iSignalCon®

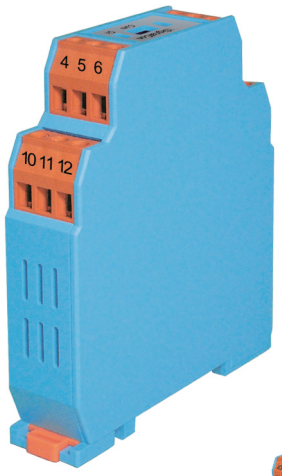
ISA Dual Channel Isolated Signal Conditioner/Converter (for DC linear Signal)

Features:

- Programmable for various input signals and measuring range.
- Configurable without external Power Connected.
- Input : millivolt , Voltage, and Current
- Output device :

  ISA-D : Dual Analog Outputs:4 ~20 mA 、0~5VDC、 0~10VDC …
  OUTPUT1=PV1 ; OUTPUT2=PV2

  ISA-C : One Analog Output (OUT1) 4 ~20 mA、0~10VDC …
  with RS485 com port:MODBUS-RTU (OUT2);
  OUTPUT1=PV1
- High accuracy in total ambient temperature range.
- Fault signal on sensor break presettable.
- Defines the output signal to be upscale (>20mA) or downscale (<4 mA) on Sensor break or cut the output signal on upscale (20mA) or downscale (4 mA)



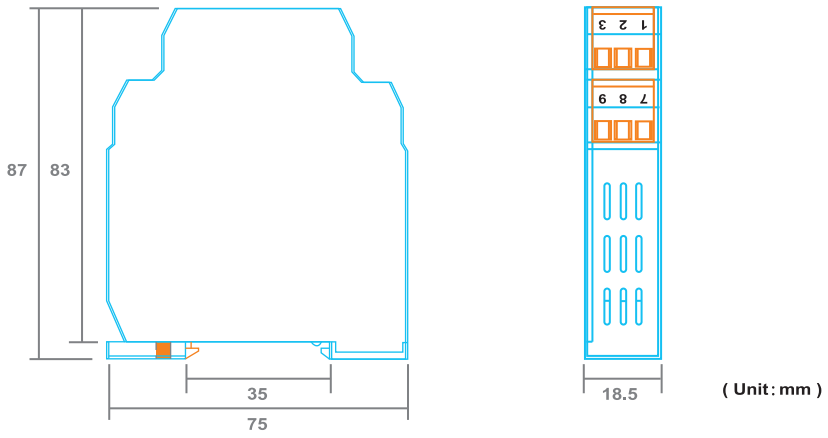
Configuration

The **iSignalCon®** DIN Rail converter is user configurable with the **iSignalwin®** software and interface cable URC-1020 or handheld programmer. The **iSignalwin®** is user-friendly software. The latest release version can be download free from website. Interface cable consist of interface converter and USB plug. It can be purchased separately from the **iSignalCon®** supplier. During configuration the converter can work alone without connecting to a power source.

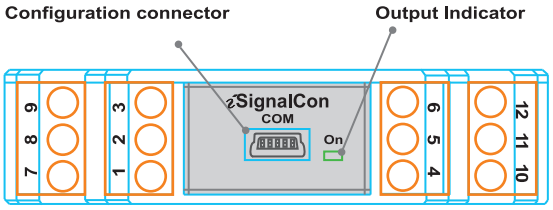
Specification	
Input	Voltage/Millivolt: -480mV ~ 480mV ; -96V ~ 96V refer to Table 1
	Current: 0 ~ 177mA refer to Table 1
Accuracy	Refer to Table 1 Input Signal
A/D Resolution	16 bits
Input Sampling Rate	<200 ms
Power Supply	DC 24V
Output	Current Output: 4~20mA (Resistive load 600Ω max)
	Continuous Voltage Output: 0~10V... (Resistive load 600Ω min)
Output Resolution	0.6 μA (15 bits)
Output Response Time	<200 ms
Common Mode Rejection Ratio (CMRR)	>80 dB
Electromagnetic Compatibility (EMC)	En 50081-2, En 50082-2
Galvanic Isolation	3.75 KV. between input and output
Operating Temperature	-10 to 50°C
Humidity	0 to 90% RH
Dimension	75mm(W)x87mm(H)x18.5mm(D)

