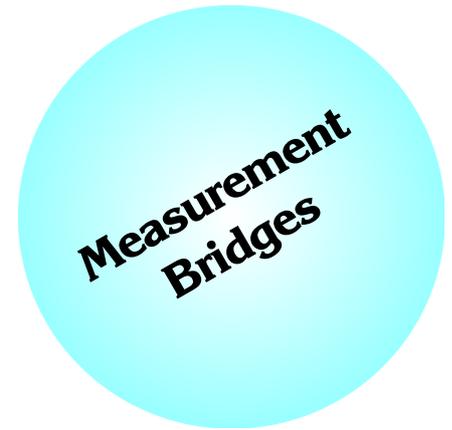
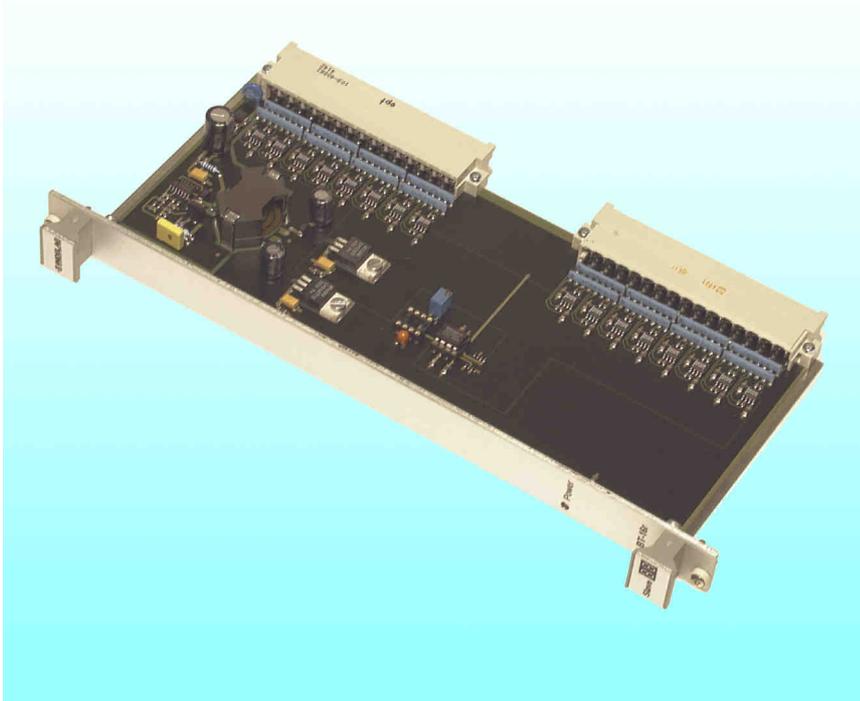


Bridge Driver

Bt-16r



Technical Data

Measurement bridges

- 16 bridge drivers
- $\pm 10V$ standard; other voltages upon request
- Voltage output: max. 20mA/channel

Power supply

- +18 ... 34V, 470mA an 24V
- Electrically isolated

Climatic conditions

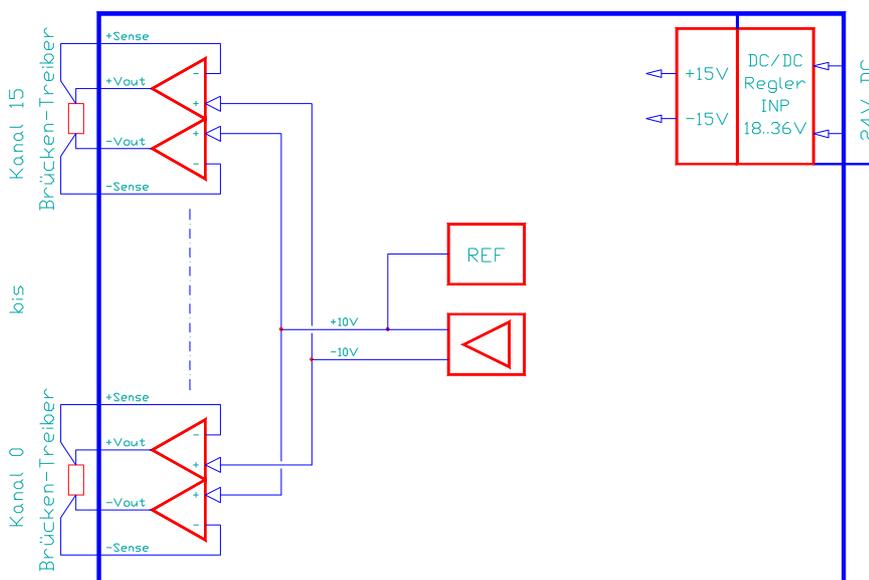
- Ambient temperature:
Storage: -20...+80°C
Operation: 0 ... +45°C
- Board temperature:
Operation: 0...+70 °C
- Relative air humidity
no condensation: 95%

Mounting

- Connector DIN 41612, Type F-48
- Mounting in 19" chassis
- Dimensions:
100 x 234 x 20mm (LxHxW)
- 6U x 4SU

The Bt-16r board is equipped with 16 independent bridge drivers. The drivers provide a controlled voltage of $\pm 10V$. For this purpose, the voltage outputs and the sense lines must be wired to the sensor.

The board is suitable for operating pressure sensors, strain gauges and other sensors. In combination with an analog/digital converter (INFO-ADC, INFO-FAD), it allows very fast and highly precise measurements to be performed.



Wiring

Board power supply

For the board power supply, a 3-phase rectifier without electrolytic capacitor will suffice. But in order to prevent interference, an electrolytic capacitor of 4,700... 10,000µF is recommended. The 24V power supply must pass through a line filter.

