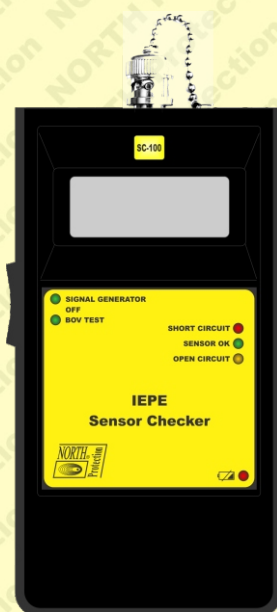


SC-100

IEPE Sensor Checker

Features

- IEPE (ICP®) sensor BOV(Bias Output Voltage) test
- IEPE (ICP®) sensor simulator (100.0mV RMS, 160Hz)
- Easy to use
- LCD for reading measured voltage
- LED indication of sensor status
- Slide switch for operating modes selection
- Empty Battery Detection



Application Note



BOV Test Mode

Signal Generator Mode

Description

SC-100 is a battery operated, easy to use instrument that is used to check sensor condition by measuring DC Bias voltage and to electronically simulate IEPE (ICP®) sensor output.

Power is supplied from one internally mounted 9V Alkaline battery. There is also a LED indication of Low Battery status.

Operating modes can be selected by slide switch mounted on the left side. There is also a visual identification of the selected mode by LEDs placed on the top panel. In the middle position of the switch, device is Off.

In BOV TEST mode, user can read measured DC Bias Voltage on display and check the sensor status by LEDs on the top panel. There are three predefined sensor statuses which depends on the Bias Voltage: SHORT CIRCUIT, SENSOR OK and OPEN CIRCUIT. Short Circuit LED is lit if the measured bias voltage is below 7V. Open Circuit LED is lit if the measured bias voltage is more than 15V. Sensor Ok LED is lit if the measured bias voltage is between 7V and 15V. If the customer needs different voltage limits, changes can be done free of charge, before the shipment.

In SIGNAL GENERATOR mode, instrument produces fixed frequency sinusoidal signal (100.0 mV RMS, 160.0 Hz) to simulate IEPE (ICP®) sensor output.

Parameters for checking (for sensor sensitivity 100mV/g)

Units	160Hz	
	RMS	PEAK
mV	100	141.4
m/s ²	9.81	13.87
g	1	1.41
mm/s	9.75	13.79
ips	0.38	0.54

Specifications

Inputs - Outputs

BOV Input

Signal Output

IEPE (ICP®) DC BOV (Bias Output Voltage) input

IEPE (ICP®) fixed frequency, sinusoidal signal output

Signal Generation

Amplitude

100.0 mV RMS

Amplitude accuracy

± 0.5 %

Frequency

160.0 Hz

Frequency accuracy

± 0.5 %

THD

< 1.0 %

Environmental Characteristics

Temperature

Operating

-10°C to +55°C

Storage

-18°C to +55°C

Humidity

95% R.H. maximum

Power

Battery

1 x 9V Alkaline Battery (6LR61)

Autonomy

> 5h in BOV Test mode

> 10h in Signal Generator mode

Physical Characteristics

Dimension

169mm x 80mm x 30mm

Weight

0.5kg typical

Case

ABS molded plastic

Connector

BNC

NOTE: All technical data can be changed without notice.

ANALOG
DIGITAL



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