

Gateways for Industrial Communications

netTAP 50 - The Low-Cost Gateway

- 1 port Real-Time Ethernet, Fieldbus, serial RS232/485/422
- Over 60 different protocol conversions available
- 10-20msec processing time
- Master functionality to single slave
- Configuration over Ethernet



netTAP 100 - The High-End Gateway

- 2 port Real-Time Ethernet, Fieldbus, serial RS232/485/422 (isol.)
- Fieldbus to Fieldbus or Real-Time Ethernet to Ethernet
- Over 200 different protocol conversions available
- 5-10msec processing time
- Unrestricted Master functionality (license)
- Programmable serial port with scripting language
- Memory card option for data backup



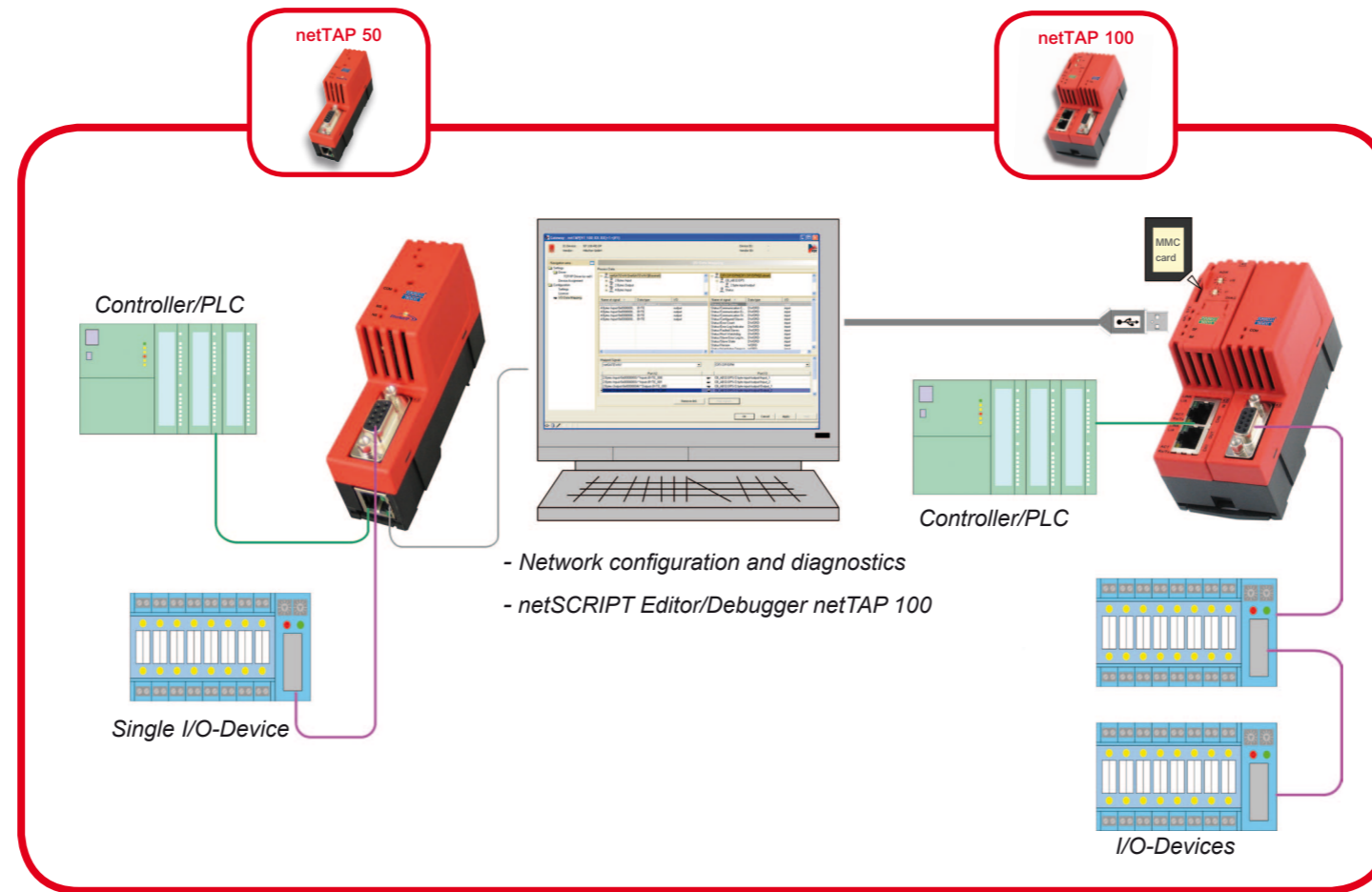
The netTAP gateway family converts two industrial protocols simply and efficiently into each other. Whether it's a simple serial bus, a classic Fieldbus or one of the many Real-Time-Ethernet protocols, netTAP provides a common platform for a transparent conversion of any automation protocol. For plants recently upgraded with Fieldbus or modernized with Real-Time-Ethernet netTAP enables the use of existing and proven field devices still by simply interfacing between the new and old technology.

