

The input module AIH41-N is used for the connection of 4-wire transducers (passive input = sink mode / transducer active).

The inputs are not galvanically separated from each other. When connecting the field devices, care has to be taken that all inputs are connected to the same supply potential.

HART® compatible sensors connected to the module communicate with the HART® controller.

The resolution is 14 bit, i.e. the analogue value between 0...21 mA is represented as a number between 0 and 16383. For clear reading, the digitized value is spread to 0 ... 21000 and transmitted to the host system.

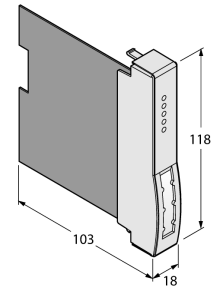
Up to 8 HART® variables (max. 4 per channel) can be read via the cyclical PROFIBUS data traffic. The bidirectional exchange of variables between the host system and the HART® transmitter is implemented via PROFIBUS-DPV1.

Parameters like wire-break or short-circuit monitoring, measuring range, HART® communication etc., can be adjusted for each channel separately and are solely initialized by the PROFIBUS master.



- **Input module for connection of 4-wire transmitters**
- **Transmission of HART® data**

Dimensions



| | | |
|-------------------------|--|-------------------------------|
| Type code | AIH41-N | |
| Ident no. | 6884220 | |
| Supply voltage | via the backplanes, central power supply | |
| Power consumption | ≤ 1 W | |
| Galvanic separation | to int. bus and supply circuit | |
| Number of channels | 4-channel | |
| Input circuits | 0/4...20 mA | |
| HART® Impedance | > 240 Ω | |
| Overload capability | > 22 mA | |
| Low level control | < 3.6 mA | |
| Short circuit | < 5 V (only with live zero) | |
| Wire-break | < 2 mA (only with live zero) | |
| Resolution | 14 Bit | |
| max. Messabweichung | ≤ max. Messabweichung % | max. Messabweichung |
| | 0.1 | bei geschirmtem Signalkabel |
| | 1 | bei ungeschirmtem Signalkabel |
| Linearitätsabweichung | ≤ 0.1% of full scale vom Endwert | |
| Temperature drift | ≤ 0.005 % / K | |
| Rise time/fall time | ≤ 50 ms (10 ... 90 %) | |
| Indication | | |
| Operational readiness | 1 x green / red | |
| State/ Fault | 4 x red | |
| Housing material | Plastic | |
| Connection mode | module, plugged on rack | |
| Protection class | IP20 | |
| Ambient temperature | -20...+60 °C | |
| Relative humidity | ≤ 95% at 55 °C acc. to EN 60068-2 | |
| Vibration test | acc. to IEC 60068-2-6 | |
| Shock test | acc. to IEC 60068-2-27 | |
| EMC | acc. to EN 61326-1 (2006) acc. to Namur NE21 (2007) | |
| MTTF | 93 years acc. to SN 29500 (Ed. 99) 40 °C | |
| Dimensions | 18x 118x 103 mm | |
| Weight | 80 g | |