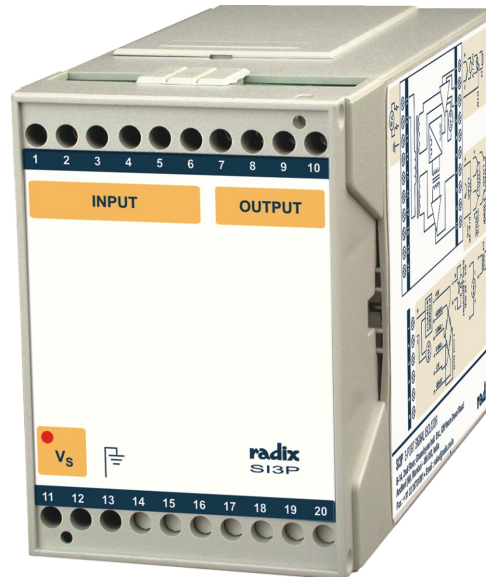


3-PORT SIGNAL ISOLATOR

INPUT : VOLTAGE,
CURRENT, TC/RTD

OUTPUT : DC VOLTS,
0/4~20 mA



INPUT, SUPPLY & OUTPUT
MUTUALLY ISOLATED

DIN RAIL ENCLOSURE

ABOUT SI3P

SI3P is a 3-port signal isolator that accepts any one of the common process inputs and generates an isolated current or voltage output. It has exceptionally high accuracy and stability.

FEATURES

- Input : DC volts, 0/4~20 mA, Ohms, RTD, Thermocouples, AC Amps, AC volts, etc.
- Output : DC volts, 0/4~20 mA
- Supply : 12~36 V DC, 85~265 V AC / 50/60 hz
- Input/output/supply isolation : 1500 V AC / 1 min, 250 V AC continuous
- Din rail enclosure

3-PORT SIGNAL ISOLATOR

SPECIFICATIONS

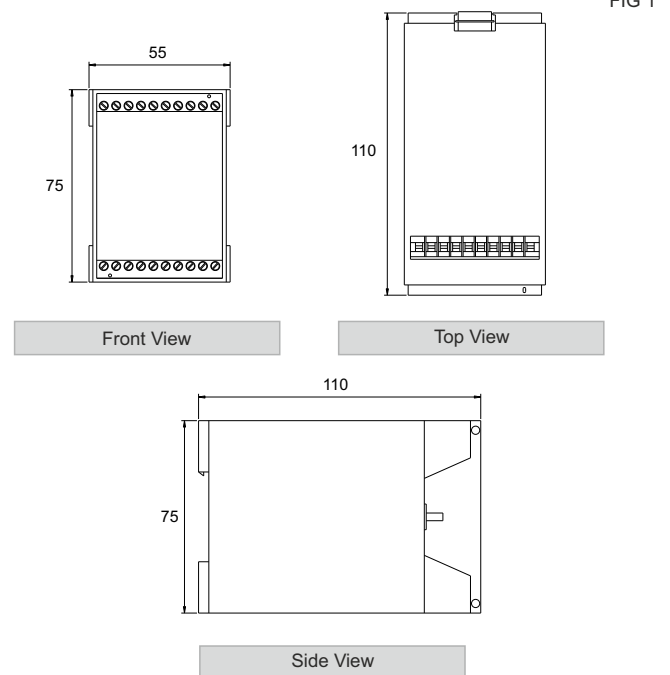
All specifications at ambient of 25 °C unless specified otherwise

