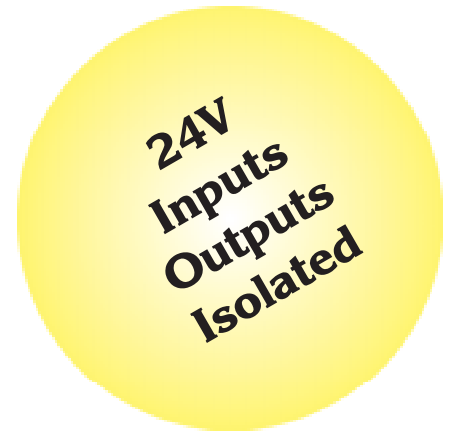
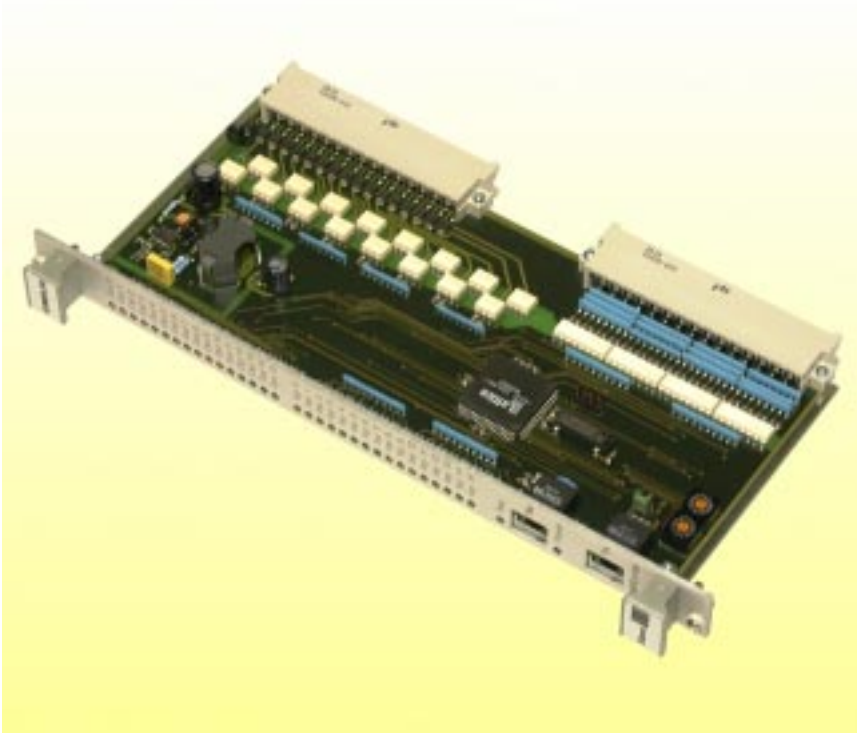


16 isolated In- and Outputs

INFO-I16r



Technical Data

Inputs

- 16 inputs
- 24V, 10mA
- Individually isolated
- Can be connected as required to plus or minus

Outputs

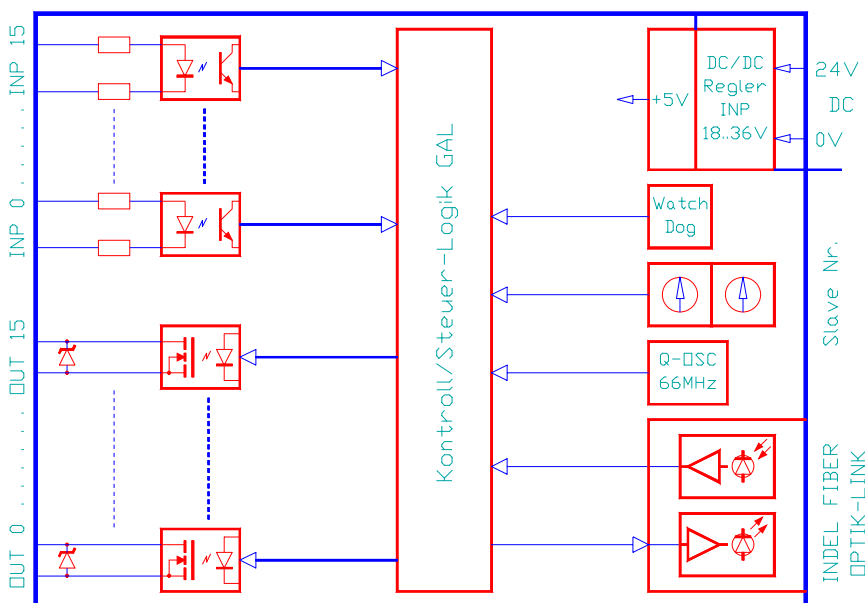
- 16 outputs
- 24V, max. 2A
- Individually isolated
- Can be connected to plus or minus

The INFO-I16r board differs from the other I/O boards in that its inputs and outputs are individually isolated. All inputs and outputs can be connected as required to plus or minus. The board is an ideal replacement of relay

boards for the control of external devices and for transmitting signals to external control systems. Advantage of the INFO-I16r: No wear, not even in case of high number of switching cycles, unlike relay boards.

