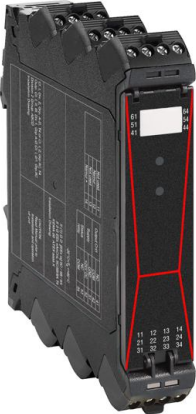


● Characteristics

1530 - STRAIN GAUGE - DIN RAIL - RTD PT100 - STANDARD SIGNAL

	- Channels	1 channel / 2 channels / 3 channels
	- Input strain gauge:	Strain gauge full bridge 350 Ω
	- Input RTD:	Pt100, 2-, 3-, 4-wire
	- Input current:	0...20 mA
	- Input voltage:	0...10 V
	- Other inputs:	Potentiometer, resistance
	- Output:	4...20 mA current loop HART (2-wire)
	- Supply:	Current loop
	- Accuracy:	See technical data
	- Electr. connection:	2...6x plug-in terminal strips, 4-pole
- Ingress protection:	IP20	

● Technical data

Input channels

Channels: 1 up to 3 channels
 Input: 1 up to 3 input signals

Input strain gauge / bridge (DRSG-S2)

Sensor: 1 strain gauge full bridge
 Bridge resistance: 350 Ω minimum
 Bridge supply: 1 VDC
 Bridge connection: 4-wire
 Range input signal: 1...4 mV/V
 Cable towards sensor: Length: 10 m maximum
 Type: Double-shielded

Input RTD Pt100 (DRRT-S2)

Sensor: 1 RTD Pt100
 Type: 2-, 3-, 4-wire
 Maximum range: -50...250 °C
 Minimum range: 50 °C
 Sensor current: 0,3 mA

Input current (DRCU-S2)

Input: 0...20 mA
 Input resistance: 27 Ω

Input voltage (DRVO-S2)

Input: 0...10 V
 Input resistance: 20 kΩ

Input resistance (DRWI-S2)

Input: 3,3 kΩ
 Measuring current: 0,15 mA

● Applications

For use in industrial facilities, plant engineering or in general applications. With it's up to 3 input signals, which can be different types, the via HART-tool configurable transmitter is also suitable for applications with higher requirements.



● Technical data (continued)

Input potentiometer (DRPO-S2)

Input: 3,3 k Ω
Measuring current: 0,15 mA

Output

Current signal: 4...20 mA with superimposed communication signal (HART), 2-wire current loop
Current range: 3,6...21 mA
Signal on error: 21 mA (sensor break, sensor open circuit, sensor short circuit, underflow)

Performance

Measuring amplifier: Accuracy: 0,3% of range
Resolution: 16 Bit
Filter setting: 0...99 s
Measuring rate: 10 measurements/s
Configuration: via software (HART communication)
Transmission behaviour: linear with input signal
Turn-on delay time: <5 s
Response time: 20 ms

Supply

HART current loop: Voltage: 12...40 VDC
Load: $R = (U_B - 12 \text{ V}) / 21 \text{ mA}$
Reverse battery protection: available (no function, no damage)

Programmable features

Measuring amplifier: Measuring range start (LRV) / Measuring range end (URV) /
Adjustment, simulation of output current / Filter function
Linear output signal / HART address / 2-point calibration