INPUTS			
Input types	Specify any one listed below		
Thermocouple	J, K		
RTD	Pt100, Pt200, Pt1000, 3-wire		
DC Voltage	75 mV / 200 mV / 1 V / 10 V / 100 V / 300 V / 800 V etc. (FS)		
DC Current	0~20 mA, 4~20 mA		
Resistance	500Ω, 1 KΩ, 2 KΩ, 5 KΩ, 10KΩ (FS)		
Special	0~1 A AC, 0~5 A AC, 0~250 V AC, etc.		
Transmitter supply	18 V DC for 2-wire transmitter (provided if input type is DC current - 4~20 mA)		
Input range	User specified		
ADJUSTMENTS			
Zero, span	Multiturn potentiometers through detachable panel		
OUTPUTS			
Output types	Current - 0~20 mA, 4~20 mA (Load 600 Ω max) Voltage - 0~1 V DC, 0~10 V DC (Load 1 mA max)		
Input / Output relation	RTD - temperature linear Other inputs - voltage linear (output is proportional to input signal - no linearisation of input is done)		
Current limit	Current output - 25 mA Voltage output - 10 mA		
ACCURACY			
Input / output transfer accuracy		± 0.1% span (includes repeatability, hysteresis & non linearity)	
Temperature effect on accuracy		See Table 1	
Accuracy for different inputs		See Table 1	
ISOLATION			
Mutual isolation between input / output / supply		1.5 KV AC RMS / 1 minute, 250 V AC RMS continuous	
POWER SUPPLY			
Supply voltage		12~36 V DC 85~265 V AC, 50/60 hz	
ENCLOSURE			
Material		ABS plastic	
Dimensions (in mm)		75(H) x 55(W) x 110(D) see Fig 1	
Mounting		Snap on for 35 mm DIN rail to DIN 46277	
Connection, single/stranded wires		≤ 2.5 mm ² , AWG 14	
TEMPERATURE, HUMIDITY			
Ambient, operation		0 to 60 °C	
Relative humidity		0 ~ 95%	

TABLE 1

Input	Range	Accuracy (% of span)	Temperature effect on accuracy (% of span/°C)
DC Current	0~20 mA, 4~20 mA	± 0.1	± 0.01
DC Current	0~1 A DC, 0~5 A DC	± 0.25	± 0.02
DC Voltage	Upto 10 V DC	± 0.1	± 0.01
DC Voltage	> 10 V DC	± 0.25	± 0.02
AC Current	0~1 AAC, 0~5 AAC	± 0.5	± 0.02
AC Voltage	Any (<500 V AC)	± 0.5	± 0.02
RTD, Pt100, Pt50, etc.	Any	± 0.1	± 0.01
Thermocouple	Any	± 0.1 of span ± thermocouple non-linearity error	± 0.02

