The XL2 Sound & Vibration Analyzer offers the following measurement functions by default:

- **Sound Level Meter**
  - SPL actual, Leq, Lmin, Lmax, Lpeak
  - Frequency weighting A, C, Z
  - Time weighting: Fast, Slow
  - Recording of compressed wav-files and voice notes
  - 1/3 and 1/1 Octave band analysis

- **FFT Analysis**
  - Realtime FFT with Live value, Leq, Lmin, Lmax
  - Three fixed frequency bandwidths

- **Reverberation Time RT60**
  - Octave bands results from 63 Hz - 8 kHz

- **Polarity**
- **Delay Time**
- **Audio Analyzer**
- **Oscilloscope**

The following options are available for the XL2 Sound & Vibration Analyzer:

### Extended Acoustic Pack

- **SLMeter/RTA function**
  - Recording of linear wav-files (24 bit, 48 kHz)
  - Percentiles for wideband and spectrum with flexible setting from 0.1% to 99.9%
  - Sound Exposure Level LAE
  - 100 ms logging
  - RTA logging of Lmin and Lmax
  - Event-triggered audio and data recording
  - Time weighting: Impulse (Lxl, Lxleq with x=A, C, Z)
  - True peak level in 1/1 and 1/3 octave resolution
  - Clock-Impulse Maximum Level (TaktMax) and values as specified in DIN 45645-1
  - Impulsiveness detection in accordance with BS4142:2014 and NordTest ACOU 112

- **FFT function**
  - High-resolution Zoom-FFT with selectable frequency ranges and resolution up to 0.4 Hz in the range of 5 Hz to 20 kHz

- **RT60 function**
  - Reverberation time RT60 in 1/3 octave resolution

### Spectral Limits Option

- **FFT and 1/12 octave function**
  - Comparing measurement results against captures with relative or absolute curve display
  - Comprehensive tolerance handling with tolerance masks based on captures for passed/failed measurements

- **1/12 octave function**
  - High-resolution spectral analyzer 1/12 Oct + Tol
  - Selectable 1/1, 1/3, 1/6 and 1/12 octave resolution
  - Frequency band listening at rear speaker
  - Sound Mode: 11.5 Hz to 21.8 kHz
  - Vibration mode: 0.73 Hz to 1.36 kHz

- **FFT function**
  - High-resolution Zoom FFT with selectable frequency ranges and resolution up to 0.4 Hz in the range from 5 Hz to 20 kHz
  - Sound mode: 5 Hz to 20 kHz
  - Vibration mode: 1 Hz to 20 kHz

- **SLMeter/RTA function**
  - True peak level in 1/1 and 1/3 octave resolution

- **Noise Curves**

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The XL2 Analyzer offers the following options for the XL2 Analyzer:
Options for XL2 Analyzer

**Cinema Meter Option**

- Calibration and repetitive verification in accordance with the SMPTE ST 202:2010 and SMPTE RP 200:2012 standards
- Includes the “Spectral Limits” Option

**Type Approval Option**

- Upgrades the instrument to the XL2-TA, the sound level meter for certified measurements

**Speech Intelligibility STIPA Option**

- For Public Announcement and Evacuation Systems
- Measurement in accordance with the IEC60268-16 and DIN VDE 0833-4 standards
- Ambient noise correction and automated averaging for repeated measurements

**Vibration Option**

- Extends the XL2 to a Vibration Meter with acceleration, velocity and displacement
- Frequency range: 0.8 Hz - 2.5 kHz
- FFT analysis in selectable ranges from 1 Hz to 1.69 kHz
Options for XL2 Analyzer

Data Explorer Option

- Data Visualization
- Audio playback synchronized to graph
- Calculates sum of frequency bands
- Customized Reporting

Sound Insulation Reporter Option

- Airborne, Impact & Facade Sound Insulation
- Visualization of all measurement data
- Customized Reporting

Room Acoustics Option

- Reverberation Time RT60 according to ISO 3382 or DIN 18041
- Import of absorption coefficients
- Comparison before / after room treatment
- Frequency response spectrum according to IEC 61260

Sound Power Reporter Option

- Visualization of all measurements
- Customized Reporting
Projector PRO Option

- Enables additional functions to the Projector PRO software for live sound monitoring
- “XL View” for large screen dB level display
- “Sound Level Predictor” that indicates the headroom for the next few minutes during the show

Remote Measurement Option

- Real-time acquisition of XL2 measurement data directly into a computer application via USB
- Adds a real-time acquisition facility to Sound Insulation Reporter software