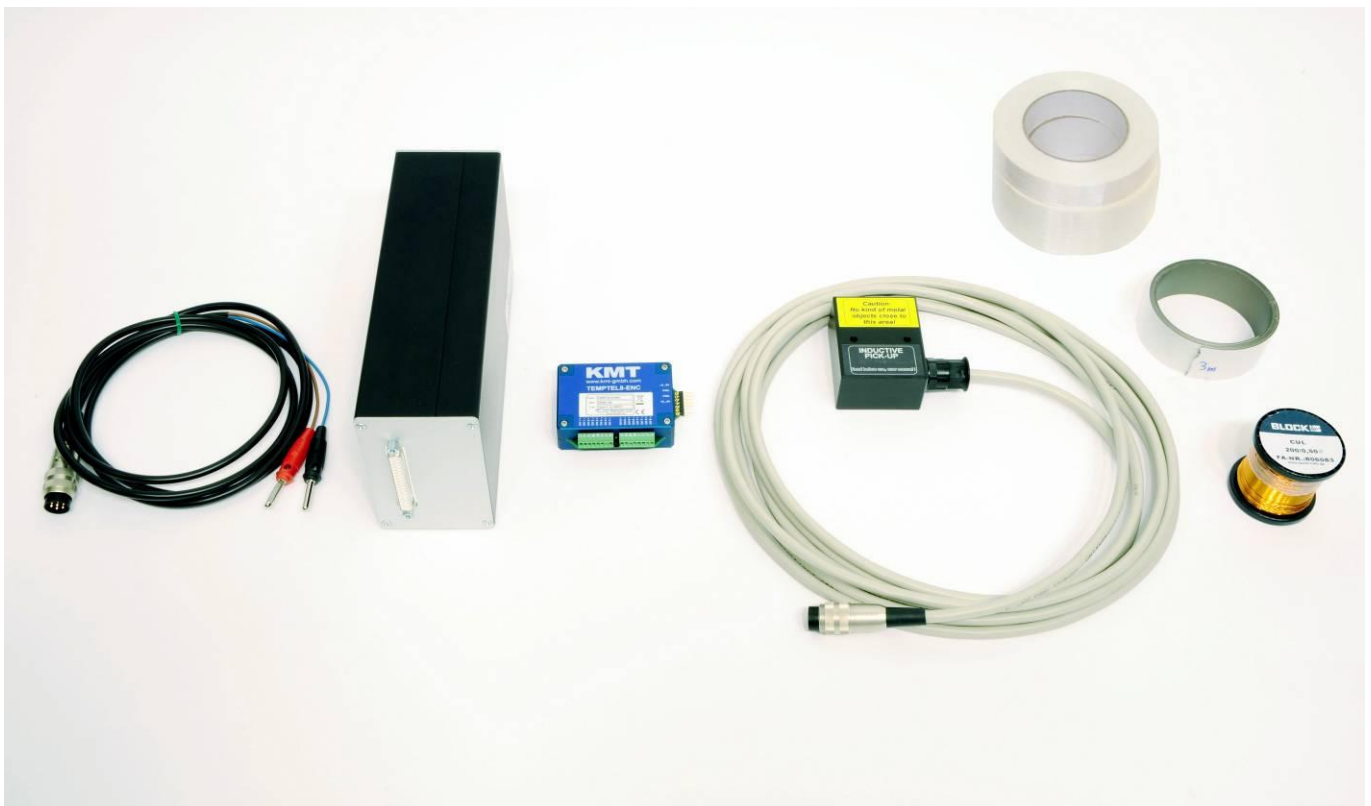


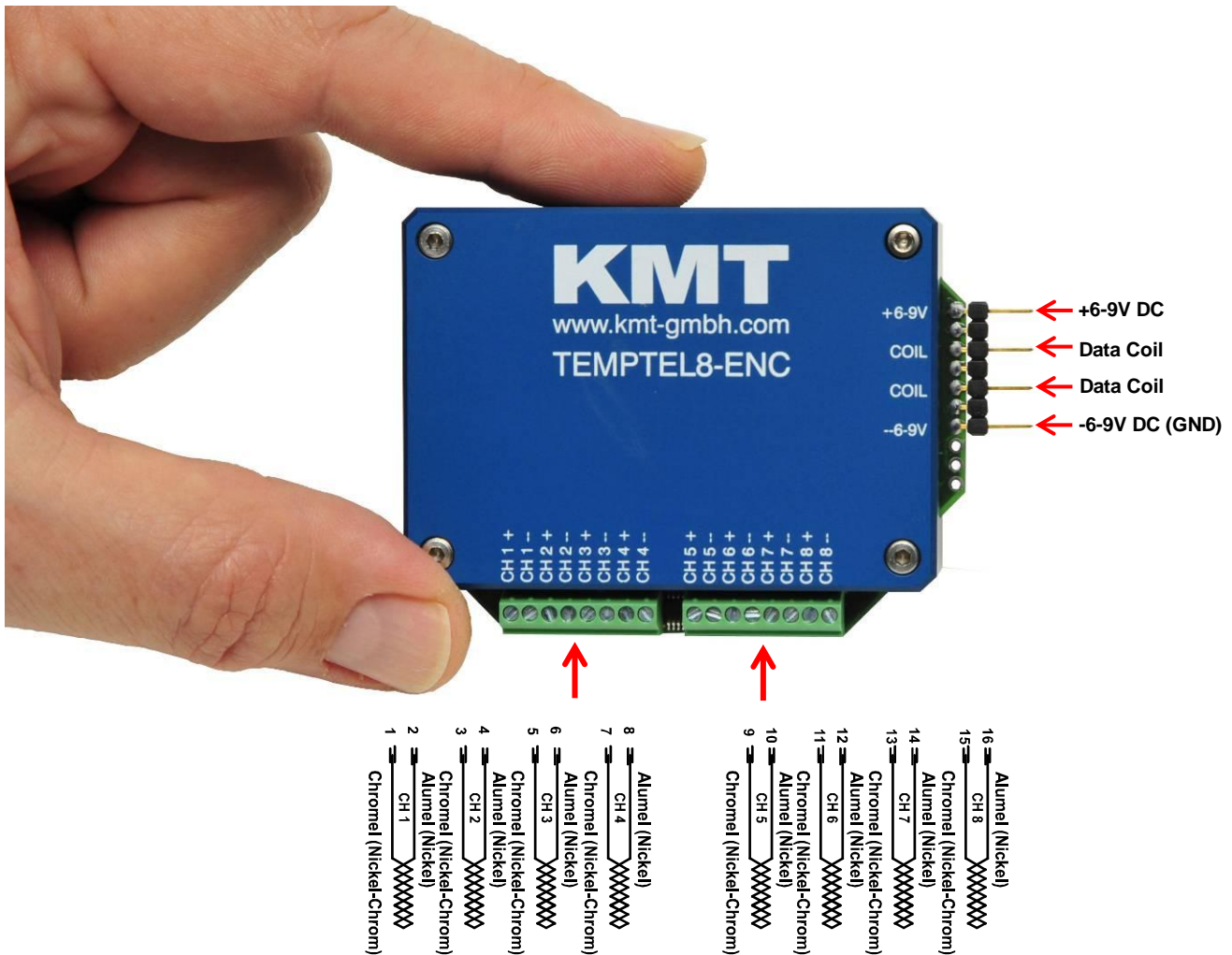
## TEMPTEL 4/8

**4/8 channel Telemetry System for Thermocouples K or J**  
Inductive digital transmission from rotating shafts



- For thermo couples K or J
- Linearization for K or J
- Galvanic isolated inputs
- Cold junction compensation
- 12 bit ADC resolution
- Signal bandwidth 0-30 Hz
- Different temperature ranges
- Inductive digital transmission
- 4 or 8 channel version
- Analog output +/- 10V
- Current outputs 0-20mA (Opt.)
- Powering of encoder with battery

