

ADW521 RTD Two Wire Temperature Transmitter

Description

The ADW521 RTD input Two-Wire Transmitter is suitable for use as an element in SIL 1 & SIL 2 rated (IEC 61508) safety instrumented system (SIS) loop applications, as 1oo1 architecture (HFT:0).

As the input Temperature signal varies from 0 to 100%, the supply current is modulated from 4-20mA.

Non-Smart/Non-uProcessor based, Type A instrument.

Warranty period: 10 Years.

Technical Specifications

Input

Any 2 or 3 wire PT100 resistance temperature sensor.
Third wire compensation to overcome lead resistance variation (PT130 / PT500 / PT1000 & 4 wire input options available)

Typical Input ranges

-15 to +25°C, 0-50°C, 0-100°C, 0-150°C PT100, 3-wire connection

Supply

Nominal 24Vdc (Can vary from 12 to 36V dc)

The maximum line resistance is determined by the supply voltage level.

Performance

Accuracy/Linearity: $\leq \pm 0.1\%$ span
10 - 90% Time constant: $< 400\text{ms}$
Isolation: 250V RMS Input/Supply
Input Open Circuit response: Upscale drive as standard

Optimum operating conditions when supply voltage 24Vdc

'K' option- RF Immunity available: 20MHz-3GHz $\leq 10\text{V/m}$
(80MHz-1GHz/5.6GHz $\leq 30\text{V/m}$, 889MHz/1.75GHz $\leq 40\text{V/m}$)

Environmental Conditions

Storage Temperature: -40 to +70°C
Operating Ambient: -15 to +55°C/(+60°C max)
Relative Humidity: 5 – 95% RH (Non-Condensing)
EMC: 2014/30/EU , EN 61326-1:2013 (Controlled EM)
(‘K’ option to highest Generic Industrial levels)

Dimensions

50w x 75h x 110d mm
(‘K’ option enclosure = 182d mm)

Mounting

Either Din Rail (TS35) **or** Surface by corner fixing holes as std.

(‘K’ option enclosure may be specified as either Din Rail (TS35) **or** Surface mounting by rear Keyhole plate)