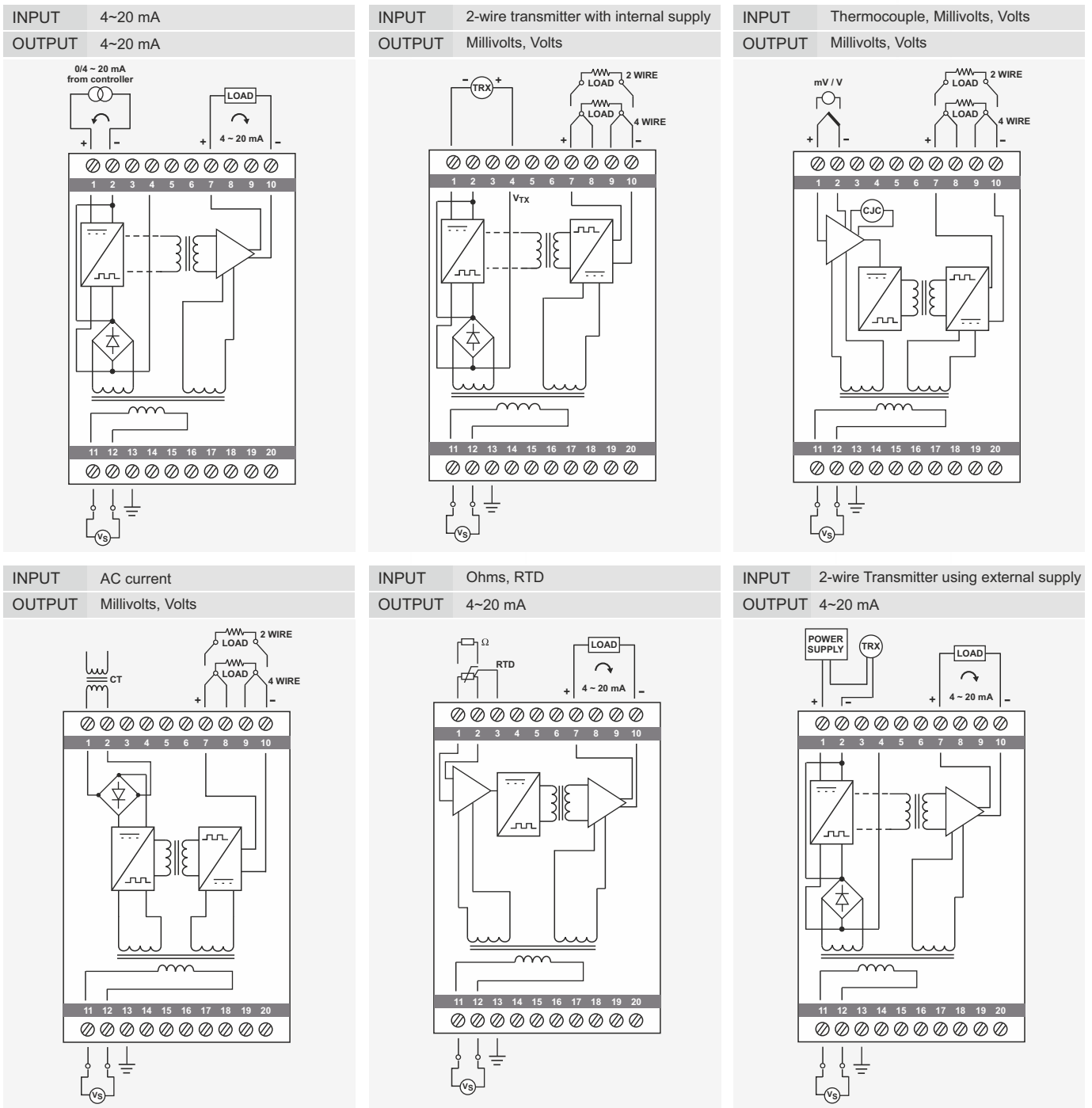
DIMENSIONS mm



3-PORT SIGNAL ISOLATOR

EXAMPLES OF CONNECTION DIAGRAMS

SI3P can be supplied with any combination of input/output/supply. Examples & options are given below.



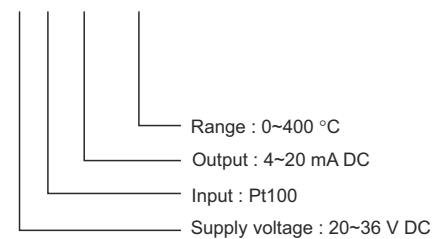
3-PORT SIGNAL ISOLATOR

ORDERING INFORMATION

Example	2115	1	08	01	0~400 °C	
Product code	2115					
Supply voltage		1				20~36 V DC
		2				85~265 V AC
Input			01			4~20 mA
			02			0~20 mA
			03			0~75 mV
			04			0~100 mV
			05			0~1 V DC
			06			0~5 V DC
			07			0~10 V DC
			08			Pt100
			09			J
			10			K
			11			Ω
			12			A AC
			13			V AC
			14			A DC
			15			V DC
Output				01		4~20 mA DC
				02		0~20 mA DC
				03		0~1 V DC
				04		0~5 V DC
				05		0~10 V DC
Range					User range	User specified range #

EXAMPLE

2115 1 08 01 0~400°C



Input : Pt100, J, K, Ω, A AC, V AC, A DC, V DC

* For other configurations, send email to sales@radix.co.in

PREFERRED ORDER CODES *

Order code	Supply voltage	Input type	Output
2115-2-03-01	85~265 V AC	0~75 mV DC	4~20 mA DC
2115-2-03-05	85~265 V AC	0~75 mV DC	0~10 V DC
2115-2-01-01	85~265 V AC	4~20 mA	4~20 mA DC
2115-2-07-05	85~265 V AC	0~10 V DC	0~10 V DC
2115-2-01-05	85~265 V AC	4~20 mA	0~10 V DC
2115-1-07-01	20~36 V DC	0~10 V DC	4~20 mA DC
2115-2-12-01- 0~5	85~265 V AC	0~5 AAC	4~20 mA DC
2115-1-08-05- 0~100°C	20~36 V DC	Pt100	0~10 V DC
2115-1-08-01- 0~400°C	20~36 V DC	Pt100	4~20 mA DC

Non-standard inputs	
Input	Remark
Pt1000	
0~1mA	
0~4mA	
Other	Specify details

Non-standard outputs	
Output	Remark
0~50 mV	
0~75 mV	
Other	Specify details

SI3P can be supplied with a variety of non-standard inputs & outputs. Please give details. Minimum order quantity and/or minimum value may apply.

CAT#149R13/A

ENQUIRIES

Instruments: sales@radix.co.in
Sensors: sensors@radix.co.in
Gauges: gauges@radix.co.in
Automation: automation@radix.co.in
Level: level@radix.co.in

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