Status indication

- User-friendly indication of all inputs and outputs by LEDs



INFO-I16r

Function

The INFO-I16r board can control 16 inductive or ohmic loads and other loads with up to 2A continuous load and simultaneously register 16 input signals.

The inputs and outputs are electrically isolated both from each other and from the board power supply.

The states of all inputs and outputs are indicated by LEDs. For each input and output, two connections each are available (INP+, INP- or OUT+ and OUT-). The outputs behave like a simple relay make contact, it being necessary to pay attention to the polarity during connection.

In terms of software, the INFO-I16r board behaves exactly like an INFO-16P board. Up to max. 250 INFO-I16r boards can be connected with an optical fiber to the INFO-Master. Serial transmission in this case is so fast that a board is served every 4 μs. In other words, in one millisecond all 250 possible INFO-I16r boards are addressed. In case of Power-Off of the computer, or the rupturing of the fiber optic line, a watchdog will immediately switch off all outputs.

The connections C and D (C: 6z ... 32z; D: 2z ... 32z) can be used as a bus. Either for +24V or 0V.

16 isolated In- and Outputs

Connector Allocations

	d		b		z	
2	O	OUT+ 0	O	OUT- 0	I	K 24V K_GND
4	O	OUT+ 1	O	OUT- 1	I	
6	O	OUT+ 2	O	OUT- 2		C
8	O	OUT+ 3	O	OUT- 3		C
10	O	OUT+ 4	O	OUT- 4		C
12	O	OUT+ 5	O	OUT- 5		C
14	O	OUT+ 6	O	OUT- 6		C
16	O	OUT+ 7	O	OUT- 7		C
18	O	OUT+ 8	O	OUT- 8		C
20	O	OUT+ 9	O	OUT- 9		C
22	O	OUT+ 10	O	OUT- 10		C
24	O	OUT+ 11	O	OUT- 11		C
26	O	OUT+ 12	O	OUT- 12		C
28	O	OUT+ 13	O	OUT- 13		C
30	O	OUT+ 14	O	OUT- 14		C
32	O	OUT+ 15	O	OUT- 15		C

Connector 1

90° angled
DIN 41612, Type F-48
2.8mm pins

	d		b		z	
2	I	INP + 0	I	INP - 0		D
4	I	INP + 1	I	INP - 1		D
6	I	INP + 2	I	INP - 2		D
8	I	INP + 3	I	INP - 3		D
10	I	INP + 4	I	INP - 4		D
12	I	INP + 5	I	INP - 5		D
14	I	INP + 6	I	INP - 6		D
16	I	INP + 7	I	INP - 7		D
18	I	INP + 8	I	INP - 8		D
20	I	INP + 9	I	INP - 9		D
22	I	INP + 10	I	INP - 10		D
24	I	INP + 11	I	INP - 11		D
26	I	INP + 12	I	INP - 12		D
28	I	INP + 13	I	INP - 13		D
30	I	INP + 14	I	INP - 14		D
32	I	INP + 15	I	INP - 15		D

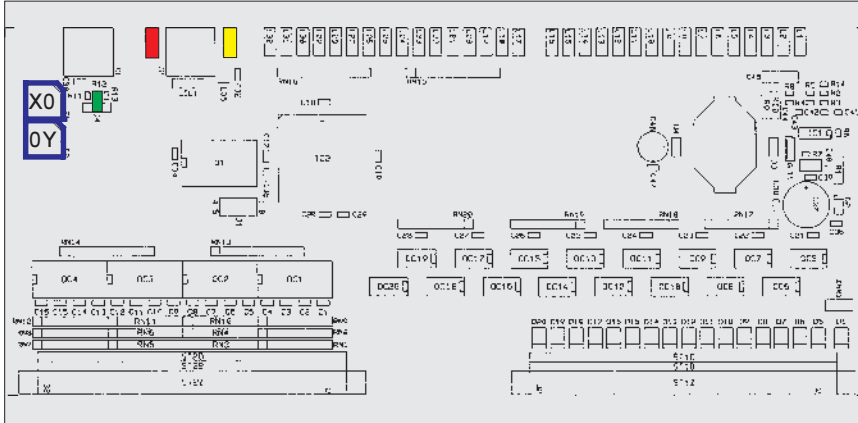
Connector 2

90° angled
DIN 41612, Type F-48
2.8mm pins

16 isolated In- and Outputs

INFO-I16r

Assembly



Addressing (blue)

S1 (X0)	S2 (OY)	Board
0	0	0
...
F0	0F	255

LEDs on front panel

All inputs and outputs pass through the front panel and are labeled there.

LEDs on the receiver module

LED-red = +5V supply
LED-yellow = INFO-Link receiver signal OK

Jumper (green)

The jumper influences the light intensity of the emitting LED and thereby the segment length of the fiber cable to the next board.

Segment length	Jumper position
0 ... 10m	no jumper
8 ... 30m	> 10
20 ... 50m	> 30

Customer-specific modifications are available whenever required.

