



SG-3227 2-channel IEPE Signal Conditioner

#### **■** Introduction

SG-3227 is a 2-channel IEPE signal conditioner. It has 2mA/4mA/6mA/10mA excitation current for sensors with integrated amplifiers. It features three selectable gain x1/x10/x100 ranges individually for two channels. LED failure indicators for sensor condition minimize the risk of handling errors.



### **■ System Specifications**

Model Name	SG-3227		
LED Indicator			
System LED Indicator	1 as Power Indicator		
	Yellow : Sensor Open		
LED Status Indicator	Green : Sensor Normal Red : Sensor Short		
Isolation	Red . Selisor Short		
Input/Output to Power	1000 VDC		
EMS Protection			
ESD (IEC 61000-4-2)	±4 kV Contact for each Terminal		
EFT (IEC 61000-4-4)	±4 kV for Power Line		
Surge (IEC 61000-4-5)	±1 kV for Power Line		
Power			
Reverse Polarity Protection	Yes		
Input Range	+10 to +30 VDC		
Consumption	3 W		
Mechanical			
Dimensions (W x L x H)	25 mm x 116 mm x 120 mm		
Installation	DIN-Rail or Wall Mounting		
Environment			
Operating Temperature	-25 to +75°C		
Storage Temperature	-40 to +85°C		
Humidity	10 to 95% RH, Non-condensing		

#### **■** Features

- 2-channel Input
- Individual Channel Configuration
- Excitation Current Support: 2 mA / 4mA / 6mA / 10mA
- Signal Amplification of x1 , x10 and x100
- LED Indicators for Sensor Open, Short and Normal
- Flexible DIN-Rail Mounting









#### Applications

- Data Acquisition System
- Remote Diagnosis
- Vibration Measurement
- Testing Equipment

## **■ I/O Specifications**

<u> </u>			
Model Name	SG-3227		
IEPE			
Channel	2		
	Screw Terminal (Including a female		
Connectors	BNC to terminal block adaptor)		
Excitation Current	2 mA / 4mA / 6mA / 10mA		
Gain	x1 / x10 / x100 for AC Coupling		
Upper Cut-off Frequency	x1, x10 Gain: 80 kHz;		
	x100 Gain : 50 kHz		
Lower Cut-off Frequency	AC Coupling (0.1uF): 1.6 Hz		
Lower Cut-on Frequency	AC Coupling (1uF): 0.2 Hz		
Analog Output			
Channels	2		
Voltage Range	±10V		

### **■ LED Indicators and Switch setting**

LED Indicators	Description	
RED	Sensor Short	
GREEN	Normal Operation	
YELLOW	Sensor Open	

Coupling Setting	1	2
DC	OFF	OFF
AC (0.1 uF)	ON	OFF
AC (1 uF)	OFF	ON

Gain Setting	3	4
x1	OFF	OFF
x10	ON	OFF
x100	OFF	ON

<b>Excitation Current Setting</b>	5	6
2 mA	OFF	OFF
4 mA	ON	OFF
6 mA	OFF	ON
10 mA	ON	ON

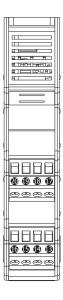
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# **PIN Assignment**

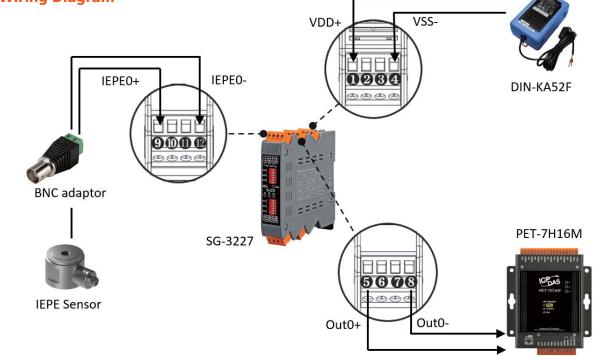
ТОР			
1	2	3	4
+VDD		-VSS	
5	6	7	8
Out0+		Out0-	
9	10	11	12
IEPE0+		IEPE0-	



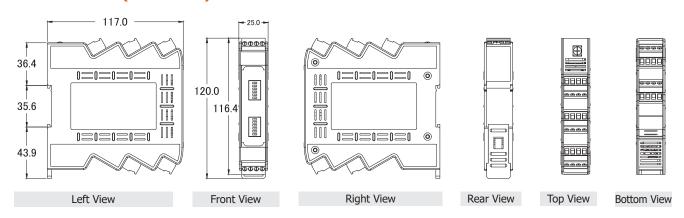
Bottom			
13	14	15	13
IEPE1+		IEPE1-	
17	18	19	20
Out1+		Out1-	



# **■** Wiring Diagram



## **■** Dimensions (Units: mm)



#### **■** Ordering Information

SG-3227 CR 2-channel IEPE Signal Condition (RoHS)

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