

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 60 dB in 0.5-dB steps
- Main amplifier 0 dB to 50 dB in 0.5-dB steps
- Y-axis spread 0 dB to 3 0 dB in 1-dB steps
- Phase 0° to 359.5° in 0.5° increments
- Signal filter LP/HP; 1.8 Hz to 10 Hz in 40 steps, separately adjustable; bandpass-filter (BP) with variable bandwidth

Probe Connection

- All types of probes can be used
- Rohmann ELOTEST B1 standard adaptor receptacle with B1-RS adaptor
- Optional 24-pin Fischer multi-functional plug to use with special probes with integrated memory or multi-probe systems (e. g. differential/absolute probe systems); alternatively 2nd ELOTEST B1 standard adaptor 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 directfunction keys, cursor block and softkeys
- Turning knob to quickly set parameters
- Integrated, quick-change battery pack; alternatively built-in mains supply 120 - 240 V/AC

Power Supply

- Quickly rechargeable NiMH- respectively Li-Ion battery with intelligent charger and autonomous battery-status display; capacity with full display lighting
 - Li-Ion battery pack 6 hours operating time
 - NiMH battery pack 4 hours operating time
- Wide-range power supply, external; input 120 – 240 V/AC; output 24 V/DC; 50 W

Operating Features

- Automatic probe adjustment
- Automatically adjustable preamplification (incl. HF-compensation for maximum preamplification)
- Automatic mix function for multi-frequency applications
- Waterfall-display for dynamic inspections

Software Options

- Multi-frequency multiplex
- Probe array multiplex (with optional additional hardware)
- C-Scan software compatible with the Scanalyzer-software
- Conductivity measurement (with calibrated special probes)
- Layer-thickness measurement (with calibrated special probes)

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; signal mix channel
- ELOTEST B330: 3-channel version with 3 independent test channels that can be configured as master / slave channel; 2 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

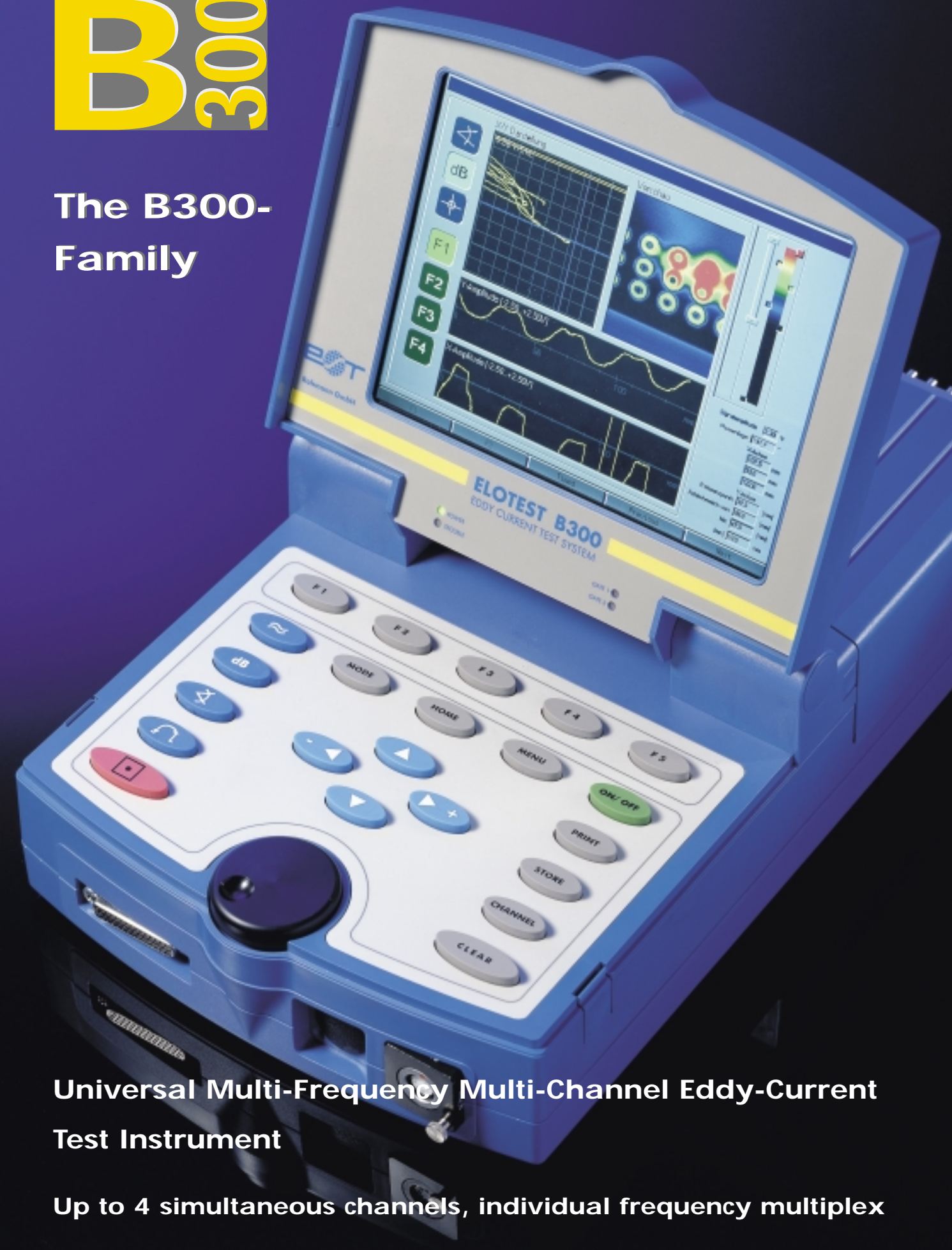
- Instrument without battery pack: 3,100 g
- NiMH battery pack: 2,250 g
- Li-Ion battery pack: 1,860 g



