

VIBXPERT II instrument

Technical data

| Parameter | Technical data VIBXPERT II instrument (VIB 5.310) |
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| Input | |
| Analog, Vibration, 2x | Voltage (AC/DC, ±30 V max.) Current (AC/DC, ±30 mA max.) IEPE-type accelerometer (2 mA, 24 V max.) Current Linedrive (CLD) accelerometer (10 V, 10 mA max.) |
| Frequency range | DC ... 51.2 kHz (Acceleration from 0.5 Hz) |
| Dynamic range | 96 dB (measurement) / 136 dB (total) |
| Sampling frequency | up to 131 kHz per channel |
| Impedance | 90 kOhm, with cable VIB 5.433 |
| Analog, Temperature, 1x | Thermocouple (type K) |
| Digital, Pulse/ Tacho, 1x | RPM, Trigger, Keyphaser with pulse and AC signals: 0 V ... +26 V or -26 V ... 0 V |
| Max. input voltage | ± 26 V |
| Switching threshold for 0 V ...+26 V signal | max. 2.5 V rising, min. 0.6 V falling |
| Switching threshold for -26 V ...0 V signal | min. -8 V rising, max. -10 V falling |
| Pulse width | < 0.1 ms |
| Output | |
| Stroboscope control | TTL |
| Frequency range | 0 - 500 Hz |
| Resolution | 0.05 Hz |
| Signal-Out | Connection for headphones to listen to the analog input signal; signal processing (oscilloscope) |
| Frequency range | 0.5 Hz - 40 kHz |
| Output impedance | 100 Ohm |
| Measurement range / Accuracy | |
| Vibration acceleration | depends on the sensor connected |
| Shock pulse | -10 ...80 dBsv / ± 3dBsv |
| RPM | 10 ... 200 000 min ⁻¹ / ±0.1‰ or ± 1 min ⁻¹ (the lower accuracy is applicable) |
| Temperature, type K | -50 ... +1000°C / 1% or ±1°C (the lower accuracy is applicable) |
| Standards fulfilled | Frequency response acc to ISO 2954 |
| Display | |
| Type | TFT-LCD, backlit |
| Pixel area | 116 x 87 mm |
| Resolution | VGA (640 x 480 pixel) with 140 ppi |
| Color depth | 18 bit (262144 colors) |
| Power supply | |
| Battery type | Li Ion rechargeable battery pack (7.2V / 4.8Ah - 34 Wh) |
| Charging time | < 5 hours in the instrument |
| Charger, input | 110-240 V / 50-60 Hz |
| Charging temperature | 0°C ... +50°C [32 °F ... 122°F] |
| Computer | |
| Processor | Marvell PXA320 806 MHz |
| Keyboard | 1 navigation pad and 7 keys (Zoom, Escape, Function, Help, Menu, On/Off); Keyboard illumination controlled by ambient light. |
| Memory | Internal: 128 MB DDR RAM; Compact Flash: 2 GB to 8 GB (interchangeable) |
| Serial interface | RS 232, <115 kBaud |
| USB interface | USB 2.0 |
| Ethernet interface | 100 Mbit (100Base T), 10 Mbit (10Base T) |
| Environment / General | |
| Connectors | Analog / Digital channels: MiniSnap socket Thermocouple (type K): QLA socket; all compatible to VIBSCANNER |
| Housing | ABS plastics |
| Dimensions | 186 x 162 x 52 mm (LxWxH), [7 5/16" x 6 3/8" x 2 1/16"] |
| Weight | approx. 1.1 kg [39 oz] |
| Environmental protection | IP65, dust and splash-proofed |
| Temperature range | -10°C ... +60°C (Operation), [14 °F ... 140°F] -20°C ... +60°C (Storage), [-4 °F ... 140°F] |