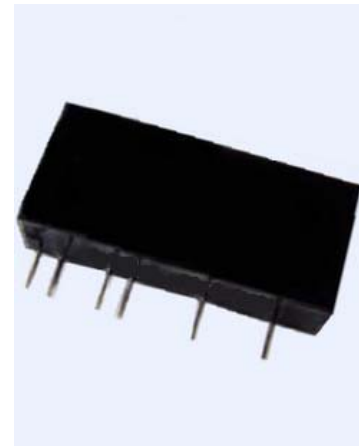


DC Current/Voltage signal Isolation Converter

FEATURES

- >>Small size, SIP 12 anti- fire UL94V-0 package
- >>No external component, ZERO and Gain adjustment no need.
- >>Three-port (power/input/output) isolation:3000VDC
- >>Power supply:5VDC/12VDC/15VDC/24VDC
- >>0-75mV/0-2.5V/0-5V/0-10V/0-±100mV/0-±5V/0-±10V voltage signal
or 0-10mA/0-20mA/4-20mA/0-±10mA/0-±20mA current signal
- >>Temperature range: -45~+85 °C
- >>In EMC(electromagnetism disturb) circumstance need adopt shield measure.



IAPEM series is electromagnetic isolation mixed IC, it is made of isolated DC/DC converters and electromagnetic isolation signal amplifier, can not be used in strong magnetic field.

ORDERING CODE INFORMATION

Input signal				Power Supply		Output Signal			
Voltage	Code	Current	Code	P	Code	Current	Code	Voltage	Code
0-5V	U1	0-10mA	A1	24VDC	P1	0-20ma	A2	0~5V	U1
0-10V	U2	0-20ma	A2	12VDC	P2	4-20ma	A4	0-10V	U2
0-75mV	U3	4-20mA	A4	5VDC	P3	-20ma~+20ma	A6	1-5V	U3
0-2.5	U4	0-±10mA	A5	15VDC	P4	User-defined	A8	1~±5V	U4
0~±5V	U5	0-±20mA	A6					0~±10V	U6
0-±10V	U6	User-defined	A8					User-defined	U8
0-±100V	U7								
User-defined	U8								

Samples:

PartNo.:**IAPEM-U2P1A4**

Input Signal:0-10V Power Supply:24V Output Signal:4-20ma

Part No.:**IAPEM-U2P2U2**

Input Signal:0-10V Power Supply:12V Output Signal:0-10V

Part No.:**IAPEM-A4P1A4**

Input Signal:4-20ma Power Supply:24V Output Signal:4-20ma

Continue isolation voltage value	3000VDC
Power Vin range:	±25%Vin
Jointing temperature(10sec.)	+300°C
Vout signal load(MIN)	2KΩ

If over above range, maybe cause products damage permanently.

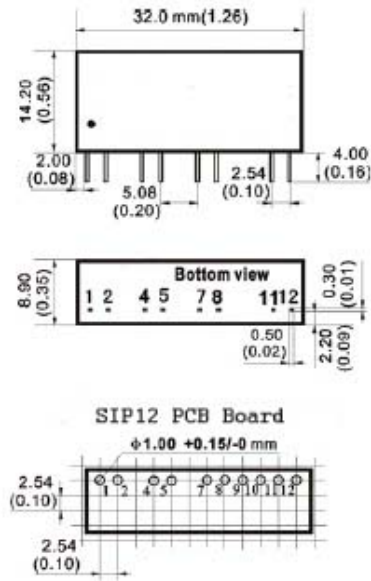
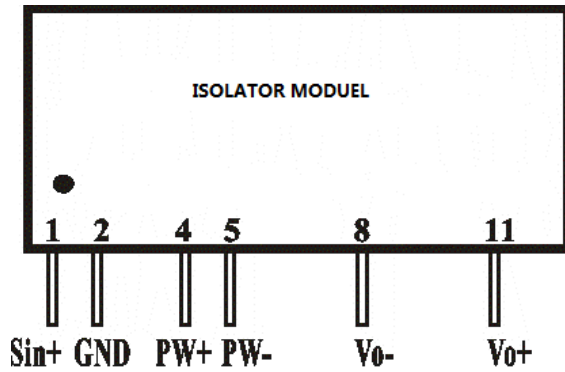
TECHNICAL PARAMETERS

Parameter	Test Condition	Mix	Type	Max	Unit
Isolated voltage	AC,50Hz,1min	3000			V(rms)
G.Adj			1		V/V
G.Adj temperature drift			25		ppm/°C
Non-linearity			0.1	0.2	%FSR
Input signal	Voltage	0		15	V
	Current	0		30	mA
Input maladjusted voltage			2	5	mV
Input impedance	Voltage		1		M
	Current			50	Ω
Output signal	Voltage	-10		10	V
	Current	-20		20	mA
Load capability	Voltage	Vout=10V		2	kΩ
	Current		0	350	Ω
Frequency response	-3DB		10		KHz
Signal output ripple	No-filter		10	20	mVRMS
Signal voltage temperature drift				1	mV/°C
Assistant power	Voltage	User-defined	3.3	12	VDC
	Power loss			0.5	W
Operating temperature		-45		85	°C
Storage temperature		-55		105	°C

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

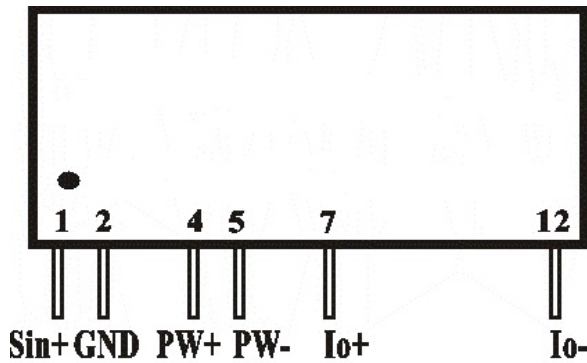
Output	Output load capability	Response Time
4-20mA	≤250 ohm, If need 650Ω,specified	≤1mS
0-20mA		
0-5V	> 2KΩ	
0-10V		
1-5V		

Voltage signal output footprint function:



1	2	3	4	5	6	7	8	9	10	11	12
Signal input Sin+	Signal input GND	omitted	power PW+	power PW-	omitted	omitted	Signal output Vo-	omitted	omitted	Signal output Vo+	omitted

Current signal output footprint function:



1	2	3	4	5	6	7	8	9	10	11	12
Signal input Sin+	Signal input GND	omitted	power PW+	power PW-	omitted	Signal output Io+	omitted	omitted	omitted	omitted	Signal output Io-