

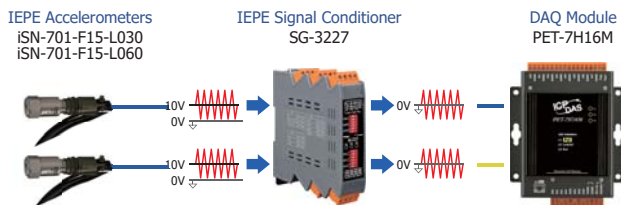


SG-3227

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 |
| LED Status Indicator | Yellow : Sensor Open Green : Sensor Normal Red : Sensor Short |
| Isolation | |
| 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 | +18 to +30 VDC |
| Consumption | 3 W |
| Mechanical | |
| Dimensions (W x L x H) | 25 mm x 120 mm x 117 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

| Model Name | SG-3227 |
|-------------------------|---|
| IEPE | |
| Channel | 2 |
| Connectors | Screw Terminal (Including a female BNC to terminal block adaptor) |
| Excitation Current | 2 mA / 4mA / 6mA / 10mA |
| Excitation Voltage | 30 VDC |
| 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 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 |

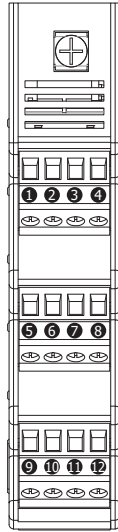
| Coupling Setting | 1 | 2 |
|------------------|-----|-----|
| DC | OFF | OFF |
| AC (0.1 uF) | ON | OFF |
| AC (1 uF) | OFF | ON |

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

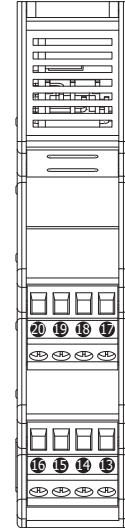
| Excitation Current Setting | 5 | 6 |
|----------------------------|-----|-----|
| 2 mA | OFF | OFF |
| 4 mA | ON | OFF |
| 6 mA | OFF | ON |
| 10 mA | ON | ON |

PIN Assignment

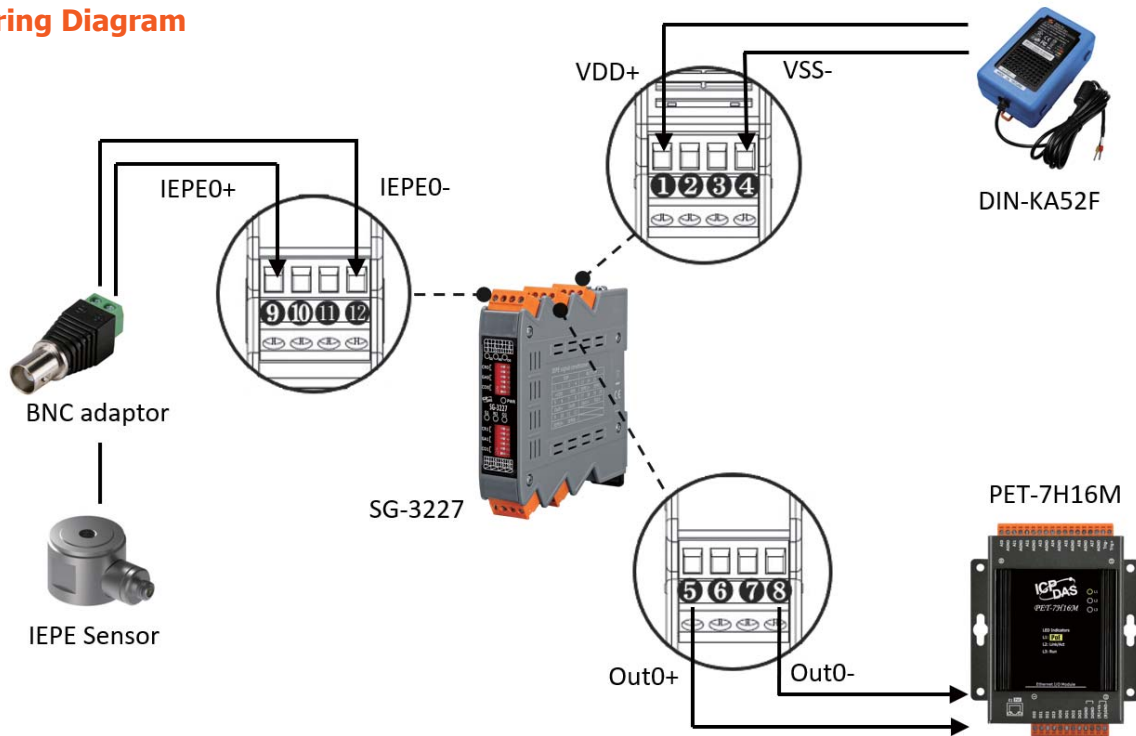
| TOP | | | |
|--------|----|--------|----|
| 1 | 2 | 3 | 4 |
| +VDD | | -VSS | |
| 5 | 6 | 7 | 8 |
| Out0+ | | Out0- | |
| 9 | 10 | 11 | 12 |
| IEPE0+ | | IEPE0- | |



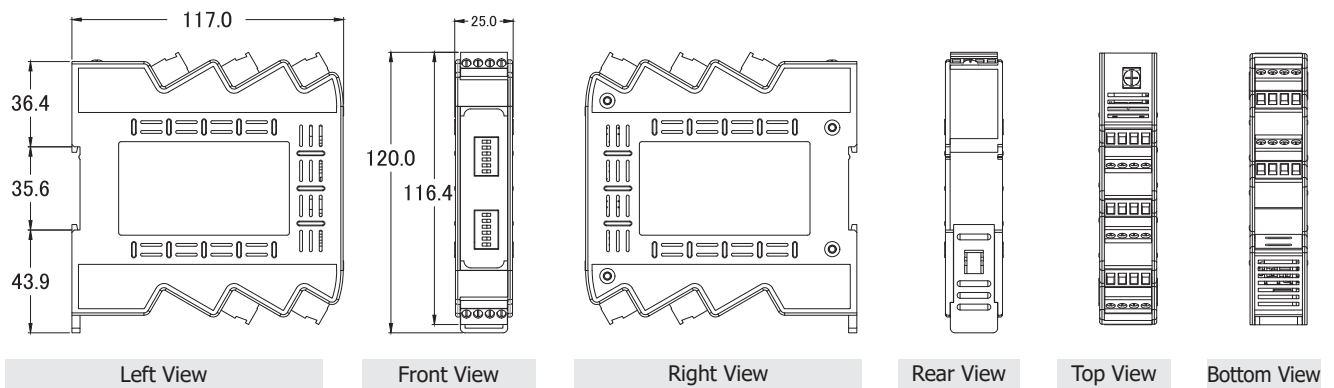
| Bottom | | | |
|--------|----|--------|----|
| 13 | 14 | 15 | 13 |
| IEPE1+ | | IEPE1- | |
| 17 | 18 | 19 | 20 |
| Out1+ | | Out1- | |



Wiring Diagram



Dimensions (Units: mm)



Ordering Information

| | |
|-------------------|--|
| SG-3227 CR | 2-channel IEPE Input Signal Conditioner (RoHS) |
|-------------------|--|