IsoPAQ-641

High-performance isolation transmitter for mA/V Signals with calibrated range selection

The Isolation Amplifier IsoPAQ-641 is used for isolation and conversion of 0/4 \dots 20 mA and 0/2 \dots 10 V standard signals.

The input and output range of IsoPAQ-641 can be easily set by using DIP switch. Due to the calibrated range selection no further adjustment is necessary. Also the cut-off frequency can be adapted to the measurement task by using the DIP Switch.

The auxiliary power can be supplied via the connection terminals or via the optional In-Rail-Bus connector. A green LED on the front of the unit has been provided to monitor the power supply.







- Calibrated signal setting via DIP switch Input and output range can be set by using DIP switch – high precision without any further adjustment
- 3-Port Isolation

Protection against erroneous measurements due to parasitic voltages or ground loops

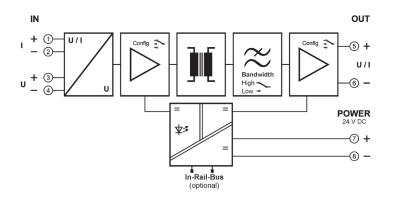
- Extremely slim design 6.2 mm slim housing for a simple and space saving DIN rail mounting
- Optional In-Rail-Bus mounting rail connector allows for fast and economical installation
- Protective Separation acc. to EN 61140 Protects service personnel and downstream devices against impermissibly high voltage
- Maximum reliability No maintenance costs

Specifications:

| Input | | | | |
|--|--|------------------|------------|---------------------------------------|
| Input signal | 0 20 mA | 4 20 mA | | |
| (calibrated switchable) | 0 10 V | 2 10 V | | |
| Input resistance | Current input | | ≤ 25 Ω | |
| | Voltage input | | ≥100 kΩ | |
| Overload | Current input | < 50 mA | | |
| | Voltage input | | < 30 V | |
| Output | | | | |
| Output signal | 0 20 mA | | | |
| (calibrated switchable) | D 10 V 2 10 V | | | |
| Load | Current output: ≤12 | / (600 Ω at 20 r | nA) | Voltage output: ≤ 5 mA (2 kΩ at 10 V) |
| Linear transmission range | –1 +110 % | | | |
| Residual ripple | < 10 mVrms | | | |
| General Data | | | | |
| Transmission error | < 0.1 % full scale | | | |
| Temperature coefficient ^{1]} | < 100 ppm/K | | | |
| Cut-off frequency -3 dB (switchable) | | 100 Hz | | 10Hz |
| Response time T99 | 150 µs | 7 ms | | 70 ms |
| Test voltage | | | | inst output against power supply |
| Working voltage ^{2]} (Basic insulation) | 600 V AC/DC for overvoltage category II and pollution degree 2 acc. to EN 61010-1 | | | |
| Protection against | Protective separation according to EN 61140 by reinforced insulation in accordance with EN | | | |
| electrical shock ²⁾ | 61010-1 up to 300 V AC/DC for overvoltage category II and pollution degree 2 between | | | |
| | all circuits | | | |
| Ambient temperature | Operation | | -25°C to · | +70°C |
| | Transport and storage -40°C to +85°C | | | |
| Power supply | 24 V DC voltage range 16.8 V 31.2 V, approx. 0.7 W | | | |
| EMC ³⁾ | EN 61326-1 | | | |
| Construction | 6.2 mm (0.244") housing, protection class IP 20, mounting on 35 mm DIN rail acc. to | | | |
| | EN 60715 | | | |
| Weight | Approx. 70 g | | | |

Average TC related to full scale value in specified operating temperature range, reference temperature 23 °C
For applications with high working voltages, ensure there is sufficient spacing or isolation from neighboring devices and protection against electric shocks.
Minor deviations possible during interference

Block diagram/Connections



Dimensions

