MI) Phone: +39 02 25007068 E-Mail: info@hilscher.it

Janan

Hilscher Japan KK Tokyo, 160-0022 Phone: +81 (0) 3-5362-0521 E-Mail: info@hilscher.jp

Hilscher Korea Inc. Seongnam, Gyeonggi, 463-400 Phone: +82 (0) 31-789-3715 E-Mail: info@hilscher.kr

Switzerland

Hilscher Swiss GmbH 4500 Solothurn Phone: +41 (0) 32 623 6633 E-Mail: info@hilscher.ch

Hilscher North America, Inc. Lisle, IL 60532 Phone: +1 630-505-5301 E-Mail: info@hilscher.us