Specification ELOTEST B300-Family

Eddy-Current Data
- Up to four independent channels, frequency 10 Hz – 10 MHz
- Driver amplifier: dual, 15 V_{SS}, max. 250 mA, protected
- HF-compensation for maximum preamplification
- Preamplifier 6 dB to 72 dB in 0.5-dB steps
- Main amplifier 0 dB to 60 dB in 0.5-dB steps
- Y-axis spread 0 dB to 30 dB in 1-dB steps
- Phase 0° to 359.5° in 0.5° increments
- Signal filter LP/HP; 0 Hz to 10 kHz in 40 steps, separately adjustable; bandpass-filter (BP) with variable bandwidth

Probe Connection
- All types of probes can be used
- Rohmann ELOTEST B1 standard adapter receptacle with B3-RS adapter
- Optional 24-pin Fischer multi-functional connector to use with special probes with integrated memory or multi-probe systems (e. g. differential/absolute probe systems); alternatively second ELOTEST B1 standard adapter receptacle
- Optionally, probe arrays can be connected

Universal Scanner Interface (USI)
- Multifunctional connector for pulse generator, linear potentiometer and TTL-I/O

Interfaces
- Ethernet port (10/100 Mbit/s; RJ45, 100BaseT)
- RS232 (D-Sub 9) for mouse or external PC
- USB-port
- VGA-port for external monitor
- Parallel printer interface (D-Sub 25)

Display
- Active TFT-color display with 210 mm (8.4") diagonal, 640 *480 pixel with integrated CFL-lighting

Housing
- Shock-proof ABS-industrial plastic housing
- The lid containing the display can be opened up to max.180°; when closed it protects the display and the keypad
- Dust and waterproof (IP 67) silicon-keypad featuring specific direct-function keys, cursor block and softkeys
- Turning knob to quickly set parameters
- Integrated, quick-change battery pack; alternatively built-in wide-range mains supply

Power Supply
- Quickly rechargeable Li-Ionen battery with intelligent charger and autonomous battery-status display; 6 hours operating time
- Wide-range power supply, external; input 100 – 250 V/AC 50 - 60 Hz; output 24 V/DC; 90 W

Operating Features
- Automatic probe adaptation
- Automatic preamplifier adjustment (incl. HF-compensation for maximum preamplification)
- Automatic lift-off adjustment
- Automatic mix function for multi-frequency applications
- Waterfall-display for dynamic inspections

Software
- C-Scan software
- Conductivity measurement (with calibrated special probes)
- Layer-thickness measurement (with calibrated special probes)
- Probe array multiplex (with optional additional hardware)
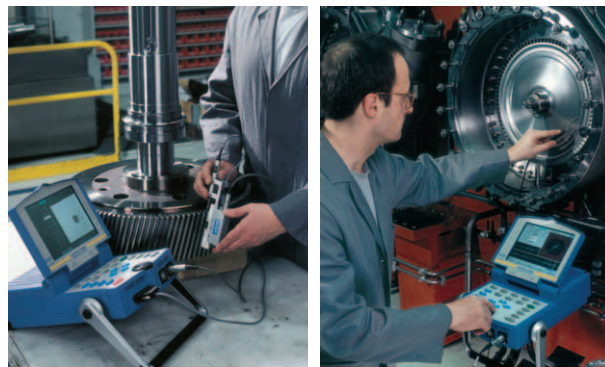
Instrument Versions
- ELOTEST B310: 1-channel test instrument compatible with the ELOTEST B1 V3/V4 with regards to probes/rotors
- ELOTEST B320: 2-channel version with 2 independent test channels that can be configured as master / slave channel; 3 signal mix channels
- ELOTEST B330: 3-channel version with 3 independent test channels that can be configured as master / slave channel; 3 signal mix channels
- ELOTEST B340: 4-channel version with 4 independent test channels that can be configured as master / slave channel; 3 signal mix channels

Dimensions
- Length: 362 mm (14.25")
- Width: 232 mm (9.13")
- Height: 95/110 mm (3.4/4.3") lid closed
  290 mm (11.42") lid open

