Features

- Very compact design for DIN rail mounting
- Redundant power supply
- Galvanic isolation of the networks
- Up to 1024 bytes of input/output data
- 300 configurable slots for PROFINET IO data
- Supports the full ModbusTCP address space with free assignment of IO data
- Supports multiple ModbusTCP clients accessing simultaneously
- Configuration only with GSDML file, no further software required
- MQTT publisher on both network sides (PROFINET & ModbusTCP)

PROFINET Coupler, Modbus/TCP

Machines and systems can be linked with fieldbus couplers. This makes data exchange between different control worlds possible. A complex CPU-to-CPU communication can be omitted. Depending on the fieldbus, the integration takes place via device description files such as GSD, GSDML or EDS.

Simple and uncomplicated connection of a PROFINET network with a ModbusTCP network is possible with the PN/ModbusTCP Coupler. The PN/ModbusTCP Coupler enables data transmission between a PROFINET controller and ModbusTCP participants. Received input data on one of the network sides is made available as output data to the other network side. The IO data transfer takes place live and as quickly as possible without additional handling blocks.

The maximum size of the transmitted data is 1024 bytes input/output data. Up to 300 slots for I/O modules are available via which the PROFINET data can be connected to the ModbusTCP coils, inputs and registers as required. The full ModbusTCP address space of 65536 coils, inputs and registers is supported.

The integration into the PLC engineering tool is made possible by a GSDML file.

In addition to the PROFINET/ModbusTCP communication, the PN/ModbusTCP coupler also provides an MQTT publisher on both network sides. This means that the values ??exchanged via the gateway can also be distributed to visualization or production data acquisition systems via MQTT.

General information

Order number	700-159-3MB02
Article name	PN/ModbusTCP Coupler

Scope of delivery	PN/ModbusTCP Coupler with power plug
Dimensions (DxWxH)	32.5 x 58.5 x 76 mm
Weight	Approx. 135 g

PROFINET interface (X1)

Number	1
Connection	2 x RJ45, integrated switch
Protocol	PROFINET IO as defined in IEC 61158-6-10
Transmission rate	100 Mbps full duplex
I/O image size	max. 1024 bytes of input and output data
Features	Media redundancy (MRP),
	automatic addressing,
	topology detection (LLDP, DCP),
	diagnosis alarms
	PROFINET conformance class B

ModbusTCP interface (X2)

Number	1
Connection	2x RJ45, integrated Switch
Protocol	ModbusTCP server
Transmission rate	10/100 Mbps full duplex
I/O image size	65536 coil bits,
	65536 discrete input bits,
	65536 input register,
	65536 holding register
Supports Modbus function codes	1, 2, 3, 4, 5, 6, 15, 22, 23

Status indicator

Function status	9 LEDs
Ethernet status	8 LEDs

Power supply

Operating voltage	24 V DC (18 - 28 V DC)
Current draw	max. 140 mA at 24 V DC
Power dissipation	max. 3,4 W

Ambient conditions

Ambient temperature	0 °C to 60 °C
Transport and storage temperature	-20 °C to 80 °C
Protection rating	IP 20
Mounting position	as desired
Approvals	CE, UL

UL

UL	UL 61010-1 / UL 61010-2-201
Surrounding Air Temperature	DC 24 V (18 ... 28 VDC, SELV and limited energy circuit)
Pollution degree	2
Altitude	Up to 2000m
Temperature cable rating	87 °C

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