## Transmitting unit TEMPTTEL4/8-ENC (Encoder)



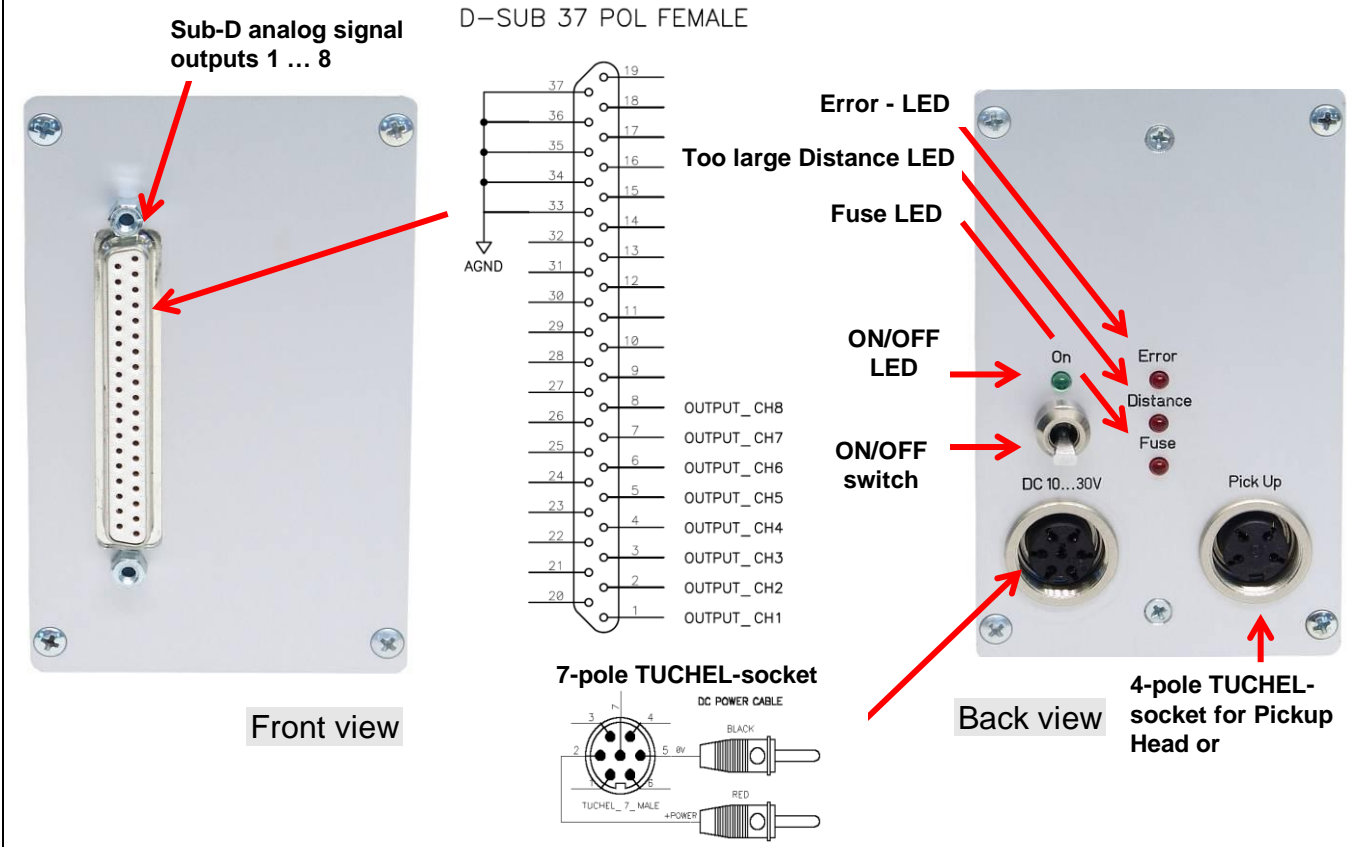
### SC Module TH-K (J):

Sensor:	thermo-couple, type K (J) with cold junction compensation <b>inputs full galvanic isolated!!</b>
Temperature measuring range type K:	-50°C to +1000°C (standard), or -50°C to +500°C or -50°C to +250°C specify temperature range at order!
Temperature measuring range type J: <u>type J on request</u>	-50°C to +750°C or -50°C to +500°C or -50°C to +250°C specify temperature range at order! J on request

### System Parameters:

Channels:	4 or 8
Resolution:	12 bit A/D
Line-of-sight distance:	distance 5-50mm at battery power (between coil and Pickup Head)
Powering:	6-9V by battery or <u>optional</u> inductive power supply
Current consumption:	130 mA
Analog signal bandwidth:	4x 0...30Hz or 8x 0...30Hz (scanning rage 312.5Hz/CH)
Dimensions:	70mm x 50 x 22.5mm (housing)
Weight:	110 g without cables
Transmission:	Induktive ,digital PCM Miller Format - FSK
Operating temperature:	- 20 ... +70°C
Housing:	Aluminum IP 54
Humidity:	20 ... 80% no condensing
Static acceleration:	1000g in all directions
Shock:	2000g in all directions

## Receiving unit TEMPTTEL4/8 DEC (Decoder)



### System Parameters:

Channel:	4 or 8 analog outputs via 37-pole sub-D +/-10V (linearised) (optional current output 0-20mA via 25-pole sub-D)
Receiving:	inductive PCM Telemetry
Resolution:	12 bit D/A converter, with smoothing filter
Dynamic:	72dB
Power supply input:	10-30 VDC
Current consumption:	300mA at 10V, 100mA at 30V
Analog signal bandwidth:	4 x 0 ... 30Hz or 8 x 0 ... 30Hz
Dimensions:	205 x 105 x 65mm
Weight:	1.00 kg without cables and antenna
Overall system accuracy between encoder input and decoder output:	+/-0.5% without sensor influences

