

# MDIO-16

## Technical Documentation Parallel Input-/Output-Module

*Please keep for further use !*

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# MDIO-16



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## MDIO-16, Submodule digital input/output

**16 bit 24V inputs**  
**16 bit 24V/0.5A outputs**

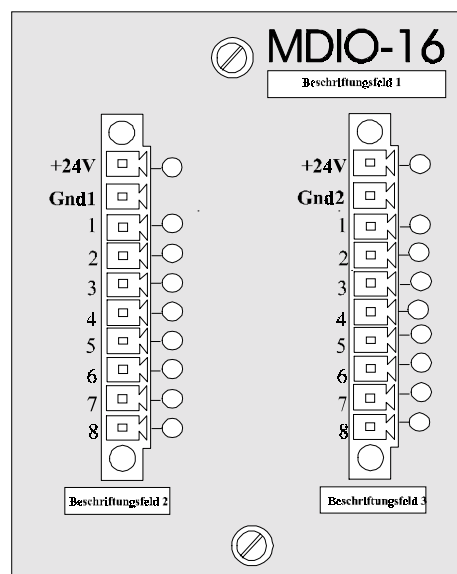
### 1 General

The MDIO16 input/output module is a submodule, which is galvanically decoupled by means of optocouplers, for the basic modules:

- FOX-20 ( Lightbus ),
- PBX-21 ( Profibus ),
- IBX-21 ( Interbus-S ) and
- CNX-21 ( DeviceNet ).

It has 16 digital inputs/outputs for 24V /0,5A. It can be installed up to four MDIO16 in the four slots of a basic module. Thus, 64 inputs/output per module are possible. A mixture with other digital or analog modules is also possible.

Each of the 16 channels can be used as input/output or as outputs with reading back function. If a channel is used as input, he can not be used as an output. If the channel is used as output, its output level can be read back again for control as input.



## 2 Technical data MDIO-16

<b>Inputs</b>	16 inputs, galvanically decoupled 16 LED input status indicators 2 LED voltage indicator
<b>Outputs</b>	16 outputs, galvanically decoupled 16 LED output status indicators 2 LED voltage indicator
<b>Output Specifications</b>	24V / 0.5A short-circuit-proof After getting rid of an existing short-circuit, the output resets itself to its logical status, i.e. if the output is set from the point of view of the message, it switches ON.
<b>Output Monitoring</b>	Watchdog circuit
<b>Power supply</b>	24 V DC ( $\pm 20\%$ ), 0.02 A (without load and input currents)
<b>Housing</b>	Module fixed with 2 screws in basic module
<b>Dimensions (W * H * D)</b>	58 * 72 * 50 mm
<b>Weight</b>	ca. 100 g
<b>Temperature range</b>	Operation $\pm 0..+55^{\circ}$ C Storage: $-20..+70^{\circ}$ C

### 2.1 Signal description MDIO-16

Pin	Signal	I/O	Description
L-1	+ 24V	VCC	+ 24 V DC output driver supply
L-2	0V	GND	Ground, feedback of outputs
L-3	DIO 0	In/Out	Bit 0 of data byte
L-4	DIO 1	In/Out	Bit 1 of data byte
L-5	DIO 2	In/Out	Bit 2 of data byte
L-6	DIO 3	In/Out	Bit 3 of data byte
L-7	DIO 4	In/Out	Bit 4 of data byte
L-8	DIO 5	In/Out	Bit 5 of data byte
L-9	DIO 6	In/Out	Bit 6 of data byte
L-10	DIO 7	In/Out	Bit 7 of data byte
R-1	+ 24V	VCC	+ 24 V DC output driver supply
R-2 ...	0V	GND	Ground, feedback of outputs
R-3	DIO 8	In/Out	Bit 8 of data byte
R-4	DIO 9	In/Out	Bit 9 of data byte
R-5	DIO 10	In/Out	Bit 10 of data byte
R-6	DIO 11	In/Out	Bit 11 of data byte
R-7	DIO 12	In/Out	Bit 12 of data byte
R-8	DIO 13	In/Out	Bit 13 of data byte
R-9	DIO 14	In/Out	Bit 14 of data byte
R-10	DIO 15	In/Out	Bit 15 of data byte

Pin designations

L : left-hand row;

R : right-hand row