

Eddy current flaw detectors

The NORTEC 500 Series, Olympus' newest eddy current flaw detectors incorporate a full range of features: internal balance coils, VGA output connector (for heads up displays, monitors, and projectors), and a USB interface for rapid information transfer. The NORTEC 500 also includes PowerLinkTM, for automatic probe recognition and program set-up.

The NORTEC 500 improves on previous NORTEC eddy current instruments and is available in four configurations. Each configuration includes USB port and increased resolution with reduced noise. Internal balance coils allow use of inexpensive absolute probes without the need for external balance coil adapters. A built-in preamp adds extra gain when needed for difficult tests. VGA output allows for the display to be projected or viewed on a standard computer screen.

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 ° in 1 ° steps
Sweep: Variable from 0.005 - 4 seconds per division
Low Pass Filter: 10 - 500 Hz and wide band
High Pass Filter: Off or 2 to 500 Hz, 2 pole response
Probe Drive: 2, 6, 12 volts
Variable Persistence: 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 box, polar, or sweep alarm settings
Alarm Modes: 1-3 box gates, polar, sweep, conductivity, and coating thickness

Trace Storage: Up to 200 traces can be stored for recall. The traces can be static or frozen and can contain up to 60 seconds of movement. The traces are stored with the date and time of capture.

Program Storage: Up to 200 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 numbers (PowerLink[™] probes only).

Inputs / Outputs

Power: 2-pin connector to charge the internal batteries and operate the instrument from AC power

USB Port: Allows interface with PC and printers

Probe Connector: 16-pin LEMO and BNC

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

Alarm Outputs: 15-pin analog and alarm output connector

VGA Output: 15-pin connector