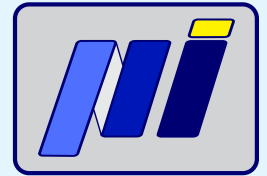


NID-2000

Dynamic Signal Simulator



Features

- Simulates various sensor and transmitter signal outputs
- Fully compliant with the requirements of ISO 10816 standards
- Operates in two modes: stand-alone and PC based
- The software includes a sensors/transmitters database
- Automatic creation of reports in PC mode enabled
- Loop powered current source output
- Tachometer TTL and OSO[®] output
- BOV test of IEPE (ICP[®]) sensors supported
- Menu-driven operation
- Multi language menu
- Metric and Imperial units
- PC connection
- Battery operated

Application Note

NID-2000 Dynamic Signal Simulator is suitable for checking and calibration measurement lines for dynamic parameters analysis, such as vibration analysis, structural analysis, etc. Function BOV (Bias Output Voltage) allows quick verification of the accuracy of IEPE (ICP[®]) sensors and signal cables. Device is especially optimized for Machinery Monitoring Systems (MMS).



Description

NID-2000 Dynamic Signal Simulator is a battery operated instrument which is used to electronically simulate outputs from various types of sensors and transmitters. The device can be used as stand-alone device or it can be PC driven via embedded USB communication.

In PC mode the device provides all the benefits of a stand-alone mode, with the difference that includes a number of useful tools that make it easier to use. Thus, for example, the software contains a database of sensors and transmitters major manufacturers in the area of vibration, but has and the option of "Customer defined". Also by using the profile enables storing of data settings for future use, and so on.

Specifications

Input/Outputs

Output types

Single-ended Voltage (mV)
 IEPE (ICP[®]) - Current Sinking
 Loop powered Current Source (mA)
 Single-ended Charge (pC)
 Differential Charge (pC)
 Tachometer (TTL)
 Flow Meter (TTL)
 OSO[®] - Optical Speed Output
 BOV - Bias Output Voltage

Input type

Frequency range

Output range

1Hz to 10kHz

10mV to 10,000mV RMS; 10pC to 10,000pC

Transfer Characteristics

Amplitude accuracy ± 0.5% of settings on any range
Amplitude stability 0.03%/°F maximum change from 14°F to 149°F
Frequency accuracy ± 0.02% of settings on any range
Frequency stability ± 0.5% of maximum change from 14°F to 149°F
Total harmonic distortion ≤ 0.1% 1Hz to 2kHz; ≤ 0.15% 2kHz to 10kHz

Environmental Characteristics

Temperature

Operating 14°F to 149°F
 Storage -0.4°F to 149°F

Humidity

95% R.H. maximum

Power

Battery

Autonomy

4x AA rechargeable Ni-MH supplied
 More than 5 hours when fully charged

Physical Characteristics

Dimension (LxWxH)

Weight

Case

Connection

8.19in x 3.94in x 1.57in
 1.126 lb (including batteries)
 Molded Plastic Case
 mV, IEPE, BOV, mA and Tachometer - BNC
 Charge (single-ended and differential) - Microdot
 USB 2.0

Front Panel Controls

Front Panel Display

Five sealed switches (Arrows, E, Back and ON/OFF)
 4 line LCD panel with 64 character

NOTE: All technical data can be changed without notice.

