DIN1x1/DIN2x2 ISO4-20mA-F
Two-wire 4-20mA Isolation Distributor

Application:

·PLC,DCS analog signal data acquisition and isolation
·Industrial process 4-20mA signal isolation
·Ground-loop elimination
·No distortion in long distance signal transmission
·Instrument signal acquisition
·Electric supervision , medical application and Petrochemical protection

Feature:

·Supply power to sensor:24V
·4-20mA Signal loop input
·High linearity(0.2/0.4)（Nonlinearity<0.2%）
(connecting ZERO & FRS)
·4-20mA signal input/Output, 3000VDC isolated voltage
·Industrial temperature（-45—+85℃）
·DIN rail-mounted

Description:

DIN 1X1 ISO 4-20mA-F,DIN 2X2 ISO 4-20mA-F is 4-20mA Two-wire Signal Isolation Distributor IC，it belongs to SUNYUAN ISO 4-20mA series. The IC contains an electromagnetic coupled converter and current modulate, and a high efficiency DC-DC circuit and so on. The IC supplies to loop distributor 16V~21.5V, and meets requirements for 4-20mA loop sensor signal measurement, transmission, isolation and so on.,it can save energy and prevent exploding.The IC output is designed according to Loop circuit power supply of 24VDC and resistance connecting in series, it match to popular module input attachment board, PLC and DCS or the other equipment module input attachment. The internal ceramic PCB, printed impedance and new isolation technologies allow the IC for the 3KVAC insulated voltage and meets the industrial level for the extremely poor temperature, humidity and shaking conditions. DIN 1X1 ISO 4-20mA-F，DIN 2X2 ISO 4-20mA-F is easy to use, it is able to meet 4-20mA current loop signal isolation and transmission without external components.

Maximum Ratings:

* If input value is over above range, it may cause permanent damage.

Continuous Isolation Voltage	3000VDC
Vin （TYP）	28V
Operation Temperature	+80℃
Storage Temperature	+80℃
Output Short to Common	Continuous

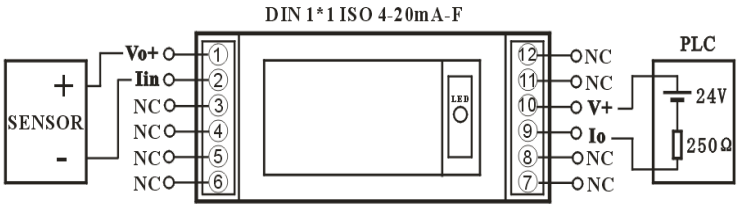
General Parameters:

Parameter	Condition	Min	Typ	Max	Unit
Isolation voltage AC,50Hz	10S	3000			VDC
Barrier impedance			$10^{12} \parallel 1$		Ω ‖ Pf
Leakage current	240Vrms,50Hz		0.5		uA
Temperature Drift			±50	±100	PPm/℃
Nonlinearity			±0.2	±0.5	%FSK
Load capability	24VDC			500	Ω
Signal input voltage range		1. 2		30	mA
Signal output voltage range			24	28	VDC
Output linearity range			4	24	mA
Output current Io		1. 2		30	mA
Output signal ripple				5	mV
Frequency response (Small signal bandwidth)	Io=20mA		50		Hz

1. **D I Type: (Green)**

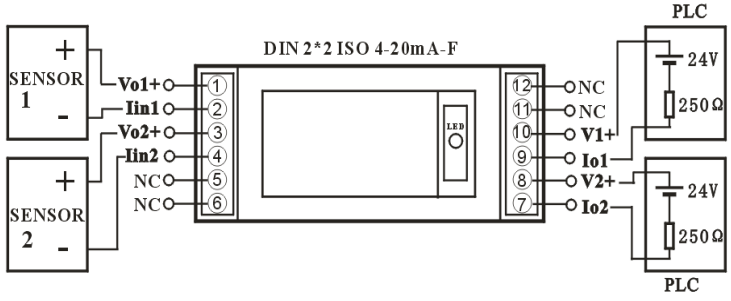
Dimension PIN Description:

