

DSCP55

Pt100, Ni100/Loop-Powered Converter

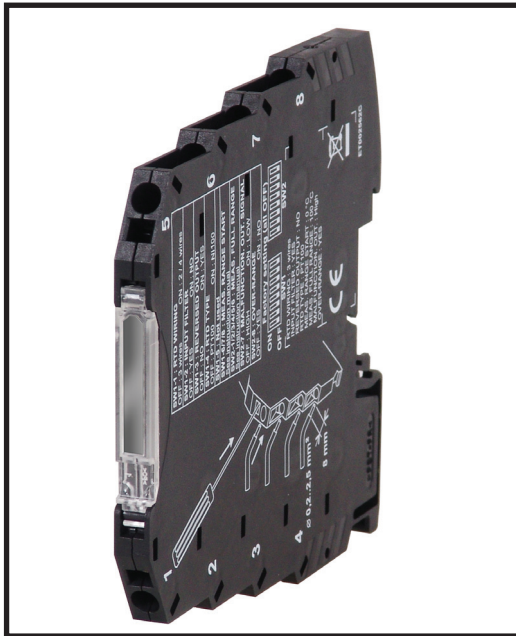


Description

Each DSCP55 RTD Loop-Powered Converter provides a single channel of RTD input which is amplified, linearized and converted to a high-level 4 to 20mA or 20 to 4mA output. Inputs may be connected by 2, 3, or 4 wires and measurement range may be configured by dip-switch.

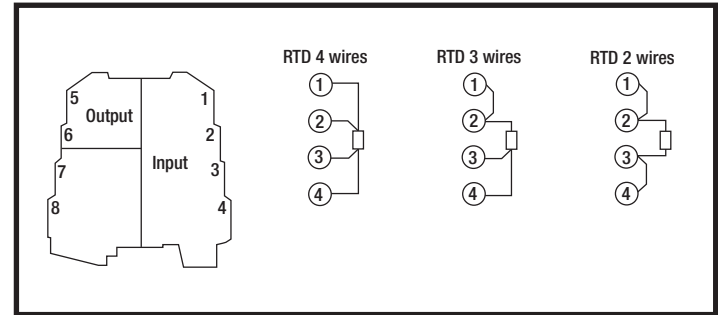
► Features

- Input: Pt100 (–200°C to + 650°C)
Ni100 (–60°C to + 250°C)
- Output: Current (4 to 20 or 20 to 4mA)
- Spring Cage Clamp Connection
- 16-Bit Resolution
- Better than ±0.1% Accuracy
- Configuration by Dip-Switch
- Compact 6.2mm DIN Housing
- CE Compliant

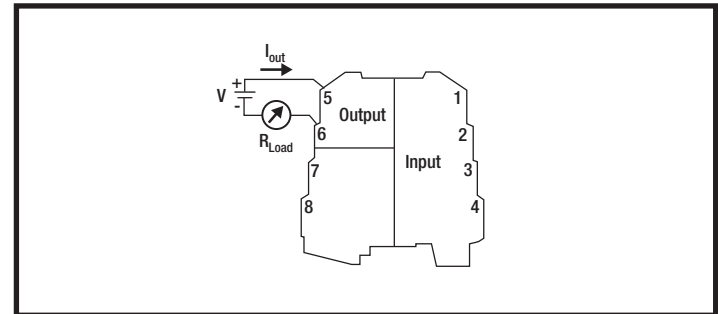


Electrical Connections

Input



Output and power supply



For information call 800-444-7644

Specifications Typical at $T_A=+25^{\circ}\text{C}$ and +24VDC loop power

Module	DSCP55
Input (selectable) Pt100 Probe EN 60751	Accepts 2-, 3-, or 4-wire RTDs Sensor current: 750 μA Cable resistance: 25 Ω (max) per wire Measurement range: -200°C to $+650^{\circ}\text{C}$ (settable) Span: 20 $^{\circ}\text{C}$ (min)
Ni100 Probe	Accepts 2-, 3-, or 4-wire RTDs Sensor current: 750 μA Cable resistance: 25 Ω (max) per wire Measurement range: -60°C to $+250^{\circ}\text{C}$ (settable) Span: 20 $^{\circ}\text{C}$ (min)
Accuracy	$\pm 0.1\%$ (max)
Thermal Drift	<100ppm/ $^{\circ}\text{K}$
A/D Conversion	16-bit
Response Time, 90% Span (selectable)	<220ms (without filter), <620ms (with filter)
Isolation	No
Dip-Switch Configuration	Sets input and output ranges, sensor type, filter and faults
Status Indicators (LED)	Internal fault, configuration error, connection fault
Output (selectable)	
Current	4 to 20 or 20 to 4mA Load resistance: 1200 Ω (max)
Current Output Maximum	30mA
Fault Output	102.5% or 105% of full-scale value in case of over-range
Hot Swapping	Yes
Loop Supply Voltage	5 to 30VDC
Environmental	
Operating Temp. Range	-20°C to $+65^{\circ}\text{C}$
Storage Temp. Range	-40°C to $+85^{\circ}\text{C}$
Relative Humidity	0 to 90%, Noncondensing
IP Protection	IP20
Emissions	EN61000-6-4
Immunity	EN61000-6-2
Mechanical Dimensions (w x h x d)	0.24" x 3.67" x 4.04" (6.2mm x 93.1mm x 102.5mm)
Housing	Terminal housing for mounting on 35mm DIN 46277
Connections	Spring cage clamp
Weight	1.6 ounces (45g)

Ordering Information

Model	Description
DSCP55	Pt100, Ni100 Loop-Powered Converter

Dimensional Drawing
