

CODIX 551 for thermocouples and sensors in mV range



Now available with serial interface and set-up software EzControl!

Your benefit

- programmable input characteristics curve with up to 24 control points for 0...400/4000 Ω, 0...100 mV and -100... +100 mV
- auxiliary power supply output for measuring transducer/sensor
- Display Hold input
- easy operation and programming thanks to large keys
- Inputs thermocouples millivolt, resistance thermometer with 2, 3 or 4-wire measurement
- optional serial interface

Technical Data

Display	5-digit display, red 7-segment LED's; height 14,2 mm
Display range	-19999 ... 99999, with leading zeros suppression
Out of range - Indication	Under-range uuuuu / Over range ooooo
Data storage	EEPROM, 1 Million storage cycles or 10 Years
Test voltage	EN61010 Part 1; overvoltage category 2, Test voltages level 2
EMV	Interference resistance EN61000-6-2
AC power supply	90 ... 260 V AC / max. 6 VA external fuse 100 mA/T
DC power supply	10 ... 30 V DC / max. 2 W/galvanically isolated/with inverse polarity protection external fuse 250 mA/T
Mains Hum Filter	digital filter 50 Hz or 60 Hz, programmable

Measurement ranges

Thermocouples	Ranges	Accuracy
Type B	400,0 °C ... 1820,0 °C	± 1,5 °C
E	-200,0 °C ... 1000,0 °C	± 0,5 °C
J	-210,0 °C ... 1200,0 °C	± 0,5 °C
K	-200,0 °C ... 1372,0 °C	± 0,5 °C
N	-200,0 °C ... 1300,0 °C	± 0,5 °C
R	-50,0 °C ... 1760,0 °C	± 1,0 °C
S	-50,0 °C ... 1767,0 °C	± 1,0 °C
T	-210,0 °C ... 400,0 °C	± 0,5 °C

Resolution	0,1 °C (0,1 °F)
Cold-junction-compensation	internal or external (programmable)

Input for resistance thermometers

Resistance thermometer	Ranges	Accuracy
Type Pt100	-200,0 °C ... 800,0 °C	± 1,0 °C
Pt1000	-200,0 °C ... 800,0 °C	± 1,0 °C

Resolution	0,1 °C (0,1 °F)
Type	2 wire, 3 wire and 4 wire technology, programmable

Current	800 µA at Pt100; 80 µA at Pt1000
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Input for resistance

	Ranges	Accuracy
Resistance	0 ... 400 Ω	± 0,2 Ω
Resistance	0 ... 4000 Ω	± 2,0 Ω
Resistance	14 Bit	
Measurement mode	2 wire, 3 wire and 4 wire technology, programmable	
Current	800 µA at 400 Ω 80 µA at 4000 Ω	

Voltage measurement

	Ranges	Accuracy
Voltage	0 ... +100 mV DC	< 0,1% v. Mb ± 1 Digit
Voltage	-100 ... +100 mV DC	< 0,1% v. Mb ± 1 Digit
Resolution	14 bit	
Input resistance	> 2 MΩ	

Further data for measurement input

A/D transducer	Dual-Slope
Measuring speed	approx. 1 measurement/sec
Zero adjustment	automatically
Weight	ca. 220 g
Protection	IP 65
Ambient temperature	-20 ... +65 °C
Storage temperature	-40 ... +85 °C

Digital input

Input MPI*	Function of the input depends on set-up 1. Function: Display-Hold to stop the instantaneous value
Input KEY	Keypad lock-out of alarm settings

