

DSCP55

Pt100, Ni100/Loop-Powered Converter

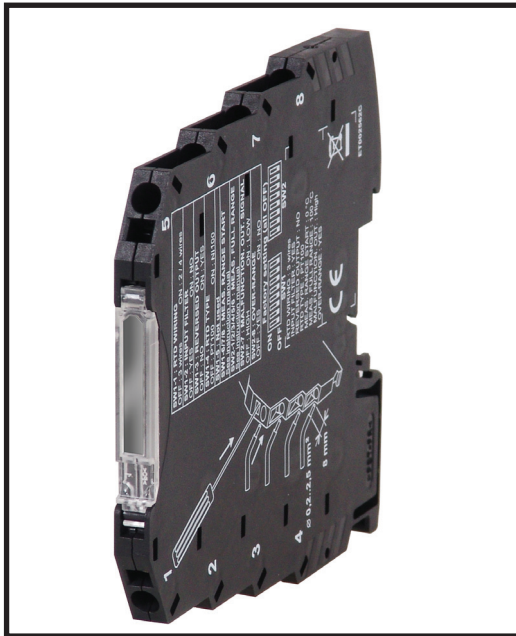


Description

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.

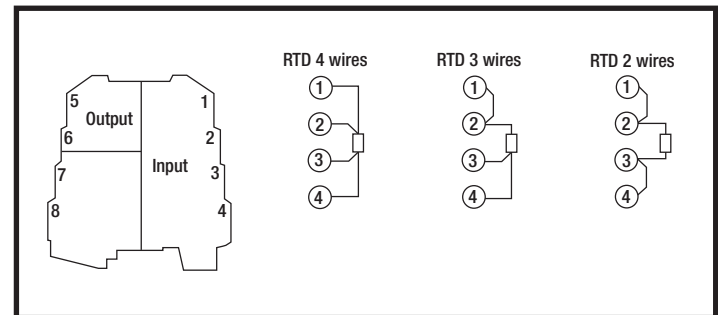
► Features

- 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

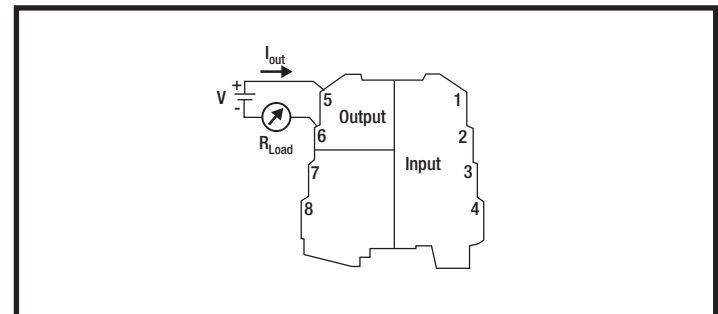


Electrical Connections

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

Ordering Information

Model	Description
DSCP55	Pt100, Ni100 Loop-Powered Converter

Dimensional Drawing