The modular gateway design combines the two network interfaces in a DIN-rail mountable housing. netTAP is configured and diagnosed by a universal FDT/DTM technology based configuration tool. 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.

netTAP 50 – The Low-Cost Gateway

netTAP 50 is a protocol converter for simple conversions. It supports conversions of one port Real-Time Ethernet to Fieldbus to serial automation protocols. the conversion can be either slave to slave or slave to communications. As a master netTAP 50 provides full master functionality to one slave device only. This enables an effortless integration of a single field device into any higher-level network.

The design provides a cost-optimized, compact hardware implementation. The converter addresses a market segment that sets the focus on cost savings. The cost reduced design combined with its countless conversions is making netTAP 50 an attractive gateway in terms of price and universality.



netTAP 100 – The High-End Gateway

netTAP 100 is the protocol converter for sophisticated conversions and supports two port Real-Time Ethernet to serial, Fieldbus to Fieldbus, Real-Time Ethernet to Ethernet conversions. It supports slave and master functionality in any combination. There are no restrictions on the master functionality when it is master licensed.

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

netTAP 100 includes netSCRIPT to create own serial protocols with the scripting language Lua. A full featured development environment is included in the delivery. It allows the comfortable and rapid programming of any proprietary serial protocol and the I/O data pre-processing during the conversion into the other field protocol.



Technical Data netTAP 50

| Protocol | Cyclic Process Data max. | | Parameter | Value |
|-------------|--------------------------|-------|-----------|----------|
| | Master * | Slave | | |
| ASCII | 2024 | 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-IO | 2048 | 2048 | Bytes | I/O-Data |

| Parameter | Value |
|-----------------------|--|
| Diagnostic Interface | Ethernet, RJ45 female connector |
| Display | SYS, COM, LINK, Rx/Tx, protocol specific |
| Configuration | SYCON.net, Windows® 2000, XP, 7 |
| Power Supply | 18 ... 30 V / 130 mA @ 24 V |
| Connector | Mini-COMBICON 2-pin |
| Operating Temperature | 0 ... 60 °C |
| Size (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 |

* Master functionality to one slave

The effectively convertible number of I/O data of a protocol conversion is determined by the protocol with the lower I/O data number.

Technical Data netTAP 100

| Protocol | Cyclic Process Data max. | | Parameter | Value |
|-------------|--------------------------|-------|-----------|----------|
| | 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 | 11520 | 400 | Bytes | I/O-Data |
| EtherNet/IP | 11520 | 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 | 7168 | 488 | Bytes | I/O-Data |
| PROFINET-IO | 11520 | 2048 | Bytes | I/O-Data |
| SERCOS III | 11520 | 396 | Bytes | I/O-Data |

| Parameter | Value |
|-----------------------|--|
| Diagnostic Interface | Mini-USB |
| Display | SYS, COM, LINK, Rx/Tx, protocol specific |
| Configuration | SYCON.net, Windows® 2000, XP, 7 |
| Power Supply | 18 ... 30 V / 130 mA @ 24 V |
| Connector | Mini-COMBICON 2-pin |
| Operating Temperature | 0 ... 60 °C |
| Size (L x W x H) | 100 x 52 x 70 mm (without connector) |
| Mounting | DIN-Rail, DIN EN 60715 |
| Weight | 150 g |
| CE-Sign | yes |
| UL | UL 508 |
| Emission | CISPR 11 class A |
| Noise Immunity | EN 61131-2:2003 |
| Card slot | MMC memory card |

The effectively convertible number of I/O data of a protocol conversion is determined by the protocol with the lower I/O data number.