Weight
- Instrument without battery pack: 3,400 g
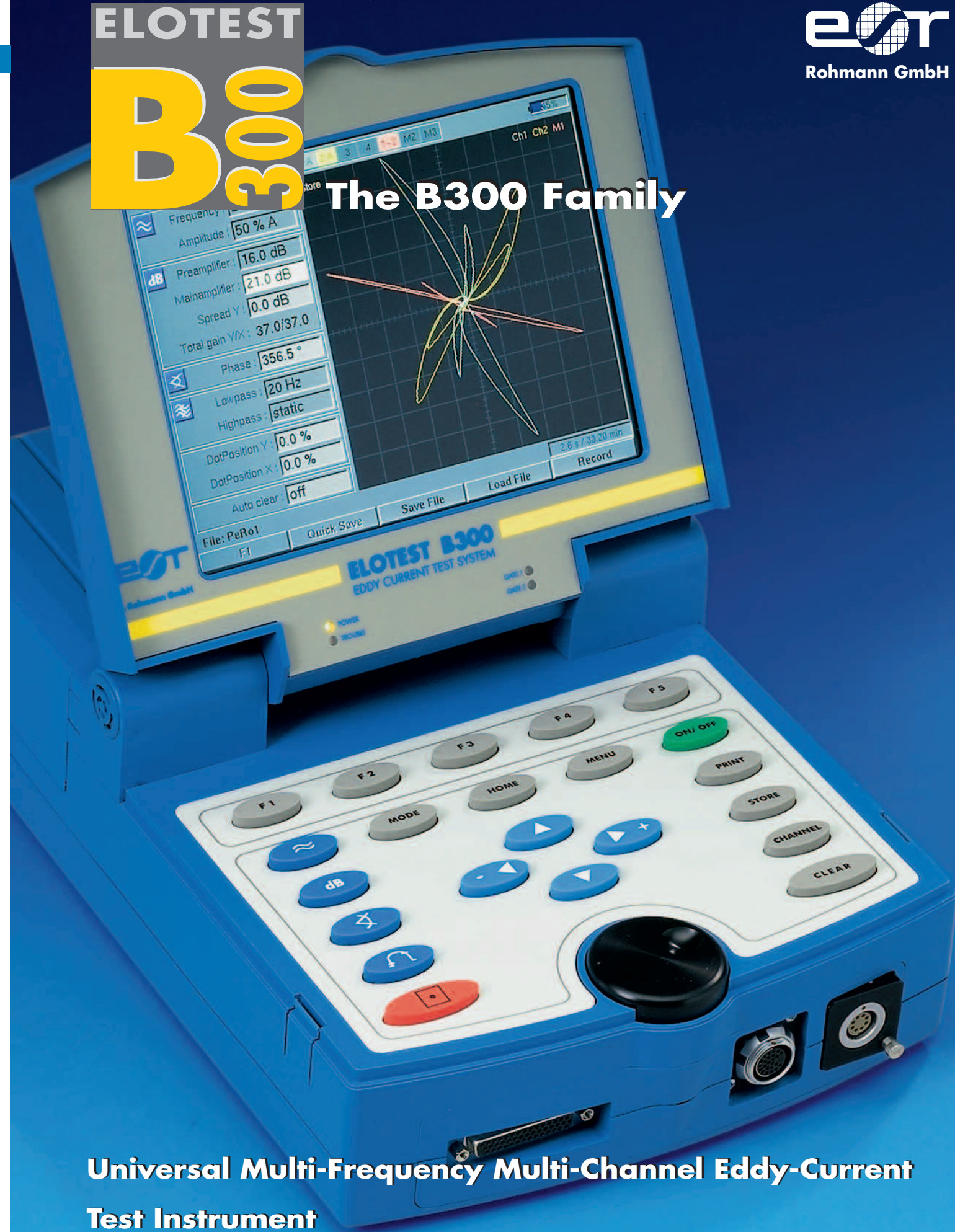- Li-Ionen battery pack: 1,860 g

Rohmann GmbH
Rudolf-Diesel-Str. 13
67227 Frankenthal
GERMANY
Tel. +49-(0)6233-3789-0
Fax +49-(0)6233-3789-77
E-Mail: info@rohmann.de
www.rohmann.de

