

Overview



INPUD-TC (Inductive Power and Data Transmission) is a compact system for contactless transmission of thermocouple transducers. INPUD-TC is able to transmit up to two thermocouple channels simultaneously.

The electronics for receiving data from up to two TC (type K or -J) sensors is already integrated in the rotating module. Cold junction compensation is also located inside the rotor. There, the signals are amplified and converted serially into a digital data stream. Digital transmission ensures a very high degree of data reliability, even under harsh ambient conditions with the presence of e.g. oil, dust, or moisture. In the stationary module the incoming data stream is decoded and converted into an output signal that is proportional to the measured temperature. Due to the near field communication and its dedicated structure, the INPUD-TC is immune against external disturbances

The integrated LEDs indicate the status of the data communication and power control. This status information can also be fed directly to the control system via the connecting cable; it guarantees correct and reliable operation at all times.

INPUD products are available in different performance categories and form factors. Please contact MESA Systemtechnik for more information.

Features

- integrated signal converter
0..10 V / 4..20 mA
- no maintenance required, suitable for
24/7 continuous operation
- Housing protection IP54/67
- different form factors/performance
categories
- integrated CRC check, proprietary
digital transmission method
- not affected by electromagnetic radiation

Your benefits

- transmits up to two independent
thermocouples type K or type J
- integrated linearization and cold junction
compensation, thus high accuracy
- for harsh ambient conditions
- rotational speeds up to 5000 1/min
- compact design
- LED status display as well as status
information via the connection cable

Applications

- Horizontal flow wrapping machines
- Process engineering, planetary mixers
- Centrifuges, decanters
- Calenders (foil production, fleece, etc.)

