Two wires current loop isolator DIP24

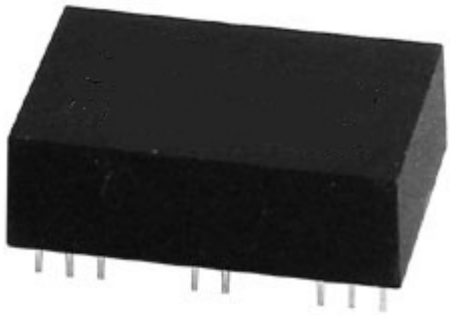
Part No.	Input	Output
IAP1001	Voltage Signal	Two wires 4-20ma

DESCRIPTION

IAP1001, a voltage transmitter, is 4-20mA current loop isolation interface module, the module includes a current signal modulation circuit, an electromagnetic conversion circuit and a demodulation circuit isolation. This module power supply range is 12-32VDC,small input equivalent resistance, high linearity, provides a 5V/3mA isolation voltage source and a 2.5V reference voltage source to the front-end circuit power distribution. Input signal is 0 ~ 75mVDC or higher, the output current signal corresponds to the input voltage signal change. Between input / output isolation voltage is 2500VAC.

Features:

- 2500VDC Isolation (input-output)
- Standard DIP24
- Power supply is 12-32VDC
- 4-20ma current loop supply power



Application

- Industrial field sensor signal two-wire isolation
- 4-20mA isolation signal transmission
- Ground interference control

TECHNICAL PARAMETERS

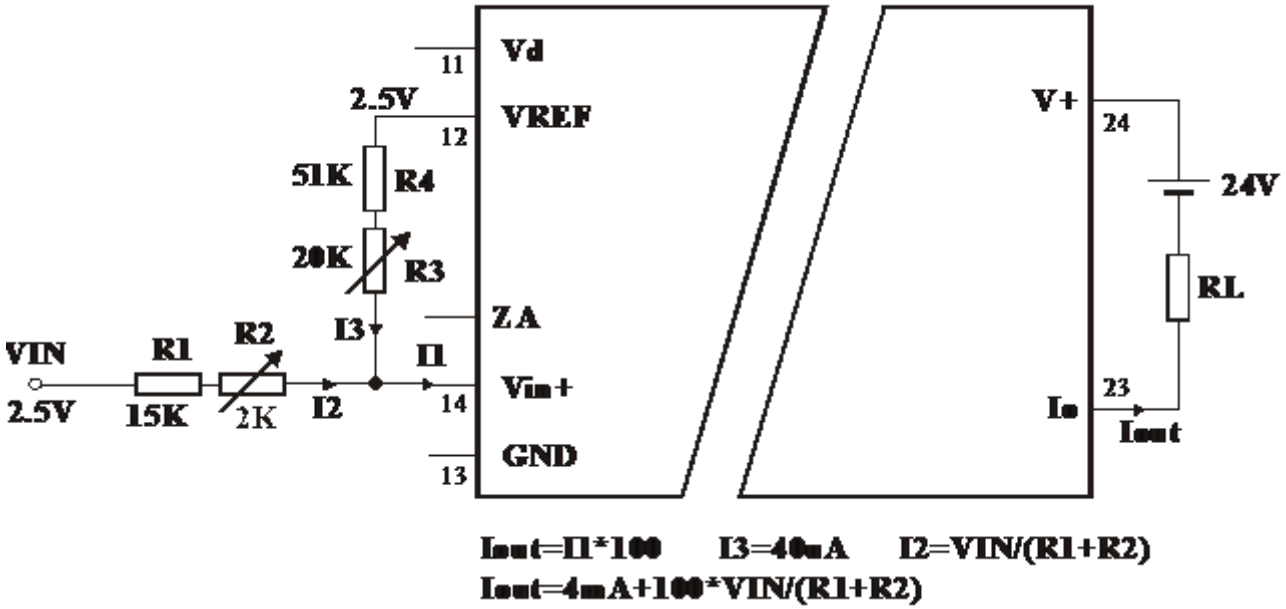
Parameter	Test Condition	Min	Type	Max	Units
Isolation Voltage	AC,50Hz,1min	1500	2500		V(rms)
Norm Voltage	24V power(Vref)	2.475	2.495	2.515	VDC
Norm Voltage current	24Vpower(Iref)	100			μA
Precision	RL=250Ω		0.5	0.6	%FSR
Output signal	RL=250Ω	4	4~20	20	mA
Vd voltage output	24Vpwer(Vref)	4.8	5.0	5.2	VDC
Vd load capability	24Vpower(Iref)	2			mA
Power supply range	V+	9 16.5	24 24	32 36	V

Operating temperature		-40		85	℃
Storage temperature		-55		125	℃

All specifications measured at TA=25°C, humidity<75%, nominal input voltage and rated output load unless otherwise specified.

Application:

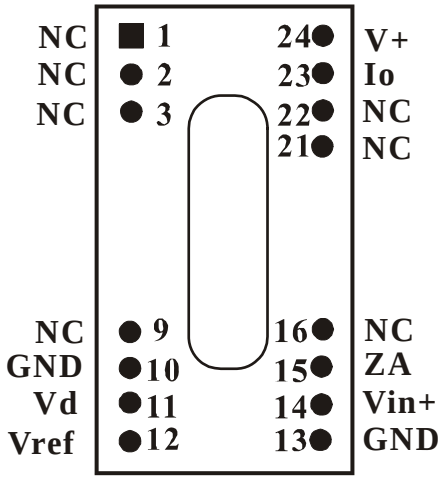
Such as Input：0~2.5V output：4~20mA(two wires current loop)



When input 0-100mV,R1=500 ohm,R2=200 ohm

Figure 1

Footprint Details:



FOOTPRINT DETAILS		
Pin	**Function**	
1`3	**NC**	
9	**NC**	
10	**GND**	**Input Ground**
11	**VD**	**Vin**
12	**VREF**	**Vin**
13	**GND**	**Ground**
14	**VIN+**	**Vin**
15	**ZA**	**ZERO adjust**
16	**NC**	
21	**NC**	
22	**NC**	
23	**Io**	**Iout**
24	**V+**	**24V output**

Physical Dimensions and PCB Dimensions:(unit:mm)