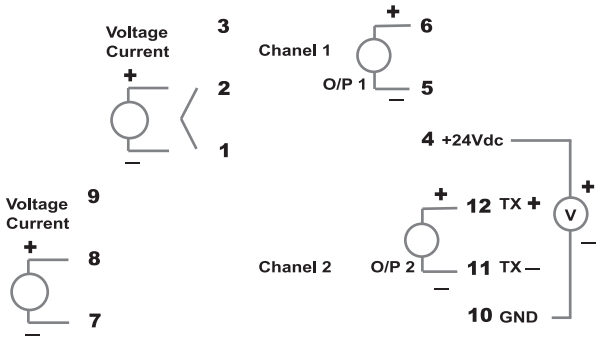
Table 1 Input Signal		
Input signal	**Maximum Range**	**Accuracy**
Millivolt	-480mV ~ 480mV	±0.2mV
Millivolt	-240mV ~ 240mV	±0.02mV
Millivolt	-120mV ~ 120mV	±0.02mV
Millivolt	-60mV ~ 60mV	±0.02mV
Millivolt	-30mV ~ 30mV	±0.02mV
Millivolt	-15mV ~ 15mV	±0.02mV
Voltage	-96V ~ 96V	±0.02V
Voltage	-48V ~ 48V	±0.02V
Voltage	-24V ~ 24V	±0.02V
Voltage	-12V ~ 12V	±0.02V
Voltage	-6V ~ 6V	±0.02V
Voltage	-3V ~ 3V	±0.02V
Current	0 ~ 177mA	±0.02mA
Current	0 ~ 88mA	±0.02mA
Current	0 ~ 44mA	±0.02mA
Current	0 ~ 22mA	±0.02mA
Current	0 ~ 11mA	±0.02mA
Current	0 ~ 5.5mA	±0.02mA

Dimension



Wiring Diagram





Ordering Information

ISA D
ISA C

Output Device	Code
Dual Analog Outputs	D
One Analog output with RS485 com port	C

Output 1	Code
4~20 mA	M
0~10 VDC	V
Other	O

C

Output 2	Code
4~20 mA	M
0~10 VDC	V
Other	O
RS-485	C

Expolsion Proof	Code
YES	Y
NO	N

- The converters are user configurable.
- Should you require that the factory set the inputs and ranges the full code must be specified.

PV1 [ ] — RANGE

Input Signal (PV1)	Code	Maximum Range
Millivolt	L1	-480mV~480mV
Millivolt	L2	-240mV~240mV
Millivolt	L3	-120mV~120mV
Millivolt	L4	-60mV~60mV
Millivolt	L5	-30mV~30mV
Millivolt	L6	-15mV~15mV
Voltage	V1	-96V~96V
Voltage	V2	-48V~48V
Voltage	V3	-24V~24V
Voltage	V4	-12V~12V
Voltage	V5	-6V~6V
Voltage	V6	-3V~3V
Current	M1	0~177mA
Current	M2	0~88mA
Current	M3	0~44mA
Current	M4	0~22mA
Current	M5	0~11mA
Current	M6	0~5.5mA

PV2 [ ] — RANGE

Input Signal (PV1)	Code	Maximum Range
Millivolt	L1	-480mV~480mV
Millivolt	L2	-240mV~240mV
Millivolt	L3	-120mV~120mV
Millivolt	L4	-60mV~60mV
Millivolt	L5	-30mV~30mV
Millivolt	L6	-15mV~15mV
Voltage	V1	-96V~96V
Voltage	V2	-48V~48V
Voltage	V3	-24V~24V
Voltage	V4	-12V~12V
Voltage	V5	-6V~6V
Voltage	V6	-3V~3V
Current	M1	0~177mA
Current	M2	0~88mA
Current	M3	0~44mA
Current	M4	0~22mA
Current	M5	0~11mA
Current	M6	0~5.5mA