Technical Data/ Product Overview

Supported Protocol Conversions / Ordering Code

| Primary Secondary | | | | | | | | | | | ASCII |
|----------------------|----------------------------------|----------------------------------|----------------------------------|-------------------|----------------------------------|----------------------------------|----------------------------------|-------------------|----------------------------------|-------------------|----------------------------------|
| | NT 100-CO-CO ● | NT 100-DN-CO ● | NT 100-DP-CO ● | NT 100-RE-CO ● | NT 100-RE-CO NT 50-CO-EN ● | NT 100-RE-CO NT 50-CO-EN ● | NT 100-CO-RS NT 50-CO-RS ● | NT 100-RE-CO ● | NT 100-RE-CO NT 50-CO-EN ● | NT 100-RE-CO ● | NT 100-CO-RS NT 50-CO-RS ● |
| | NT 100-CO-CC ● | NT 100-DN-CC ● | NT 100-DP-CC ● | NT 100-RE-CC ● | NT 100-RE-CC NT 50-CC-EN ● | NT 100-RE-CC NT 50-CC-EN ● | NT 50-CC-RS ● | NT 100-RE-CC ● | NT 100-RE-CC NT 50-CC-EN ● | NT 100-RE-CC ● | NT 50-CC-RS ● |
| | NT 100-CO-DN ● | NT 100-DN-DN ● | NT 100-DP-DN ● | NT 100-RE-DN ● | NT 100-RE-DN NT 50-DN-EN ● | NT 100-RE-DN NT 50-DN-EN ● | NT 100-DN-RS NT 50-DN-RS ● | NT 100-RE-DN ● | NT 100-RE-DN NT 50-DN-EN ● | NT 100-RE-DN ● | NT 100-DN-RS NT 50-DN-RS ● |
| | NT 100-RE-CO NT 50-CO-EN ● | NT 100-RE-DN NT 50-DN-EN ● | NT 100-RE-DP NT 50-DP-EN ● | NT 100-RE-EN ● | NT 100-RE-EN ● | NT 100-RE-EN ● | NT 100-RE-RS NT 50-RS-EN ● | NT 100-RE-EN ● | NT 100-RE-EN ● | NT 100-RE-EN ● | NT 100-RE-RS NT 50-RS-EN ● |
| | NT 100-CO-RS NT 50-CO-RS ● | NT 100-DN-RS NT 50-DN-RS ● | NT 100-DP-RS NT 50-DP-RS ● | NT 100-RE-RS ● | NT 100-RE-RS NT 50-RS-EN ● | NT 100-RE-RS NT 50-RS-EN ● | - | NT 100-RE-RS ● | NT 100-RE-RS NT 50-RS-EN ● | NT 100-RE-RS ● | - |
| | NT 100-RE-CO NT 50-CO-EN ● | NT 100-RE-DN NT 50-DN-EN ● | NT 100-RE-DP NT 50-DP-EN ● | NT 100-RE-EN ● | NT 100-RE-EN ● | NT 100-RE-EN ● | NT 100-RE-RS NT 50-RS-EN ● | NT 100-RE-EN ● | NT 100-RE-EN ● | NT 100-RE-EN ● | NT 100-RE-RS NT 50-RS-EN ● |
| | NT 100-CO-DP ● | NT 100-DN-DP ● | NT 100-DP-DP ● | NT 100-RE-DP ● | NT 100-RE-DP NT 50-DP-EN ● | NT 100-RE-DP NT 50-DP-EN ● | NT 100-DP-RS NT 50-DP-RS ● | NT 100-RE-DP ● | NT 100-RE-DP NT 50-DP-EN ● | NT 100-RE-DP ● | NT 100-DP-RS NT 50-DP-RS ● |
| ASCII | NT 100-CO-RS NT 50-CO-RS ● | NT 100-DN-RS NT 50-DN-RS ● | NT 100-DP-RS NT 50-DP-RS ● | NT 100-RE-RS ● | NT 100-RE-RS NT 50-RS-EN ● | NT 100-RE-RS NT 50-RS-EN ● | - | NT 100-RE-RS ● | NT 100-RE-RS NT 50-RS-EN ● | NT 100-RE-RS ● | - |
| netSCRIPT | NT 100-CO-RS ● | NT 100-DN-RS ● | NT 100-DP-RS ● | NT 100-RE-RS ● | NT 100-RE-RS ● | NT 100-RE-RS ● | - | NT 100-RE-RS ● | NT 100-RE-RS ● | NT 100-RE-RS ● | - |

NT 100 (netTAP 100): Master license optional; For master conversions it has to be ordered separately (except Modbus RTU,TCP)

NT 50 (netTAP 50): Master license included; Master functionality restricted to one slave only (except Modbus RTU,TCP)

○ -Primary-Secondary

● -Slave-Slave

● -Slave-Slave; -Master-Slave

● -Slave-Slave; -Slave-Master

● -Master-Slave; -Slave-Slave; -Slave-Master

● -Master-Slave; -Master-Master; -Slave-Slave; -Slave-Master

● -Slave-Seriell

● -Slave-Seriell; -Master-Seriell

| Article description | Article No. | Article |
|---------------------|-------------|--------------------------------|
| NXLIC-MASTER | 8211.000 | Master license for netTAP 100 |
| MMC-CARD | 1719.001 | MMC-Memory card for netTAP 100 |

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