

IEPE Signal conditioner

Description

Model IN-11 is a portable IEPE sensor signal conditioner that can provide an excitation power supply for IEPE sensors and perform filtering, amplification, and other conditioning on the signals output by IEPE sensors. It is internally rechargeable and has an under-voltage indication function. The gain can be externally adjusted at x1 and x10. The all-metal casing has strong anti-interference ability. Status indicator lights indicate different working states and built-in boost circuit, providing suitable working voltage for IEPE/ICP sensors. Thus it is widely used in various fields such as research and teaching.

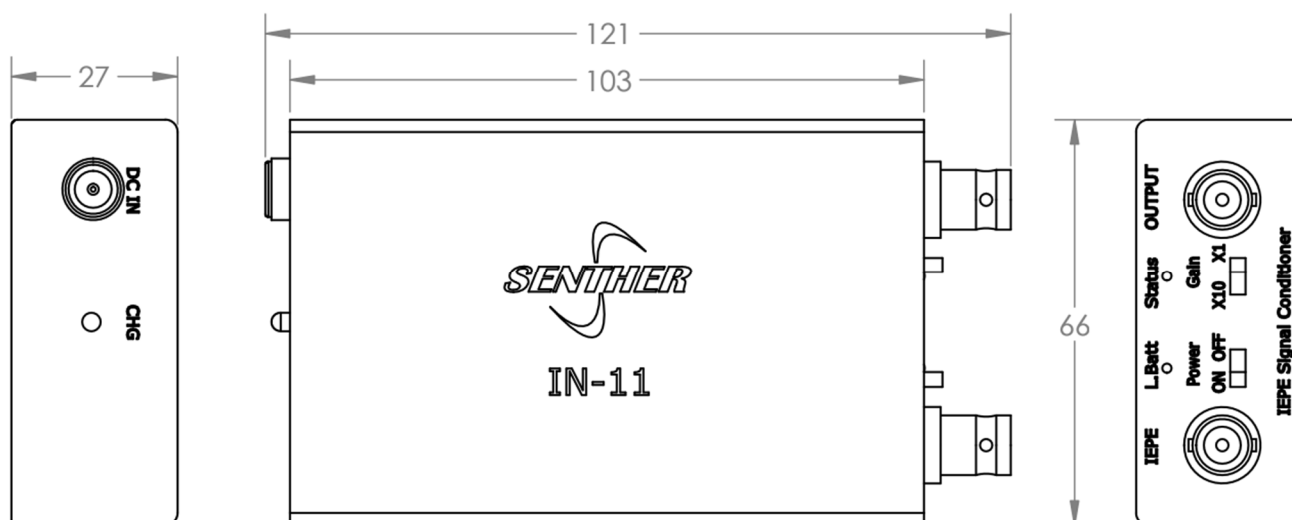


Features

- All-metal casing
- User selectable gain settings
- Wide frequency range
- Built-in battery
- Reliable operation
- Small in size
- Light in weight

Application

- Dynamic research
- Shock testing
- Aircraft research
- Modal analysis



Specification

Typical at +24°C (+75°F), 5Vdc Power Supply, unless otherwise stated.

DYNAMIC	VALUE
Input Type	IEPE
User Selectable Gain Settings	x1, x10
Bandwidth (-3dB)	0.3Hz to 100kHz
Noise	1mVrms

ELECTRICAL	VALUE
Power Supply (Vdc)	5 by charger
IEPE excitation Voltage (Vdc)	24±2
IEPE excitation Current (mA)	4
Output Voltage (Vpk)	±5
Gain Accuracy (%)	±1.5%
Coupling Capacitor (μF)	33
Insulation Resistance (MΩ)	>100 @ 50Vdc







ENVIRONMENTAL	VALUE
Operating Temperature (°C)	0 to +40
Storage Temperature (°C)	-20 to +70
Environmental Protection	IP50
Vibration (g)	10 pk from 50Hz to 2000Hz
Shock (g)	1000 pk with 3.6ms Haversine pulse
Case Material	Anodized Aluminum
Electrical Connector, Input	BNC
Electrical Connector, Output	BNC
Weight (grams)	~300

Accessories

Calibration certificate included.

Part Number	Description	Availability
PJ03XX	External power supply	Included
21-2	BNC male to BNC male cable	Included
VT280	Portable signal acquisition instrument	Optional
IN-3062	8 channels data acquisition system	Optional

Measurement configuration

Sensor	Mating cable	Voltage amplifier	BNC cable	Data acquisition	Computer
					

Instruction

- Power ON/OFF:** Turn on / Turn off the power of the IEPE constant current adapter.
- Gain X10/X1:** Gain selection switch for selecting the amplification factor of the signal.
- IEPE:** IEPE / ICP sensor is input through this port.
- L.Batt:** Low battery indicator light will be on when the power supply voltage is lower than the required working voltage.
- Status:** Indicator Light shows three states:
 - Red:** When the input port is not connected to the IEPE / ICP sensor or the IEPE / ICP sensor is open-circuited.
 - Green:** When the constant current adapter is working normally.
 - Orange:** When the IEPE / ICP sensor at the input port is short-circuited.
- OUTPUT:** Signal output to DAS through this port.
- DC-IN:** External power supply plug in.
- CHG:** The indicator lights on the adapter's rear panel.
 - Green:** Indicating the battery is fully charged.
 - Red:** Indicating charging.

Ordering information

IN	-	11
Model	-	Range
IN	-	11= IEPE Signal conditioner