Rohmann GmbH
Rudolf-Diesel-Str. 13
67227 Frankenthal
GERMANY
Tel. 06233 / 3789-0
Fax 06233 / 3789-77
E-Mail: info@rohmann.de
www.Rohmann.de

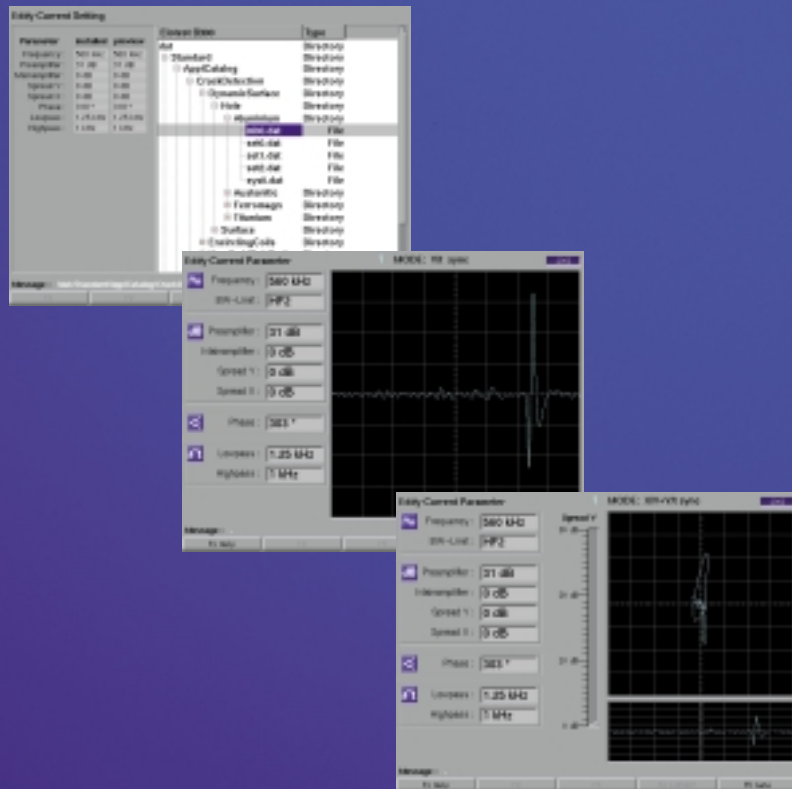


The B300-Family



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

Up to 4 simultaneous channels, individual frequency multiplex



- Suitable for multi-element multiplex probes systems
- Active probe-compensation for optimum signal dynamics
- 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
- 24 V power supply, battery-powered or mains supply
- Suitable for all probe types
- Multi-functional signal-processing, display, mix, analysis, storage and documentation
- Active high-performance interface for a bi-directional digital communication
- Complete remote operation e.g. Lab-View or X-server
- Transfer via Ethernet/Internet; operator manuals and inspection guidelines with sketches and photos for test situations can be loaded; with a connection for digital camera and voice recorder (USB-port)
- Software for specific applications available; may be adapted to the operator's requirements

- Test frequency 10 Hz - 10 MHz
- Pre-amplification 0 - 60 dB, with front-end filter optimized for remote-field technology
- Gain 0 - 60 dB in 0.5 dB steps, axis spread up to 30 dB for Y-axes in 1 dB steps
- Low-pass, high-pass and bandpass signal-analysis filter in 40 steps from 0 Hz to 10 kHz
- DSP for complex mathematical operations
- Real-time circular and box gates, may be converted into vector gates
- Software contour-gates can be edited by the operator
- Comprehensive self-test with plausibility check

