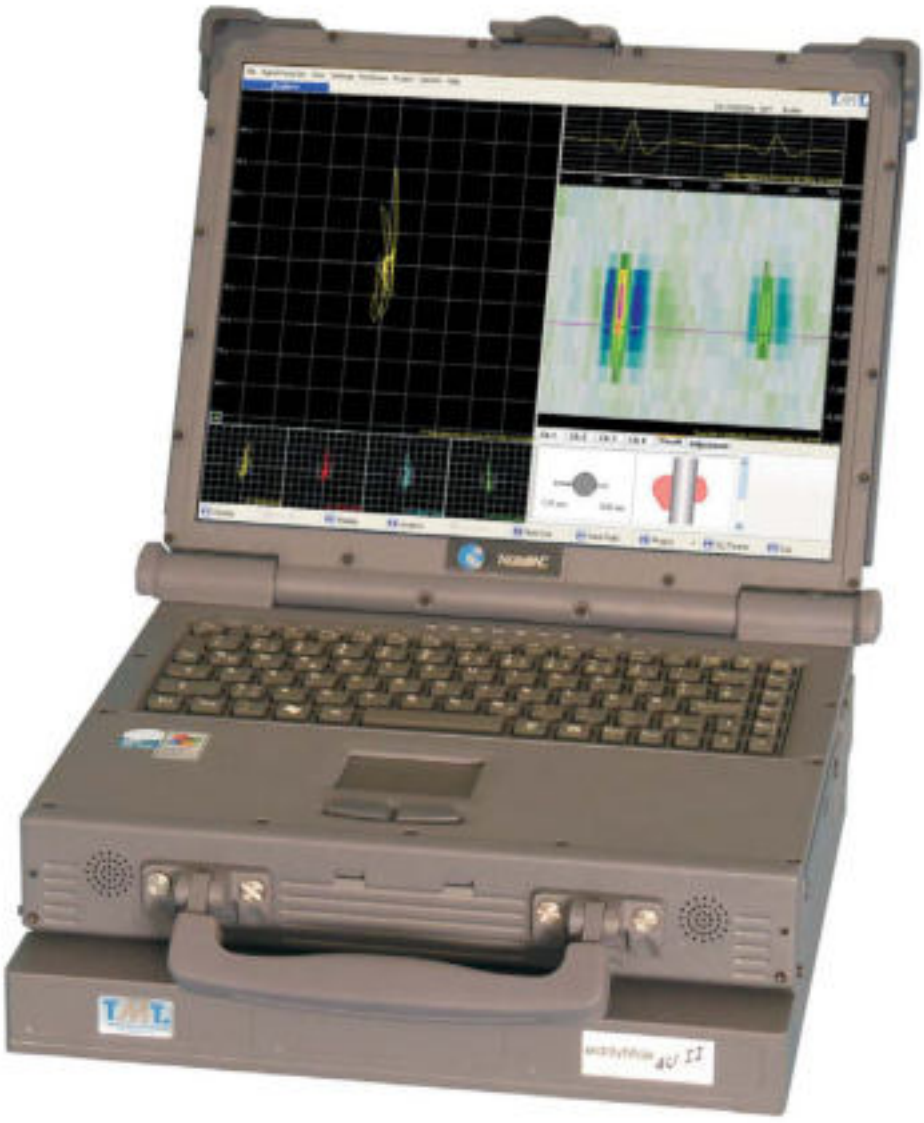
eddyMax® 4U II

Digital 4-Frequency
Universal Eddy Current Testing Instrument



Hand-, Rotation- and Scan-Testing
in a single 4-Frequency Instrument

TMT
Test Maschinen Technik GmbH

Technical Data

Frequency Range
10 Hz up to 2.5 MHz

Number of Frequencies
4 adjustable frequency channels. Adaption of the transmitter output voltage to the probe, range -40 up to 8 dB adjustable in 0.1 dB increments

Probe Matching
Adjustable preamplifier for optimal matching to the sensitivity of the probe, range 0 up to 78 dB in 6 dB increments with signal level indicator.

