

Specification ELOTES B300-Family

Eddy-Current Data

- Up to four independent channels, frequency 10 Hz – 10 MHz
- Driver amplifier: dual, 15 V_{pp}, 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 ELOTES 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 ELOTES B1 standard adapter receptacle
- Optionally, probe arrays can be connected

Universal Scanner Interface (USI)

- Multifunctional connector for pulse generator, linear potentiometer and TTL-/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

- ELOTES B310: 1-channel test instrument compatible with the ELOTES B1 V3/V4 with regards to probes/rotors
- ELOTES B320: 2-channel version with 2 independent test channels that can be configured as master / slave channel; 3 signal mix channels
- ELOTES B330: 3-channel version with 3 independent test channels that can be configured as master / slave channel; 3 signal mix channels
- ELOTES 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 / lid open

Weight

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



ELOTES B300 The B300 Family