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Reg.-No.: DE-013872 QM

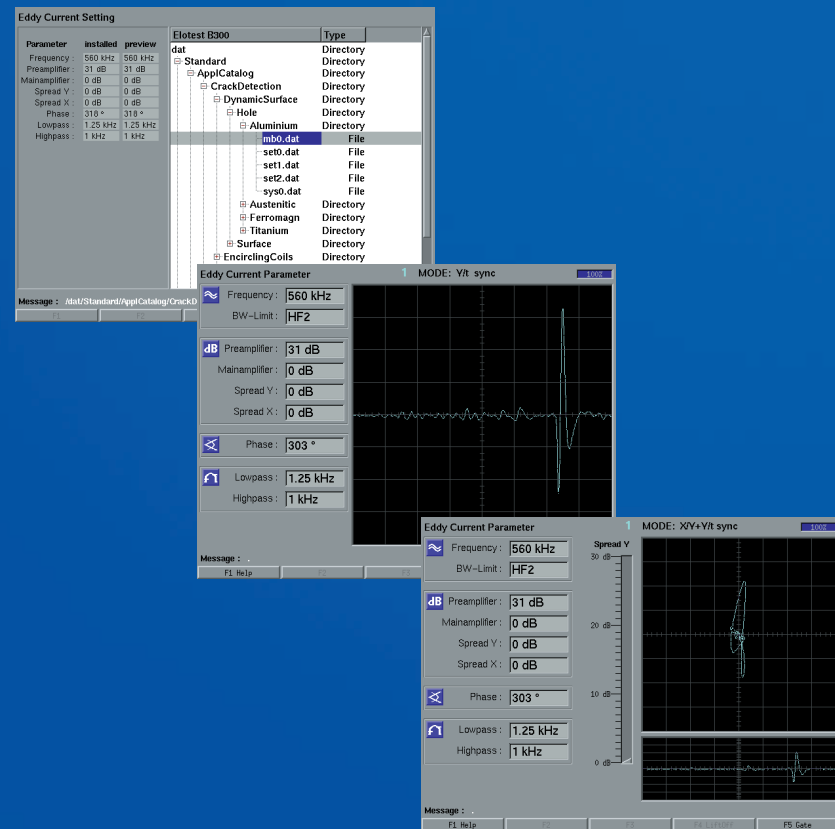ELOTEST B300

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Rohmann GmbH

The B300 Family

ELOTEST B300
EDDY CURRENT TEST SYSTEM

Universal Multi-Frequency Multi-Channel Eddy-Current Test Instrument

Up to 4 simultaneous channels

- **Intuitively operable system for hand-guided eddy-current probes, test rotors and scanner systems**

- **Suitable for use in a lab environment and as a portable field instrument for sophisticated applications**

- **Active probe-compensation for optimum signal dynamics**

- **Including multi-element multiplex probes systems**

- **24 V power supply**

- **Includes C-Scan software**

- **Multi-functional signal-processing, display, mix, analysis, storage and documentation**

- **Fast high-performance interface for a bi-directional digital communication**

- **Complete remote operation e.g. Lab-View or X-server**

- **Transfer via Ethernet/Internet Interface for video camera (Option: Endoscope inspection)**

- **Layer thickness and conductivity measurement, display with bargraph, may be switched on separately, pos./neg. selectable of sorting threshold**

- **Software for specific applications available; may be adapted to the operator's requirements**

- **Test frequency 10 Hz - 10 MHz**

- **Preamplification 6 - 72 dB, in 0.5 db steps with front-end filter optimized for remote-field technology**

- **Gain 0 - 60 dB in 0.5 dB steps, 4-axis spread up to 30 dB in 1 dB steps**

- **Low-pass, high-pass and band-pass signal-analysis filter in 40 steps from 0 Hz to 10 kHz**

- **Real-time circular and box gates, variable**

- **Comprehensive self-test with plausibility check**

ELOTEST B300
EDDY CURRENT TEST SYSTEM

Rohmann GmbH