



# XL3 ACOUSTIC ANALYZER

•

ili:

≡ Sound Level Meter

17:19:08

120 dB

100

847

ili: L<sub>ZF</sub> max

ESC

ili LZF live

LOGGING 00:00:39

**INT**i

3

63

500

OK

2k

73.2 dB I↔I 1/1 Oct

85.2 dB

XL3

START

STOP

⊕• TA•

\$ 100% [

CLASS 1 SOUND LEVEL METER 1/3-OCTAVE SPECTRUM ANALYZER REVERBERATION TIME ANALYZER BUILDING ACOUSTICS ANALYZER

Hade in Switzerland



# **Fully Networked**

The XL3 is fully networked. The remote control interface and the built-in web server allow operation and data access from any mobile device.

# **New Technologies**

State-of-the-art hardware and software technologies, high-performance processors and enough memory to cover all requirements, make the XL3 the ideal solution for acousticians. The unit offers a wide single range for easy usage, which is covered without any range switching.

# Smart User Interface

The high-resolution 4.3-inch color touch display allows intuitive control of all measurement functions. All common operating functions are also accessible on the keypad below the display.

# The Heart of Noise Monitoring

The XL3 is fully network-capable and can be connected with USB or Wi-Fi via an external router to the internet at any time for upload of data to the cloud. The binary streaming format facilitates compact data transmission over cellular networks. In addition to a large SD memory card, the XL3 also supports the connection of an external hard disk. A weather station can be connected directly to the XL3 via the SDI-12 interface.

XL3 remote access via mobile device

# XL3 – Acoustic Analyzer



The XL3 is a professional sound level meter and acoustics analyzer for noise measurements, room acoustics and building acoustics – optimized for the needs of the acoustician.

#### Sound Level Meter

09.28.18		<del>ç</del> ♦ 100% 🛔
$\equiv$ Sound L	evel Mete	r
123	ilii	
L <sub>AF</sub>	67	<b>.0</b> dB
L <sub>Aeq</sub>	71	.0 dB
L <sub>AFmax</sub>	86	<b>.3</b> dB
L <sub>Ceq</sub>	81	.5 dB
L <sub>CFmax</sub>	93	8.1 dB
READY 00:00:39		(1)

The Class 1 Sound Level Meter records numerous levels in parallel over the entire measurement period. At the same time the XL3 logs the frequency spectrum and, if desired, records the audio as a wav file.

All stored measurement data is available in simple text format. Professional data evaluation and further calculations are carried out in the optional Data Explorer PC Software.

#### Spectrum



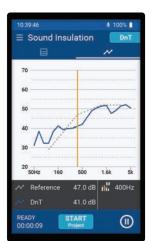
The XL3 determines the frequency spectrum with a Class 1 filter bank in octave or 1/3 octave resolution between 6.3 Hz and 20 kHz. All values are calculated in parallel. In addition, two spectra can be selected and displayed simultaneously. Both the level and the frequency axes can be freely zoomed and scrolled.

#### **Reverberation Time**



The standard reverberation time measurement determines T20 or T30 in octave bands from 63 Hz - 8 kHz. The values of a measured position or of an entire room are averaged on the XL3. The optional Room Acoustics Package extends the Acoustic Analyzer to 1/3 octave band resolution, T15 or EDT. Use either an impulse source or an interrupted pink noise as the test signal.

#### **Building Acoustics**



The optional Building Acoustics module enables direct determination of airborne and impact sound insulation, according to ISO 16283, while you are on site. Measure in the source and receiving rooms and see the sound insulation results on the display. A detailed measurement report is easy to create with the optional Sound Insulation Reporter PC Software.



