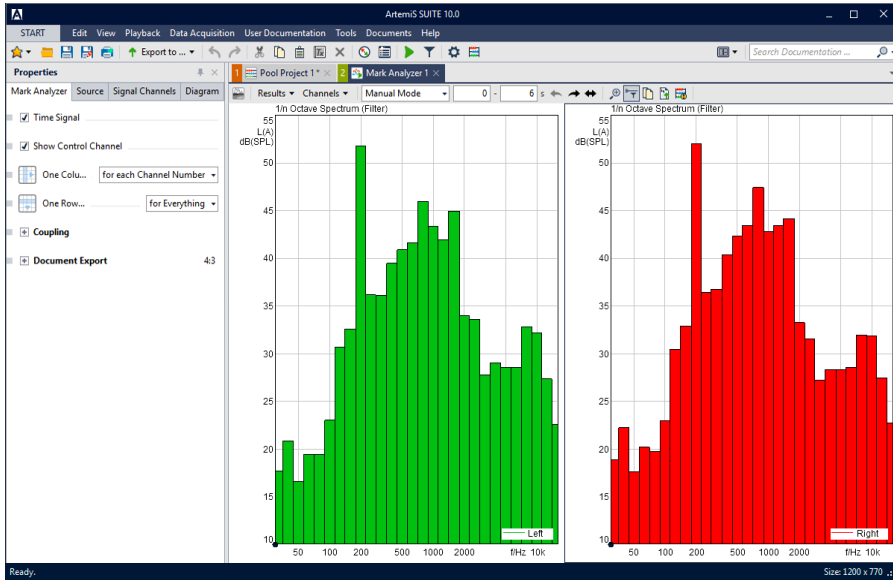


ArtemiS SUITE Octave Analysis Module (Code 5014)

Expansion module for the calculation of 3rd Octave and Octave Analyses



Overview

The Octave Analysis Module allows the use of recursive filters for the calculation of 1/n Octave analyses.

Especially temporal structures within signals can be identified excellently with the Octave Analysis Module. With the use of recursive filters, the time structures of the audio signals retain better than using the FFT-based calculation method available with the Basic Analysis Module (ASM 01).

Features

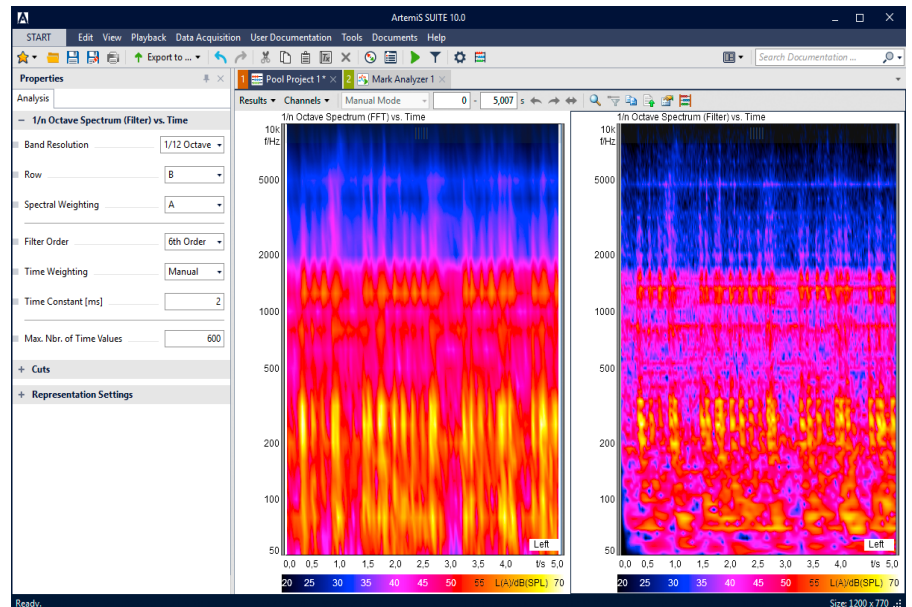
- Expansion module of ArtemiS SUITE for using recursive filters for the following analyses:
 - 1/n Octave Spectrum Filter
 - 1/n Octave Spectrum Filter (peak hold)
 - 1/n Octave Spectrum Filter vs. Time
- 4th and 6th order selectable (property page)
- Filter of 6th order according to DIN 61260 / IEC 61260 / ANSI S 1.11

Requirements

- ArtemiS SUITE Basic Framework (Code 5000)
- ArtemiS SUITE Basic Analysis Module (Code 5001)

Scope of Supply

- License file
 - ArtemiS SUITE Octave Analysis Module (Code 5014)



A comparison between a 1/12 Octave analysis, based on FFT synthesis (left) and recursive filtering (right) demonstrates the improved time and frequency resolution of recursive filters.

Technical Data

1/n Octave Spectrum (Filter) / 1/n Octave Spectrum (Filter) (peak hold) / 1/n Octave Spectrum (Filter) vs. Time

Method:	Recursive filters
Band Resolution:	Octave / 3rd Octave / 1/6 - 1/96 Octave
Row:	A / B
Spectral Weighting:	None / A / B / C / D / G / Wd / Wk / Wh etc. Weighting / Equal Loudness
Filter Order:	4th order / 6th order
Time Weighting:	Fast / Slow / Impulse / manual
Time Constant [ms]:	Selectable
Max. Nbr of Time Values:	Selectable
Only Single Values as Result:	Selectable
Abscissa Range (Single Values):	Selectable
Options (Single Values):	Average / Sum / Min / Max / Percentile
Add Tolerance Scheme:	Display of tolerance curves with tolerance test of the analysis result
Representation Settings:	Individual scaling of the axes in the analysis result
Cuts:	Extracting of 2D curves from the three dimensional spectrum (Cut Mode: First Abscissa / Second Abscissa / Free selectable cuts)

Single Values

Available for all 2D analyses as well as for 3D analyses that have been reduced to two-dimensional curves using cuts.

Only Single Values as Result:	Selectable
Abscissa Range:	Selectable
Options:	Average / Sum / Min / Max / Percentile
Definition of threshold values for whose compliance the determined single values shall be tested for.	
Quantity:	Selectable
Unit:	Selectable