Shielded lines

All lines of the bridge drivers must be installed shielded. The shields must always be connected at both ends. In order to prevent undesired leakage currents, it may be necessary to provide a bonding conductor, especially in case of large distances or with different power supplies.

Grounding

The Bt-16r board is grounded through the front panel. Make sure that the connection between the rack housing and the control cabinet is conductive. This is best achieved using chromatinized mounting bars.

See also INDEL Wiring Guidelines and INDEL Design Guidelines.

Connector Allocations

		d		b		z	
2	I	+ Sense 0	O	+ Vout 0	O	I	+ 24V
4	I	- Sense 0	O	- Vout 0	O	I	0V
6	I	+ Sense 1	O	+ Vout 1	O		Shield
8	I	- Sense 1	O	- Vout 1	O		Shield
10	I	+ Sense 2	O	+ Vout 2	O		Shield
12	I	- Sense 2	O	- Vout 2	O		Shield
14	I	+ Sense 3	O	+ Vout 3	O		Shield
16	I	- Sense 3	O	- Vout 3	O		Shield
18	I	+ Sense 4	O	+ Vout 4	O		Shield
20	I	- Sense 4	O	- Vout 4	O		Shield
22	I	+ Sense 5	O	+ Vout 5	O		Shield
24	I	- Sense 5	O	- Vout 5	O		Shield
26	I	+ Sense 6	O	+ Vout 6	O		Shield
28	I	- Sense 6	O	- Vout 6	O		Shield
30	I	+ Sense 7	O	+ Vout 7	O		Shield
32	I	- Sense 7	O	- Vout 7	O		Shield

Connector 1

90° angled
DIN41612, Type F-48
2.8mm pins

		d		b		z	
2	I	+ Sense 8	O	+ Vout 8	O		Shield
4	I	- Sense 8	O	- Vout 8	O		Shield
6	I	+ Sense 9	O	+ Vout 9	O		Shield
8	I	- Sense 9	O	- Vout 9	O		Shield
10	I	+ Sense10	O	+ Vout 10	O		Shield
12	I	- Sense10	O	- Vout 10	O		Shield
14	I	+ Sense11	O	+ Vout 11	O		Shield
16	I	- Sense11	O	- Vout 11	O		Shield
18	I	+ Sense12	O	+ Vout 12	O		Shield
20	I	- Sense12	O	- Vout 12	O		Shield
22	I	+ Sense13	O	+ Vout 13	O		Shield
24	I	- Sense13	O	- Vout 13	O		Shield
26	I	+ Sense14	O	+ Vout 14	O		Shield
28	I	- Sense14	O	- Vout 14	O		Shield
30	I	+ Sense15	O	+ Vout 15	O		Shield
32	I	- Sense15	O	- Vout 15	O		Shield

Connector 2

90° angled
DIN41612, Type F-48
2.8mm pins

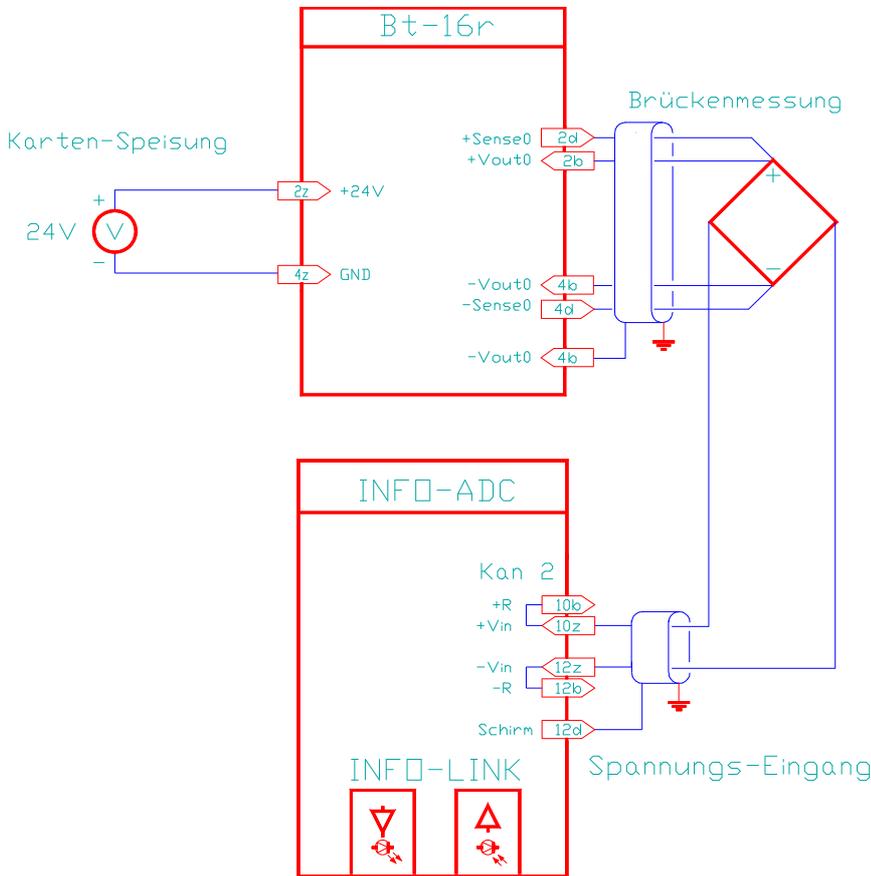
Bridge Driver

Bt-16r

Connections

Wiring

Connection example



The sketch opposite gives an example of how to wire the Bt-16r board with an analog/digital converter board (INFO-ADC).

LED on the front panel

LED-red = +15V power supply ok

Customized modifications are available as needed.

Bridge driver