Amplifier
Total gain range from -48 up to 126 dB main gain range from -48 bis 48 dB, adjustable in 0,1dB increments, preamplifier range from 0 up to 78 dB, X/Y axis spread from -20 dB up to 20 dB adjustable in 0.1 dB increments

Phase
360° in 0.1°- increments

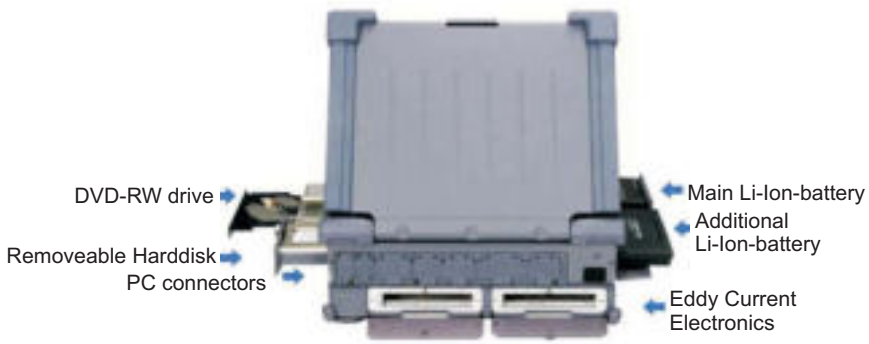
Filter
Adjustable low pass and high pass filter
range from 0.1 Hz up to 5000 Hz

Flexible Channels
Depending on the inspection task and the application used for the inspection several channels for signal processing including signal mixing channels are available.

Signal Display
Coloured signal display in impedance and chart mode, switchable to display in impedance mode with several signal windows.
The dot can be displayed in store or nonstore mode with highlighted signal trace.

Signal display in C-Scan Mode
Coloured signal display in the impedance window and coloured C-Scan display in the chart window

Modes of Operation / Probe Types
The instrument can be used for static testing with hand probes or dynamic operation with rotation probes. All types of probes like SR-probe, bridge probes and reflection probes can be connected.



Screen
14" / 360mm TFT high luminance active matrix colour display

Dimensions
Height : 125 mm
Width : 320 mm
Length : 295 mm without grip

Weight
6.5 kg

Power Supply
100 to 240V AC (50 to 60 Hz)
optional 19V DC with adaptor
Li-Ion-battery packs

System In- / Outputs
- Parallel printer interface Centronics
- Serial interface RS232
- USB connectors for external devices
- Ethernet network connector
- PCMCIA Cardbus
- eddyMax probe connector
- eddyMax system connector

Operation
Parameter setting by menus and function keys. Storage of the entire parameter setting and signals on hard disk or on external USB storage devices.
Integrated touchpad pointing device and keyboard

Protocol Functions
- Hardcopy of the screen display
- Text editor for labeling the screen display prior to the output
- Protocol output with text editor and documentation of the instrument parameters of all used channels

Software
- universal eddyMax ScanMax-Software
- Windows XP

Extensions and Accessories

Software Extensions
- eddyMax Scan Imaging Software
- eddyMax BoreMax application for 4-frequency aircraft borehole inspection
- eddyMax RivetLiner application for inspection of rivetrows on aircrafts

Software Extensions
TubeMax application with signal analysis for heat exchanger tube inspection
WinDevos-Data manager for heat exchanger tube inspection
Interface for programming own applications

Accessories
various probe adapters
C-MEC remote field extension
probe-push-puller for heat exchanger tube inspection
remote controlled polar- and XY-manipulator systems
scanner for C-scan testing at flat and rotational symmetric samples
probe rotors for borehole and tube testing
probes for a wide range of applications
test and calibration standards
transport bag

presented by :

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