## Specifications



| Vibration Meter  |   |  |
|--|---|--|
| Channels   | • 1 (Single-channel)  |  |
| Parameters   | <ul> <li>Real time measurement in</li> <li>Acceleration: m/s2, g, in/s2, dB</li> <li>Velocity: m/s, in/s, dB</li> <li>Displacement: m, in, dB</li> </ul>  |  |
| VibMeter   | Frequency range: 0.8 Hz - 2.5 kHz  RTA: Broadband level measured with bandwidth (- 3dB): 0.7 Hz - 23.6 kHz  Display according to DIN 45669-1:2010  Unweightet velocity v(t)  Maximum absolut velocity  v max  Averaging duration T <sub>m</sub> Measurement duration T <sub>M</sub> |  |
| Filter   | <ul> <li>Flat (no filter), 1 - 80 Hz, 1 - 315 Hz</li> <li>In accordance with DIN 45669-1:2010</li> <li>Bandwidth (- 3dB): 0.7 Hz - 23.6 kHz</li> <li>Decay rate = 40 dB / decade</li> </ul>   |  |
| FFT  | <ul> <li>Frequency range: 1 Hz - 1.69 kHz</li> <li>Optional: High-resolution Zoom-FFT with selectable frequency ranges and resolution up to 0.4 Hz in the range of 1 Hz to 20 kHz</li> </ul>  |  |
| 1/12 Oct   | Optional: Frequency range: 0.73 Hz - 1.36 kHz   |  |
| Maximum Input<br>Level                                 | • 353 m/s2, 36 g @ 20 mV/(m/s2) with ICP Adapter ASD  |  |
| Residual Noise<br>(typical) with<br>ICP Adapter<br>ASD | <ul> <li>17 μV @ 0.7 Hz 23.0 kHz</li> <li>14 μV @ 1 Hz 315 Hz</li> <li>14 μV @ 1 Hz 80 Hz</li> </ul>  |  |

| Reference-<br>measurement | • Mid |
|---------------------------|-------|
| range                     |       |

| Input / Output Interfaces |  |
|---------------------------|--|
| Audio Inputs              | XLR balanced with input impedance = 200 kOhm, phantom power: +48 V switchable, automated sensor detection for NTi Audio's ASD measurement microphones and pre-amplifier MA220     RCA unbalanced with input impedance >30 kOhm     Built-in condenser microphone for polarity testing, delay measurements and voice note recording |
| Audio<br>Outputs          | Built-in speaker     Headphone connector, 3.5 mm Minijack; mono monitor wired to both channels of stereo jack  |
| USB Inter-<br>face        | USB mini connector for data transfer to PC, XL2<br>Projector PRO and/or charging of Li-Po battery  |
| Digital I/O               | Connection interface to accessories  • XL2 Input Keypad  • Limit Light  • Stack Light  • Digital I/O Adapter PCB   |
| TOSLink                   | 24 bit linear PCM audio signal output (prepared for later firmware extension)  |

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| Memory          | SD Card included (8 GByte), removable, storing measurement data in ASCII format, screen shots, voice notes and wav-files  Data logging every second offers following noise monitoring periods:  Logging default noise levels: > 2 years  Additional logging of 1/3 octave data: > 6 month  Additional  compressed audio recording: > 1 week  linear audio recording: > 15 hours  Optional 32 GB SD Cards are available for longer monitoring requirements.   |
|-----------------|--|
| Power<br>Supply | Rechargeable Li-Po battery included  Type 3.7 V / 2260 mAh  Typical battery lifetime > 4 hours  Range: 3.3 - 4.5 VDC  Volume energy density = 339 Wh/I  Dry cell batteries type AA, 4 x 1.5 V  Typical battery lifetime > 4 hours  Range: 3.7 - 6.0 VDC  Linear external power supply 9 VDC  Range: 7.5 - 20.0 VDC @ minimum 6 Watt  Charges Li-Po battery during operation  USB-Power Supply  for short term operation < 1 day  charging power is equal or less than power consumption  External battery pack  22 Ah battery pack: 4 days  44 Ah battery pack: 8 days |

| General                                     |   |
|---|---|
| Clock                                       | Default     Real-time clock with lithium backup battery     Drift < 1.7 seconds per 24 hours     Special XL2 edition, NTi Audio # 600 000 356     VCXTO clock     Drift < 0.04 seconds per 24 hours   |
| Calibration                                 | <ul> <li>Recommended calibration interval: one year</li> <li>Microphone calibration with external calibrator supported</li> <li>Optional calibration certificate for new instruments available</li> </ul>   |
| Mechanics                                   | <ul> <li>Tripod or microphone stand mount 1/4"</li> <li>Wire stand mounted on rear side</li> <li>Display: 160 x 160 pixels grey scale with LED back light</li> <li>Dimensions (L x W x H)</li> <li>180 mm x 90 mm x 45 mm</li> <li>7.1" x 3.5" x 1.8"</li> <li>Weight: 480 g (1 lb) including built-in Li-Po battery</li> </ul> |
| Temperature                                 | -10 °C to +50 °C (14° to 122°F)   |
| Humidity                                    | 5% to 90% RH, non-condensing  |
| Susceptibil-<br>ity to radio<br>frequencies | Classification Group X  |
| Electromag-<br>netic Com-<br>patibility     | CE compliant:<br>EN 61326-1 Class B, EN 55011 class B<br>EN 61000-4-2 to -6 & -11   |
| Protection<br>Rating                        | IP51  |
| ATEX  | <ul> <li>For applications in explosive atmospheres within<br/>zone 2 in accordance with IEC 60079</li> <li>Conforms to 94/9/EC</li> </ul>   |