OLYMPUS®

Your Vision, Our Future

Innovation in NDT™

Nortec 1000S+
Flaw Detector

FEATURES

- 50 Hz - 12 MHz frequency range
- Single Li-Ion battery
- Lightweight, less than 4lbs. (1.8 Kg)
- Customer interchangeable displays:
  - Hi-Brite Electroluminescent
  - Monochrome Liquid Crystal
  - Color Liquid Crystal
- Single Frequency
- VGA Output
- Display Freeze to hold flaw signals
- PowerLink™ Technology - automatic probe recognition and instrument set-up
- On screen reference memory for go/no go applications
- On board storage of 120 programs
- 20 locations for trace storage including up to 60 seconds of live recordings per location
- Windows-based EddyMaster™ Software

EDDY CURRENT FLAW DETECTOR

The Nortec 1000S+ offers a frequency range of 50 Hz to 12 MHz for applications ranging from detection of cracks in tubes or structures to sorting metals and on line part inspections. The Nortec 1000S+ was designed to meet the basic NDT eddy current application requirements, but also is well suited for detecting surface breaking cracks on ferrous and non-ferrous materials, weld integrity, thickness inspection, corrosion detection, bearing inspections, valves, bolts, wire lines and numerous other applications.

A single frequency, rugged and lightweight instrument weighing less than 4 lbs. (1.8 kg) with a single Li-Ion battery, the Nortec 1000S+ provides up to 12 hours of operation and is a truly portable instrument. An adjustable tilt bail and anti-slip bumper allow it to be placed on just about any surface. In a production environment, in the hangar, in the laboratory or in the field, the rugged case design withstands the harshest environments.

Customer-interchangeable displays offer the best visibility in any lighting conditions. A VGA output drives a heads up display for inspection where conditions may be cramped, a large desktop monitor, or projector for classroom training environments.

The Nortec 1000S+ incorporates our unique PowerLink™ software, which provides automatic probe recognition and documentation. The instrument can be set up by recalling the program stored in the PowerLink™ chip, providing integrity and repeatability of inspection results.

As many as 120 programs can be stored and recalled later. Date and time are recorded with each set-up and are easily identified with alphanumeric values up to 29 characters long. 20 memory locations are available to store eddy current displays.

Envirocoustics Non Destructive Testing

NORTEC™

NORTEC 1000S+ SPECIFICATIONS*

BASIC PERFORMANCE

Frequency Range: 50 Hz - 12 MHz

Gain: 0 - 90 dB in 0.1 dB steps. The horizontal and vertical gains may be adjusted separately or together.

Rotation: Variable 0° - 359°

Sweep: Variable from 0.005 - 4 seconds per division

Low Pass Filter: 10 - 500 Hz and wide band

High Pass Filter: Off, 2 to 500 Hz. 2 pole response

Probe Drive: 2, 6, 12 volts

Variable Persistence: Screen persistence can be varied from 0.1 - 5 seconds.

Probe Types: Absolute and differential in either bridge or reflection configuration. The instrument is fully compatible with NORTEC PowerLink™ probes.

Alarms: Can be set to trigger on positive or negative

Alarm Modes: 1-3 box gates, polar, sweep, conductivity, and coating thickness

Trace Storage: 20 traces can be stored for recall. The traces can be static or frozen. They can contain up to 60 seconds of movement. The traces are stored with the date and time of capture.

Program Storage: 120 instrument set-ups may be stored and recalled. The date and time of storage is recorded with each set-up.

Print Out: Provides a custom configurable report header containing the display screen data and probe parameters including serial number (PowerLink™ probes only)

Printers: Any serial printer

INPUTS / OUTPUTS

Power: 7-pin connector to charge the internal battery and operate the instrument with AC power

RS-232: DB-9P connector, bi-directional serial data via RS-232

Probe Connector: 16-pin LEMO

Analog Outputs: Horizontal and vertical outputs of both F1 and F2. +/- 5 volts, 1 volt per division

Alarm Outputs: 9-pin analog and alarm output connector

VGA Output

GENERAL

Dimensions:
9.5″ L x 5.5″ H x 3.6″ D
(215 mm x 165 mm x 92 mm)

Weight: 3.8 lbs. (1.7 Kg) with battery

Display: Customer-interchangeable QVGA displays (320 x 240 pixels), color or monochrome LCD, Hi-Brite electroluminescent

Operating Temperature:
14° to 131° F (-10° to 55° C), depending on configuration

Storage Temperature:
-60° to 160° F (-51° to 71° C), depending on configuration

Humidity: 5 to 95%

Classification: Based on Class 2 specifications from the MIL-PRF-28800F handbook

Altitude: Maximum operating and non-operating altitude - 15,000 ft. (4600 m)

Hazardous Area Operation: Safe operation as defined by Class I, Division 2, Group D, as found in the National Fire Association Code (NFPA 70), Section 500, and tested using MIL-STD-810F, Method 511.4, Procedure 1

POWER

Power Requirements: 85 to 240 volts, 50-60 Hz. External holder charges batteries outside the instrument. Charging time is typically 4 hours.

Low Battery Protection: Display bar graph "gas gauge" indicates approximate operating time.

Battery Operating Time: 8 hours (nominal depending on configuration)

CE

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