

netTAP 50

Low-Cost Gateway for industrial Automation

- For Fieldbus to Serial or Ethernet conversions
- Short I/O data conversion time lower than 20 msec
- Extremely space-saving compact design
- Loadable firmware for flexible use of other conversions



netTAP 50 is a protocol converter for simple conversions. netTAP 50 converts 1-port Real-Time Ethernet, fieldbus and serial automation protocols. Slave to slave or slave to master conversions are supported. As a master, netTAP 50 provides full master functionality to one slave device only. This makes it easy to integrate a single field device into any higher-level network.

The design impresses with a cost-optimized, compact hardware implementation being reduced to the elementary requirements of a protocol converter. The converter addresses market segments which set the focus on cost savings. The cost-reduced design combined with its countless conversion possibilities makes netTAP 50 an attractive gateway in terms of price and universality.

netTAP is configured and diagnosed by the universal FDT/DTM technology based configuration tool SYCON.net. LED indicators are visualizing status information for rapid on-site diagnostics. The protocol conversions are pre-programmed and loaded as firmware into the device on demand. Conversions needing the same physical network interface can be managed by a single device variant. So a device can be for example a PROFIBUS slave on one hand or a PROFIBUS master by a simple firmware change on the other.

Technical Data / Product Overview

Protocol matrix / Article Description

NT 50-		CANopen		CC-Link		DeviceNet		PROFIBUS		EtherNet/IP PROFINET		Modbus TCP		Modbus RTU		ASCII	
		Master*	Slave	/	Slave	Master*	Slave	Master*	Slave	Master*	Slave	Master	Slave	Master	Slave	/	
CANopen	Master*	/	/	/	/	/	/	/	/	/	CO-EN	CO-EN	CO-EN	CO-EN	CO-RS	CO-RS	CO-RS
	Slave	/	/	/	/	/	/	/	/	/	CO-EN	CO-EN	CO-EN	CO-EN	CO-RS	CO-RS	CO-RS
CC-Link	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
	Slave	/	/	/	/	/	/	/	/	/	CC-EN	CC-EN	CC-EN	CC-EN	CC-RS	CC-RS	CC-RS
DeviceNet	Master*	/	/	/	/	/	/	/	/	/	DN-EN	DN-EN	DN-EN	DN-EN	DN-RS	DN-RS	DN-RS
	Slave	/	/	/	/	/	/	/	/	/	DN-EN	DN-EN	DN-EN	DN-EN	DN-RS	DN-RS	DN-RS
PROFIBUS	Master*	/	/	/	/	/	/	/	/	/	DP-EN	DP-EN	DP-EN	DP-EN	DP-RS	DP-RS	DP-RS
	Slave	/	/	/	/	/	/	/	/	/	DP-EN	DP-EN	DP-EN	DP-EN	DP-RS	DP-RS	DP-RS
EtherNet/IP PROFINET	Master*	/	CO-EN	/	CC-EN	/	DN-EN	/	DP-EN	/	/	/	/	RS-EN	RS-EN	RS-EN	RS-EN
	Slave	CO-EN	CO-EN	/	CC-EN	DN-EN	DN-EN	DP-EN	DP-EN	/	/	/	/	RS-EN	RS-EN	RS-EN	RS-EN
Modbus TCP	Master	CO-EN	CO-EN	/	CC-EN	DN-EN	DN-EN	DP-EN	DP-EN	/	/	/	/	RS-EN	RS-EN	RS-EN	RS-EN
	Slave	CO-EN	CO-EN	/	CC-EN	DN-EN	DN-EN	DP-EN	DP-EN	/	/	/	/	RS-EN	RS-EN	RS-EN	RS-EN
Modbus RTU	Master	CO-RS	CO-RS	/	CC-RS	DN-RS	DN-RS	DP-RS	DP-RS	RS-EN	RS-EN	RS-EN	RS-EN	/	/	/	/
	Slave	CO-RS	CO-RS	/	CC-RS	DN-RS	DN-RS	DP-RS	DP-RS	RS-EN	RS-EN	RS-EN	RS-EN	/	/	/	/
ASCII	/	CO-RS	CO-RS	/	CC-RS	DN-RS	DN-RS	DP-RS	DP-RS	RS-EN	RS-EN	RS-EN	RS-EN	/	/	/	/

Ordering example: PROFIBUS Master to EtherNet/IP Slave = NT 50-DP-EN

* Master license included; supports Master functionality to one slave (Modbus RTU/TCP without limitations)

Parameter	Value
Diagnostic Interface	Ethernet, RJ45 female connector
Displays	SYS, COM, LINK, Rx / Tx, protocol specific
Configuration	SYCON.net, Windows® 7 or higher
Power Supply	18 ... 30 V / 130 mA @ 24 V
Connector	Mini-COMBICON 2-pin
Operating temperature	0 ... 60 °C
Dimensions (L x W x H)	100 x 25 x 70 mm (without connector)
Mounting	DIN-Rail, DIN EN 60715
RS232/485/422	not electrically isolated
Weight	80 g
CE Sign	yes
Emission	CISPR 11 Class A
Noise Immunity	EN 61131 - 2 : 2003

Protocol	Maximum Cyclic Process Data		
	Master	Slave	
ASCII	1000	Bytes	I/O-Data
CANopen	1024	1024	Bytes I/O-Data
CC-Link		736	Bytes I/O-Data
DeviceNet	510	510	Bytes I/O-Data
EtherNet/IP	1008	1008	Bytes I/O-Data
Modbus RTU	1024	1024	Bytes I/O-Data
Modbus TCP	1024	1024	Bytes I/O-Data
PROFIBUS	488	488	Bytes I/O-Data
PROFINET	2048	1024	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: Subject to change without notice

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