

Model 5961-002 Cross-channel Analyzer

Version 1.1

Features

Fourier transform size

Windows

None, Hanning, Hamming, Blackman-Harris, 4-term Blackman-Harris, 7-term Blackman-Harris, Blackman, LabVIEW Flat Top, and P301 Flat-top

Selectable analysis parameters

Plot formatting options

Spectral averaging strategy determination based on number of averages

File Formats

SDRC "Universal" (Type 58), Comma-separated variable (CSV), Excel-compatible CATS or DATX, Statistics, JPEG graphical plot output

Channel Selection Strategies

Random/Manual, Contiguous Set, Command/List File

Superimposition of limits on plots

Statistical degrees of freedom calculated from overlap setting and number of ensembles

Ordering Information

Model 5961-002



Acquiring, Processing and Managing the World's Data.

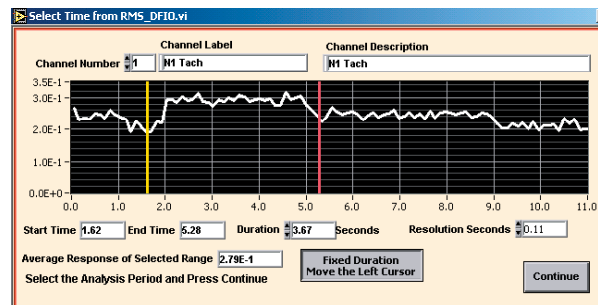
www.dspcon.com

Interactive and Batch Dual-channel Analysis

The Cross-channel post-processor analyzes one or more CATS and DATX time history files. It determines the measured spectral-response level of a reference channel, an analysis channel, and their cross-channel magnitude.

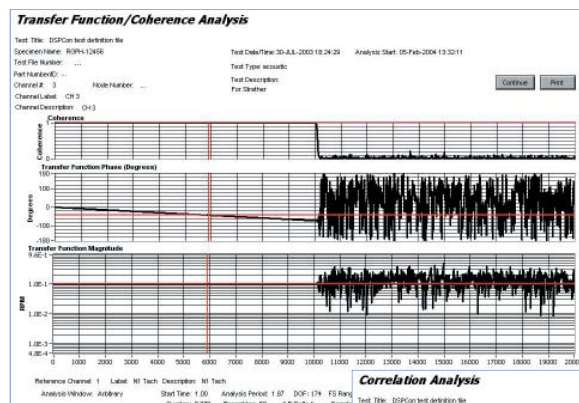
The system calculates the difference between reference and analysis channels in terms of transfer function phase, magnitude, and coherence. It also analyzes the auto-correlation of the analysis reference channel and the cross-correlation between them.

Fast Fourier Transforms (FFTs) of up to 128K points are employed for high-speed analysis, and arbitrary-block-size transforms are used to provide flexibility in spectral resolution.

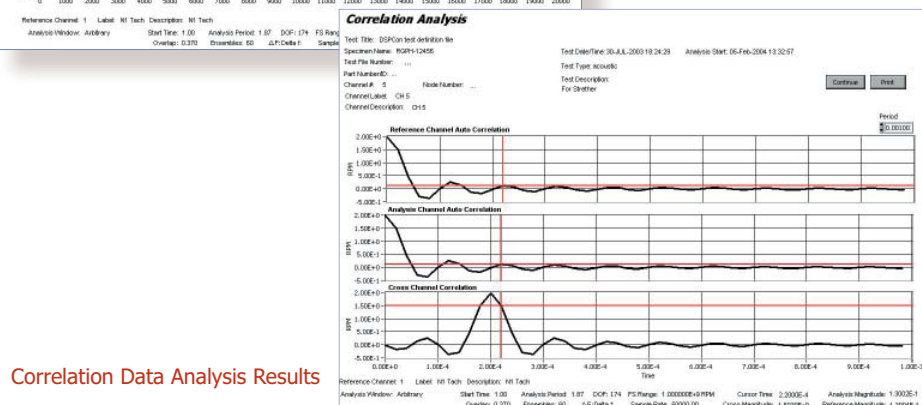


The Analysis Time Selection window plots the RMS response of a selected channel as a function of time for the entire test. Two cursors, separated by the time duration, are used to delimit the analysis duration.

Analysis Time Selection Window



Transfer Function Data Analysis Results



Correlation Data Analysis Results