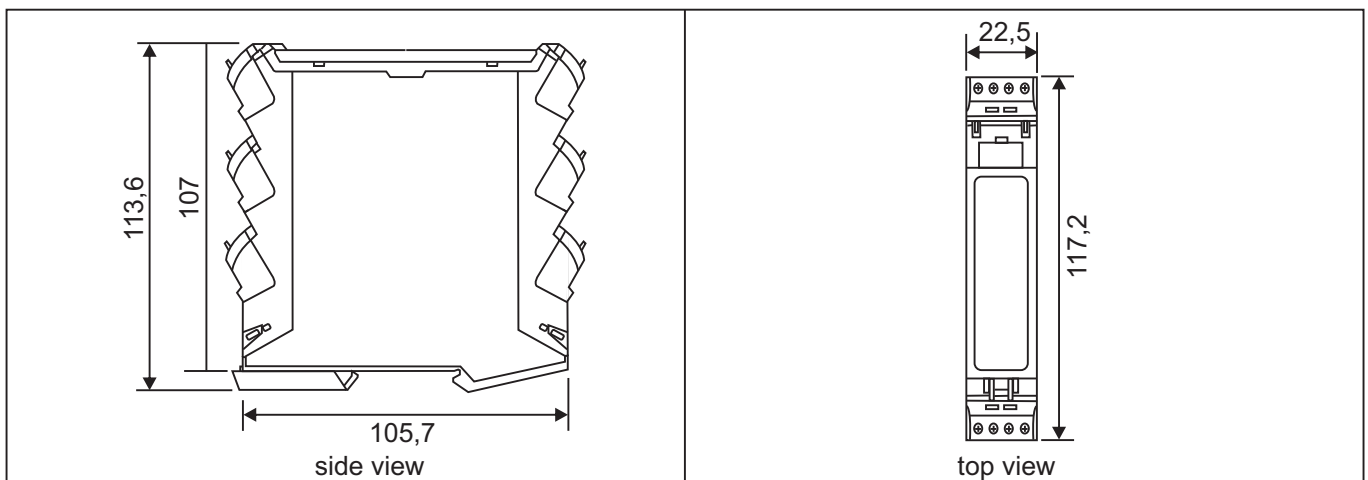
Ambient conditions

Temperature: Operating range: -20...+80 °C
Storing: -20...+85 °C
Air humidity: up to 95% rH

