

## BC-TK8iso-000

## TypeK interface to CAN

### Feature

- Amplifies the thermocouple voltage of up-to 8 connected type-K sensors and sends the value onto the CAN-Bus.
- This module is characterized by a high temperature range of  $-200^{\circ}\text{C}$  up to  $1200^{\circ}\text{C}$ . Therefore it can be used for measurements in the climatic chamber as well as measurements of the exhaust gas temperature.
- Each channel is "galvanic isolated"
- The modular building ensures a maximum of flexibility.
- Single modules can be combined into a group of modules (e.g. in a temperature test stand). You can screw a unlimited number of single Type K boxes together.

### Single box (8 x temperature type K)



### Two Boxes screwed together (16 x temperature Typ K)



### Technical specifications

#### Electrical characteristics

Power supply.....	8-18 V DC
Current consumption@12V.....	150 mA
Channels (temperature type K).....	8
Galvanic isolation of the channels...	Yes
Temperature range.....	$-200-1200^{\circ}\text{C}$
Sampling rate.....	max. 400 Hz

💡 Use the following formula to convert the Digits into physical values:

Channel	Formula	Offset	Dimension
TYPK#1..8	$0,1 * \text{Digits}$	$+ 0$	$[^{\circ}\text{C}]$

↳ signed value

#### Product reference

- Take a look at the homepage
- [Support][Download][2D manuals]
  - [Hardware manuals][Product reference]
  - **AC-DOC\_BC-TK8iso-Reference\_e-000**



#### Mechanical characteristics

Dimensions.....	100x55 x 30 mm
Weight (inc. cables).....	215 g
Housing material.....	aluminium

#### Environmental data

Ambient operating range.....	0 to $+70^{\circ}\text{C}$
Humidity.....	5 - 95 %
Sealing class.....	IP 66

#### Vibration resistance

Shock.....	40 G
.....	10 ms
Vibration tested at.....	12 G
.....	1000 Hz

#### Ordering information

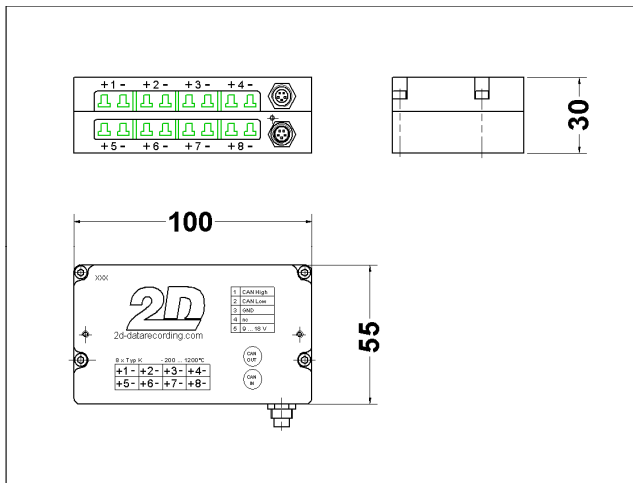
Art.No.:..... BC-TK8iso-000

## BC-TK8iso-000

## TypeK interface to CAN

### Dimensions

### Mounting advice



You can screw a unlimited number of single type K boxes together. Possibility to interconnect the boxes mechanically.



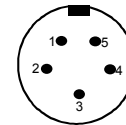
### Connector layout

### Connector type

#### CAN-line (standard)

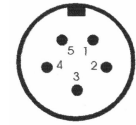
CAN-line Binder 712, 5pin	Pin	Name	Description	Color (standard)	Color (alternative)
	1	CAN H	CAN Bus High		white
2	CAN L	CAN Bus Low		green	brown
3	GND	Ground		black	black
4	n.c.	Not connected		-	-
5	Vext	Power IN (8-18V)		red	red

#### CAN IN



Binder 712, 5 PM  
(front side)

#### CAN OUT



Binder 712, 5 PF  
(front side)

#### Analog (temperature type-K)

Temperature cable 2pin	Name		Description	Color (standard)		Color (alternative)	
	+	-	Temperature cable +/-		red	green	
+	-	Temperature cable +/-				yellow	red
+	-	Temperature cable +/-				green	white
+	-	Temperature cable +/-				brown	blue
+	-	Temperature cable +/-				red	white
+	-	Temperature cable +/-				yellow	pink

#### Plug at module



2 PF (front side)

#### Mating plug



2 PM

#### Connection allocation on the module