# TECHNICAL SPECIFICATIONS

SOUND LEVEL M	ETER XL3+M2230 / XL3+M2340
Accuracy	<ul> <li>Class 1 according to IEC 61672 and ANSI S1.4</li> <li>Type-Approved configuration with TA-Option</li> <li>System Self-test (CIC) with M2340 microphone</li> </ul>
Level	<ul> <li>Frequency weighting: A, C, Z</li> <li>Time weighting: Slow, Fast</li> <li>Min, Max, Peak, EQ, EQT, Taktmax</li> </ul>
Functionality	<ul> <li>Single measurement range: 17 dBA - 137 dB</li> <li>Frequency range: 4.3 Hz - 23 kHz</li> <li>Level limits</li> <li>Logging interval 1 s</li> <li>Voice notes (planned)</li> </ul>
Audio	· Compressed (ADPCM), 24 kHz, 12 kHz
Extended Noise Measurement Option	<ul> <li>Sound Exposure Level LAE</li> <li>Time weighting: Impulse</li> <li>Percentile statistics L% (broadband, spectrum)</li> <li>Logging 100 ms (broadband, spectrum)</li> <li>Audio: 24, 32 bit with 12, 24, 48, 96 kHz</li> <li>Event-triggered audio and data recording (planned)</li> </ul>
SPECTRAL ANAL	YZER
Accuracy	· Class 1 according to IEC 61260 and ANSI S1.11
Frequency range	<ul> <li>Octave band: 8 Hz - 16 kHz</li> <li>1/3 octave band: 6.3 Hz - 20 kHz</li> </ul>
Functionality	<ul> <li>Filter base 10</li> <li>Leq with frequency weighting A, C, Z</li> <li>Spectrum logging Leq, Lmin and Lmax</li> </ul>
REVERBERATION	ITIME
Accuracy	<ul><li>ISO 3382 and ASTM E2235</li><li>Schroeder backward integration</li></ul>
Functionality	<ul> <li>Octave band: 63 Hz - 8 kHz</li> <li>Measurement parameters T20, T30</li> <li>Impulse and interrupted noise source</li> <li>Automatic averaging</li> </ul>
Extended Room Acoustics Option	<ul> <li>1/3 octave band: 50 Hz - 10 kHz</li> <li>T20, T30, T15, EDT simultaneously</li> <li>Minimum trigger level</li> <li>Automatic room averaging of multiple positions</li> <li>Audio recording</li> <li>Decay curve (planned)</li> </ul>

BUILDING ACOUSTICS (optional)		
Standards	<ul> <li>ISO 16283 and ISO 717</li> <li>Airborne and impact sound insulation</li> </ul>	
Functionality	<ul> <li>Results shown on XL3</li> <li>Averaging of source and receiving room</li> <li>Requires Extended Room Acoustics Option</li> </ul>	
Results	<ul> <li>D, Dn, DnT and R'</li> <li>Chart and table</li> </ul>	
INTERFACES		
Input	• XLR balanced with 48 V phantom power	
Network	<ul> <li>Wi-Fi integrated (2.4 GHz)</li> <li>LAN via USB adapter</li> <li>USB-C as host or slave, USB-A as host</li> <li>Data and website access via USB</li> <li>Web server, ftp, ntp</li> <li>4G/5G via optional external gateway</li> <li>Remote access connect.nti-audio.com (optional)</li> </ul>	
API-interface Option	<ul> <li>Data and audio streaming</li> <li>Control, configuration &amp; data retrieval</li> </ul>	
Digital I/O	<ul> <li>Connection of accessories</li> <li>SDI-12 and 1-Wire</li> </ul>	
Memory	<ul> <li>Removable SD card with 32 GB memory</li> <li>Supports external hard disk</li> </ul>	
Further Functionalities	<ul> <li>Automatic microphone detection (ASD)</li> <li>Built-in microphone for voice notes</li> <li>Loudspeaker</li> <li>Headphone/line output: 3.5 mm jack, stereo</li> </ul>	
Power supply	<ul> <li>Removable battery (Li-Po)</li> <li>Battery life &gt; 8 hours</li> <li>Power supply 9 VDC, USB-C</li> </ul>	
GENERAL		
Display	<ul> <li>4.3" IPS color display with capacitive touch</li> <li>480 x 800 pixels</li> </ul>	
Mechanics	<ul><li> 1/4" tripod mount</li><li> Device stand</li></ul>	
Dimensions	• 210 x 85 x 45 mm, 8.3 x 3.3 x 1.8"(L x W x H)	
Weight	• 510 g, 18 oz	

more information are listed in the product specifications

All information is non-binding and subject to change without notice. XL3, M2340 and M2230 are trademarks of NTi Audio AG

XL3 info@nti-audio.com www.nti-audio.com