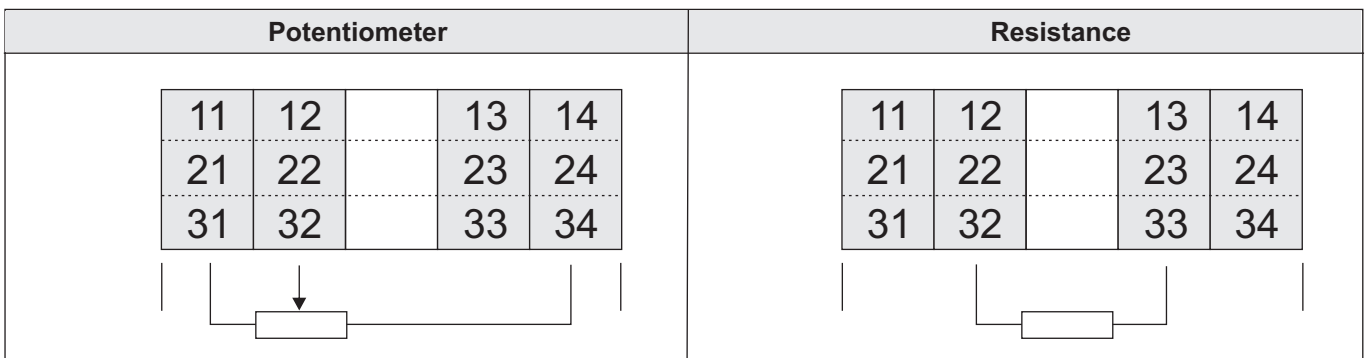
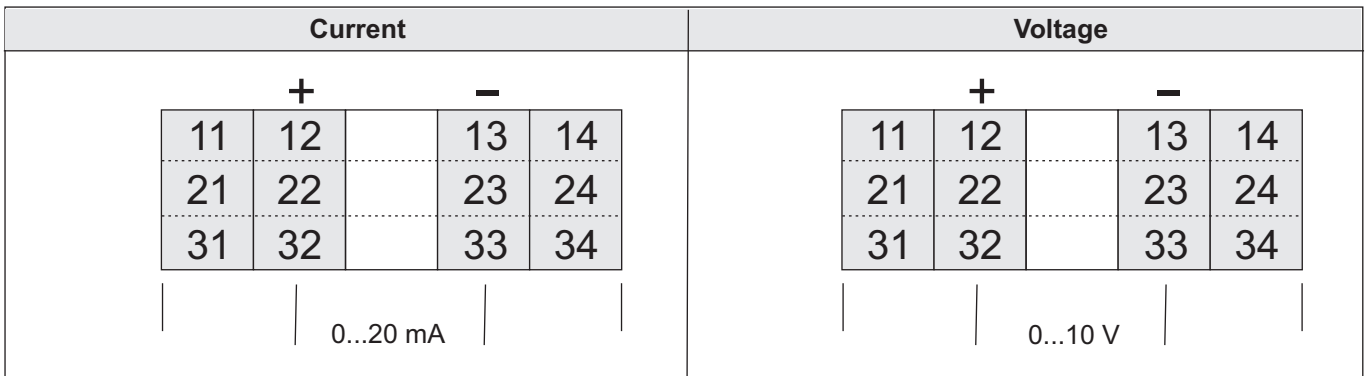
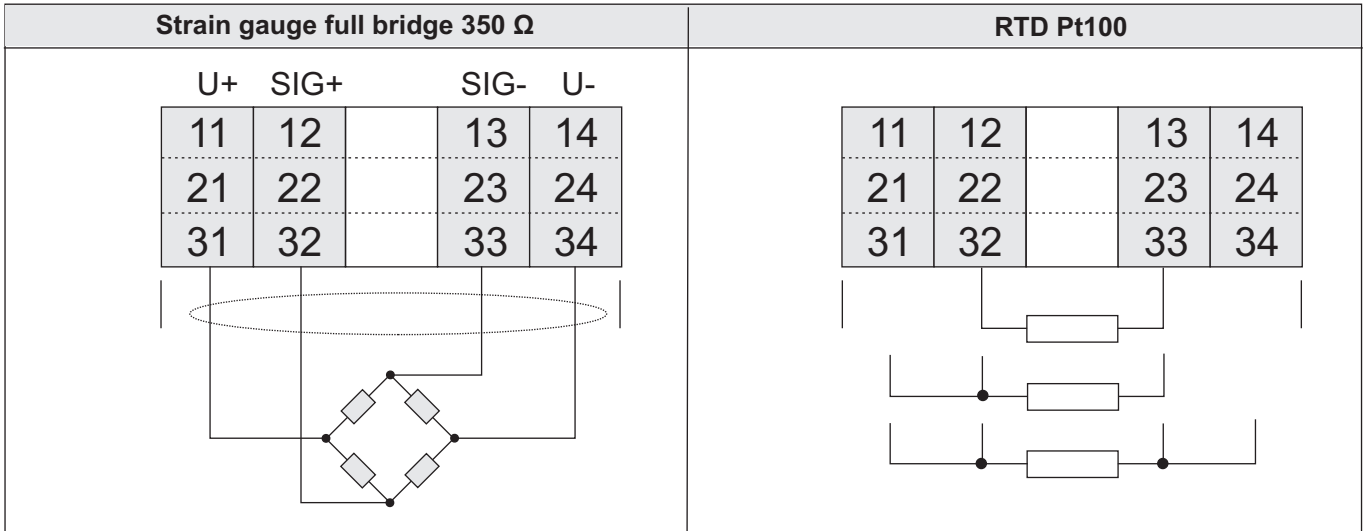
Mechanics

Case DR 22,5:
Dimensions: 117,2x22,5x113,6 mm
Material: PA66 GF30
Color: black
Flammability: UL 94 V-0
Mounting: DIN rail TS 35
Protection: IP 20
Weight: approx. 180 g
Electrical connection: 2..6 plug-in terminal strips 4-pole (according model)
Clamping range: 0,13...3,31 mm²