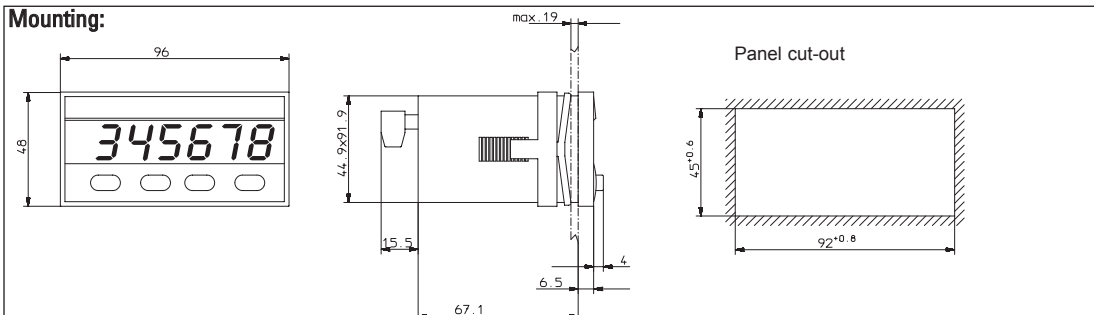
Auxiliary power supply output for measuring transducer/sensor

AC models	voltage output 10 V DC ±2%, 30 mA and voltage output 24 V DC ±15%, 50 mA
DC models	voltage output 10 V DC ±2%, 30 mA

Interface

Available options	RS232, RS485, RS422
Baud rate	600, 1200, 2400, 4800, 9600, 19200 programmable
Address	00 ... 99 programmable

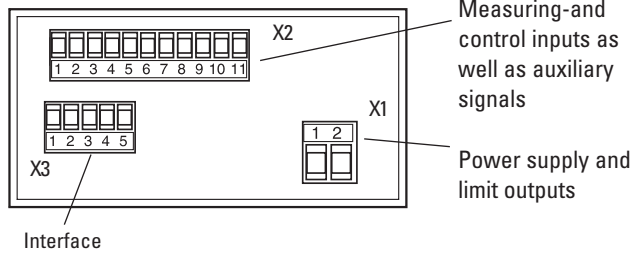
Mounting:



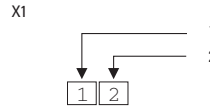
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Electrical Connections

View of rear of unit



Power supply



	DC voltage	AC voltage
1	10 ... 30 V DC	90 ... 260 V AC (N~)
2	GND4 (0 V DC)	90 ... 260 V AC (L~)

Interfaces

X3 1 2 3 4 5

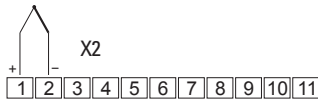
	RS232	RS485	RS422
1	GND	–	–
2	RxD	DO+/RI+	RI+
3	TxD	DO-/RI-	RI-
4	–	–	DO+
5	–	–	DO-

Serial interface

- For data transmission and documentation
- Connection for programmable logic controllers
- Programming via PC

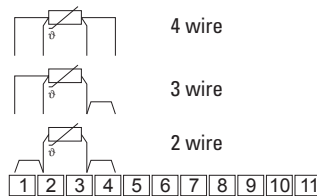
Inputs

Thermocouples

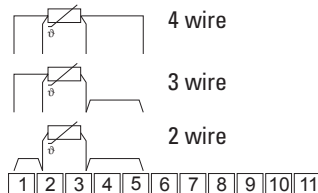


1	Positive leg of thermocouples
2	Negative leg of thermocouples

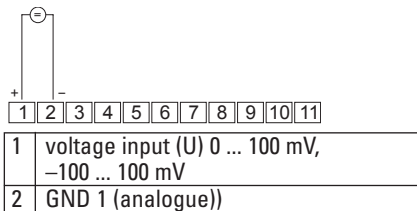
Resistance measurement
Pt1000 oder 0 ... 4000 Ω



Resistance measurement
Pt100 or 0 ... 400 Ω



Voltage measurement 0 ... 100 mV,
or –100 ... 100 mV



Delivery includes:

- Process display
- Screw terminal, 8-pole, RM 5.08
- Screw terminal, 11-pole, RM 3.81
- Screw terminal, 5-pole, RM 3.81(*)
- Clamping bracket
- Gasket
- Multilingual operating instructions
- 1 set of self-adhesive symbols

* only with the interface option

Order code

6.551.012.X0X