Specifications

Power supply

+18 ... 36V, 350mA max.

Climatic conditions

- Ambient temperature:
Storage: -20...+80°C
Operation: 0 ... +45°C
- Board temperature:
Operation: 0...+70 °C
- Relative air humidity
No condensation: 95%

Inputs

- 16 individually isolated inputs, electrically isolated
- 24V, 10mA
- Switching threshold: 15V
- Switching delay: ON 55µs
OFF 100µs

Outputs

- 16 individually isolated FET outputs, electrically isolated
- 24V, 150mΩ
- Power dissipation:
P=4.8W/board (16x2A)

Connected power

Each output must only be loaded by maximum 2A.

The unused pins of each connector are interconnected and can be used for distributing 24V or 0V.

Mounting

- Connector DIN 41612, Typs F-48
- Mounting in 19" chassis
- Dimensions:
234 x 100 x 20 mm (LxWxH)
- 6HU x 4DU

INFO-I16r

16 isolated In- and Outputs

Connections

Board power supply

For the board power supply, a 3-phase rectifier without electrolytic capacitor is sufficient. But to avoid malfunctions, an electrolytic capacitor of 4700 ... 10,000µF is recommended. The 24V power supply must pass through a line filter.

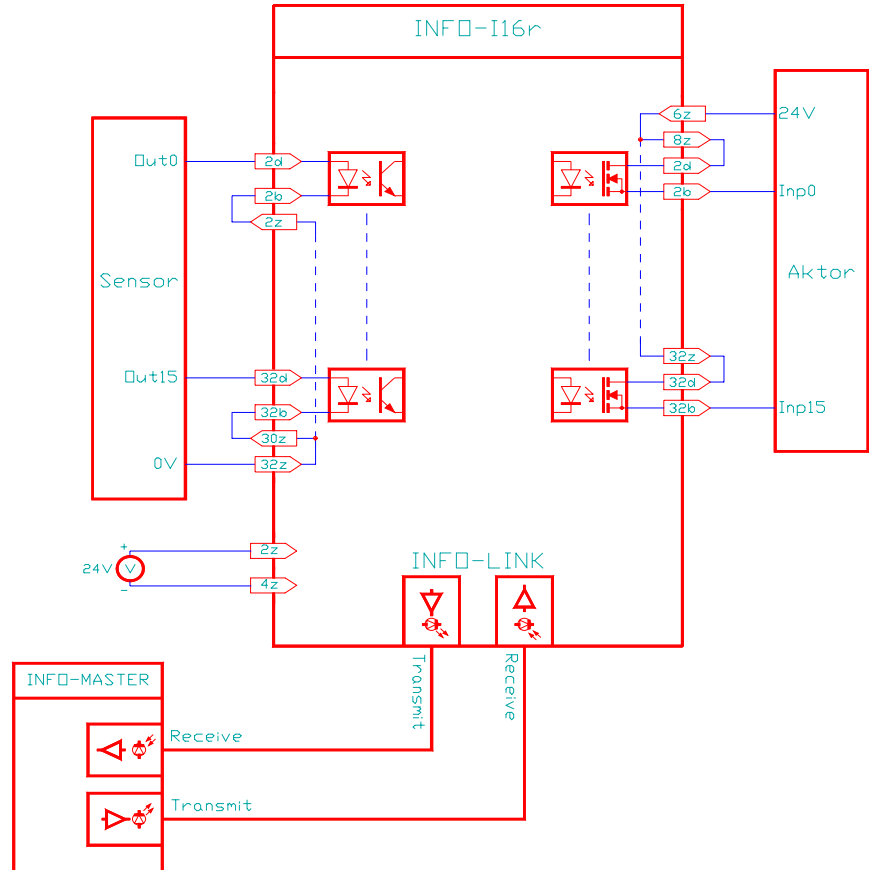
Screened lines

All lines from and to the INFO-I16r board can be installed without screening.

Grounding

The I16pr board is grounded on the front panel. Take care to ensure that the rack housing is connected with the control cabinet in a conductive manner. This is best achieved using chromated mounting bars to allow interference to be discharged.

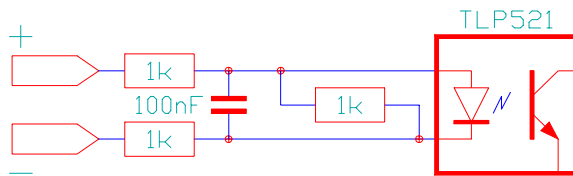
Connection Example



Interfaces

Wiring

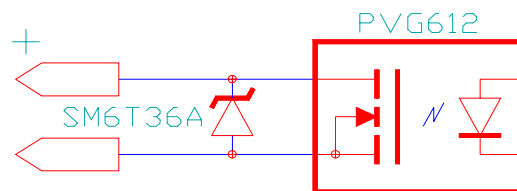
Inputs



Inputs

The inputs are configured as standard for 24V. By adjusting the resistor arrays RN1 ... RN8, it is possible to configure the inputs for other voltages, e.g. 5V or 15V.

Outputs



Outputs

Configuration of the outputs