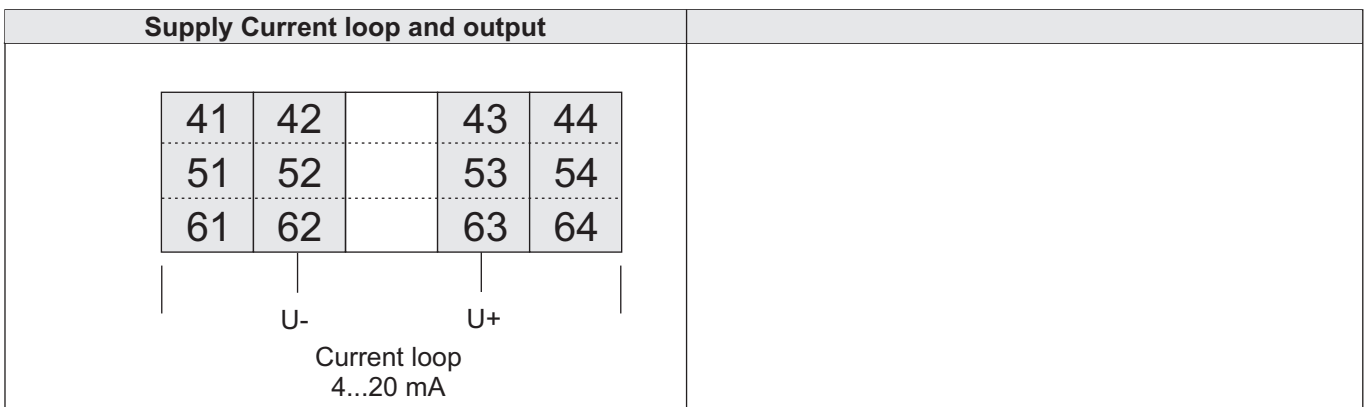
● Dimensions (in mm)



● **Connection input signal**



● **Connection supply and output signals**



● **Order code**

B W X X X X X X - X X X

Channels:	1 channel 2 channels 3 channels	1 2 3																		
Output:	4...20 mA HART		2																	
Input channel 1:	Strain gauge full bridge 350 Ω Resistance thermometer RTD Pt100, 2-, 3-, 4-wire DC current 0...20mA DC voltage 0...10 V Resistance 3,3 kΩ Potentiometer 3,3 kΩ																			
Input channel 2:	Strain gauge full bridge 350 Ω Resistance thermometer RTD Pt100, 2-, 3-, 4-wire DC current 0...20mA DC voltage 0...10 V Resistance 3,3 kΩ Potentiometer 3,3 kΩ																			
Input channel 3:	Strain gauge full bridge 350 Ω Resistance thermometer RTD Pt100, 2-, 3-, 4-wire DC current 0...20mA DC voltage 0...10 V Resistance 3,3 kΩ Potentiometer 3,3 kΩ																			
Supply:	HART current loop 12...40 VDC																			
Electr. connection:	Plug-in terminal strips																			0
Configuration:	Factory setting ¹⁾ Customized (please specify) ²⁾																			1 2
Special model:	No Yes (please specify)																			0 1

1) Factory setting

Signal	Strain gauge 2 mV/V	RTD Pt100	Current	Voltage	Differential pressure	Potentiom. Resistance
Nominal range (LRL<>URL)	100%	-50...250 °C	0...20 mA	0...10 V	100%	3300 Ω
Working range (LRV<>URV)	100%	-50...250 °C	0...20 mA	0...10 V	100 %	3300 Ω
Filter (Damping)	0 s	0 s	0 s	0 s	0 s	0 s

2) Possible settings can be done according the technical data.

Accessories:	
DEV-HM (HART-Interface, USB, Software)	Order.-No.: 1310 - 00220

● **HART communication**

The HART-Tool is a graphical user interface with menu-driven program for configuration. It can be used for putting into operation, configuration, analysis of signals, data backup and documentation of the device. Operating systems: Windows XP, Windows 7, 8.1 and 10. Connection via HART interface (modem) with USB interface of a PC or hand-held HART communicator.

Settings: - Adjustment of output current - Simulation of output current - Filter function
 - Limits of measuring range (URL, LRL) - Linear output signal (URV, LRV) - HART address
 - 2-point calibration - 6/10 point calibration (linearization)

According the model of the device there are not always all settings available

Please note: When using communication via a HART modem, a communication resistance of 250 Ω has to be taken into account.

Subject to change, version 42-647