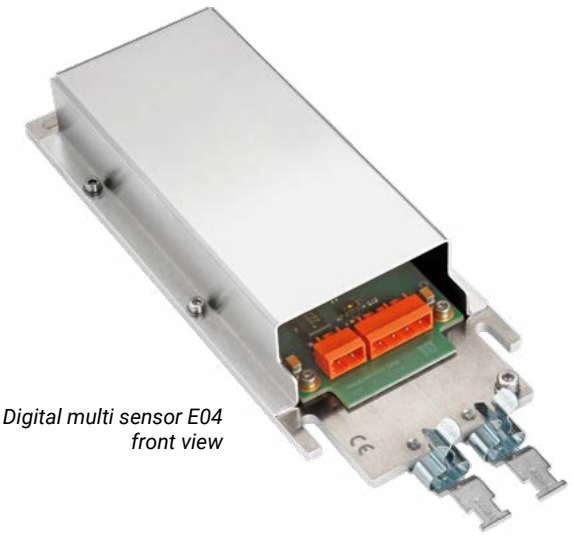
Digital multi sensor E04

Temperature, humidity and CO_2 // modular // active ventilated



Digital multi sensor E04
front view



Digital multi sensor E04
rear view

CANopen®

Highlights

- Digital multi-sensor for measuring ambient temperature, humidity and CO_2
- Active ventilated sensor elements → Enables hidden rear wall mounting along with a short response time
- CANopen communication protocol → Easy integration into equipment / systems
- Silent fan → Passengers are not disturbed by fan noise
- Very high vibration resistance → Reliable and durable operation
- Tested in accordance with DIEN EN 61373 Category 1, Class A, and other railway standards such as DIN EN 50155

Technical data	
Type	Modular multi sensor for temperature, humidity and CO_2, actively ventilated
Measuring range → Temperature → Humidity → CO_2	 -40...60 °C 0...100 % RH 0...5,000 ppm
Measuring medium	Ambient air (non-aggressive gases)
Dimensions [mm]	240 x 80 x 31 (W x H x D)
Process connection	Drill holes 4 mm (optionally with customer-specific mounting plates)
Nominal pressure	n.a. (atmospheric pressure)
Ambient temperature	-40...60 °C
Storage temperature	-40...60 °C
Degree of protection according to EN 60529	IP10

Electrical data	
Measuring element	1 x digital sensor element for temperature and humidity 1 x digital sensor element for CO_2 concentration
Accuracy*	
→ Temperature	±0.1 K @ 20...60 °C (typ.)
→ Humidity	±2.0 % RH @ 10...90 % RH, 20...60 °C (typ.)
→ CO_2	
400-5,000 ppm	±(30 ppm + 3 % of reading) @ 15...35 °C
1,501-2,500 ppm	±75 ppm @ 25 °C
0-5,000 ppm	±(30 ppm + 3 % of reading) @ 25 °C
Ouput	
→ Communication	CANopen (EN 50325-4)
→ Galvanic isolation	yes
Supply voltage	16...32 VDC
Power consumption	max. 5 W
Reverse polarity protection	yes
Electrical connection	
→ Supply voltage	WAGO Plug, 2-pin
→ Output	WAGO Plug, 4-pin

* The accuracy specifications are based on the data sheet specifications of the sensor element manufacturers.

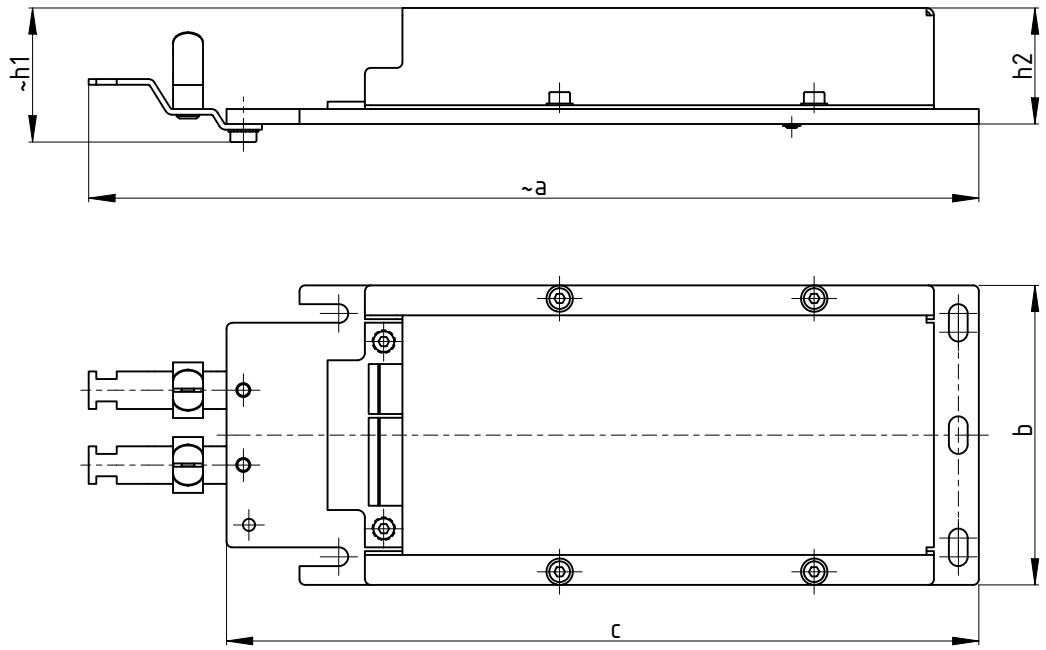
Grubatec AG - Gewerbehaus Ergolz, Wölferstrasse 5 - 4414 Füllinsdorf
Telefon: +41 (0)55 617 00 80 - www.grubatec.ch - sales@grubatec.ch

GRUBATEC MESS- UND REGELTECHNIK

SIKA

Technical drawing // Dimensions

E04



Dimensions [mm]					
Type	**a**	**b**	**c**	**h1**	**h2**
E04	240	80	201	36	31

Materials

Materials	
In contact with media	
Complete module	various

Article numbers

Article code	
Type	
E04 digital temperature and humidity sensor	W0SQE040XXXRA
E04 digital temperature, humidity and CO_2 sensor	W0SQE050XXXRA