Pin	DIN1X1 ISO 4-20mA-F function
1	Vo+
2	Iin
3	NC
4	NC
5	NC
6	NC
7	NC
8	NC
9	Io
10	V+
11	NC
12	NC



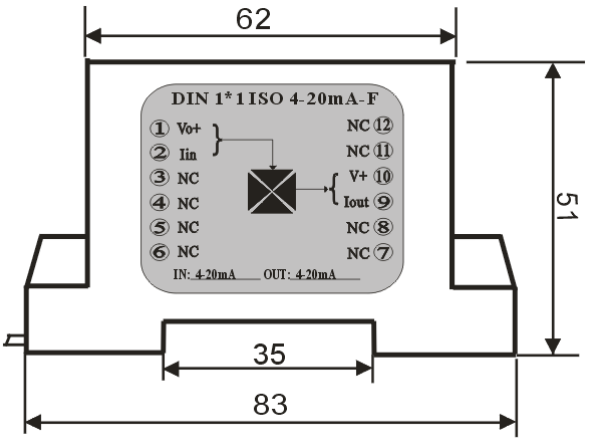
Top View

Pin	DIN2X2 ISO 4-20mA-F function
1	Vo1+
2	Iin1
3	Vo2+
4	Iin2
5	NC
6	NC
7	Io2
8	V2+
9	Io1
10	V1+
11	NC
12	NC



Top View

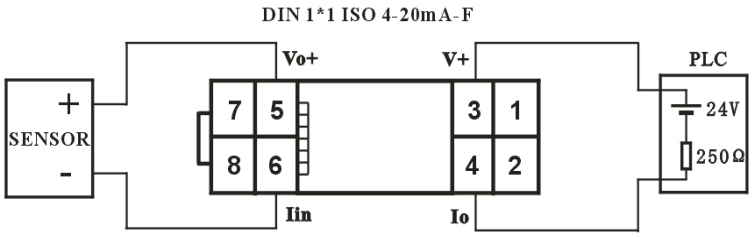
D I Type Front View



D I Type Bottom View

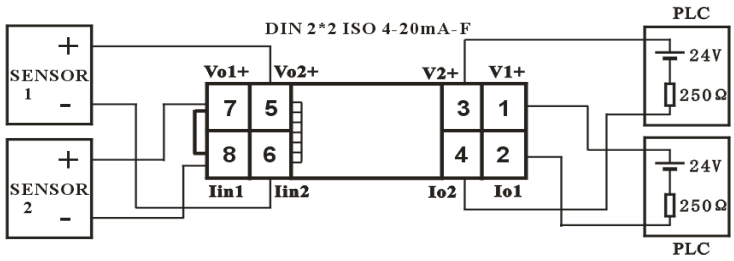
2. **D II Type: (Black)**

Pin	DIN1X1 ISO 4-20mA-F
1	NC
2	NC
3	V+
4	Io
5	Vo+
6	Iin
7	NC
8	NC



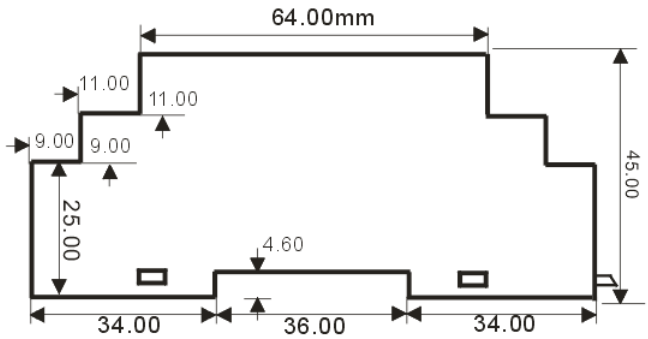
Top View

Pin	DIN2X2 ISO 4-20mA-F
1	V1+
2	Io1
3	V2+
4	Io2
5	Vo2+
6	Iin2
7	Vo1+
8	Iin1



Top Vie

D II Type Front View



D II Type Bottom View