### Environmental

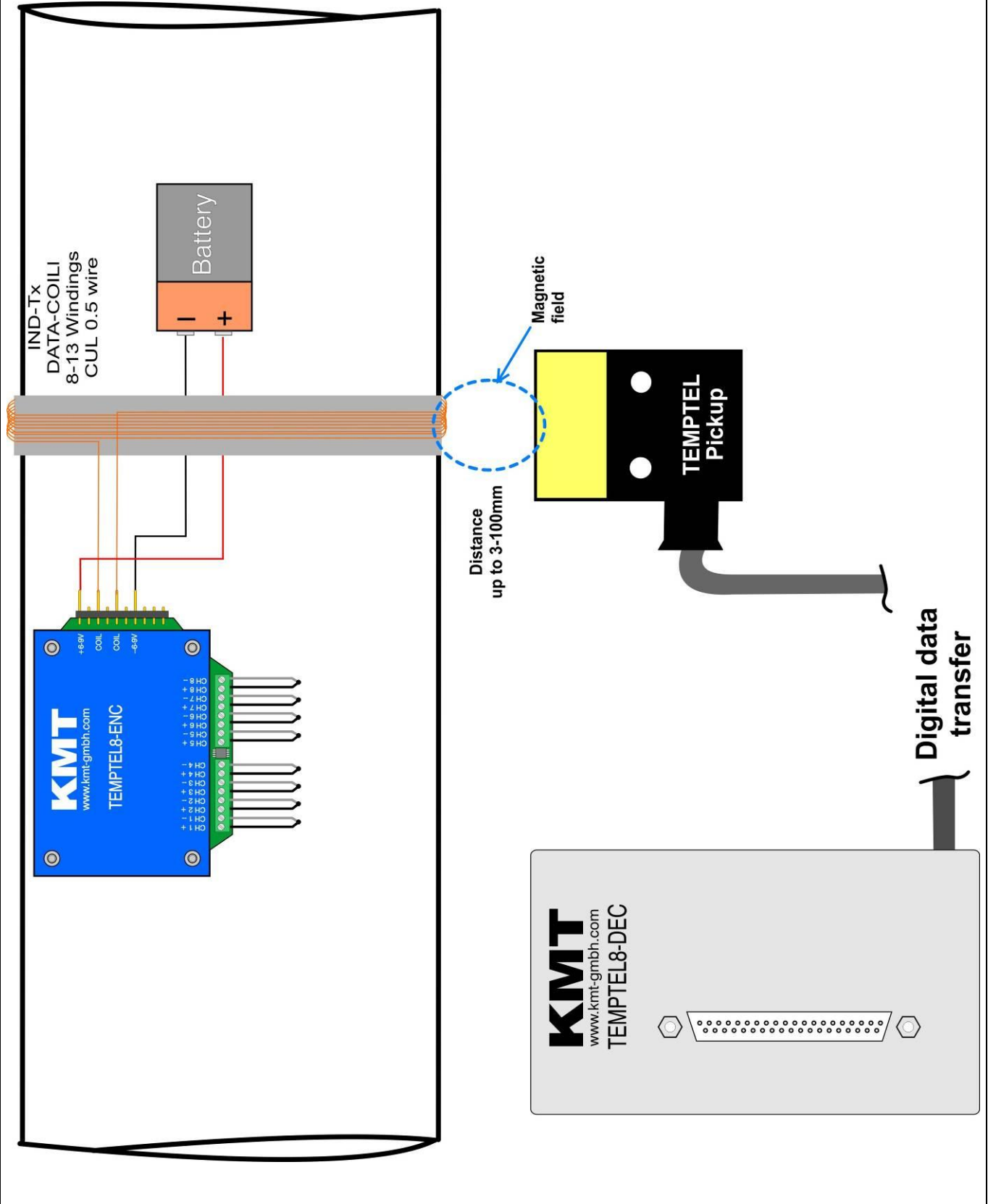
Operating:	-20 ... +70°C
Humidity:	20 ... 80% not condensing
Vibration:	5g Mil Standard 810C, Curve C
Static acceleration:	10g in all directions
Shock:	100g in all directions



### TEMPTTEL-Pickup

Pickup head receive inductive data from coil  
 Distance between the transmitter coil and the pickup is 5-100mm  
 PCM output to TEMPTTEL4/8-DEC via 5pol. Tuchel plug incl. 5m cable.  
 (Cable length standard 5m, optional 20m)  
 Operating temperature: - 10 to +80 °C  
 Dimensions: 45x60x25mm (without cable)  
 Weight: 400 grams (with 5m cable!)  
 Housing: splash-water resistant IP65 (except connector).

# Block diagram with battery power



# Block diagram with optional inductive power supply

