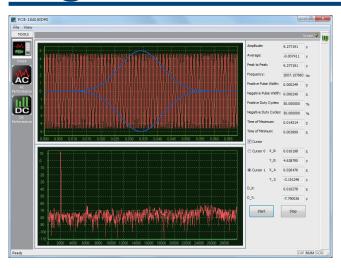
SignalMeter

Signal Analysis Software



Features

- Easy to use, no programming required
- Provides DC and AC performance measurements
- Provides cursor measurements for signal analysis
- Enables Windows function for AC signals
- Real-time frequency displays based on zoom and pan operations in the time domain
- Automatic amplitude, average, peak-to-peak, and frequency measurements
- Cost-free tool

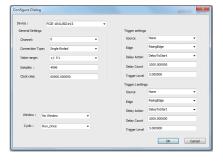
Introduction

SignalMeter is ready-to-use application software designed for Advantech's DAQ devices that enables scope, AC performance, and DC performance functions to facilitate signal analysis. Using the simple, user-friendly interface, engineers can control the settings for the three functions with a single configuration.

Feature Details

Data Acquisition Device Configuration

Before using SignalMeter, the necessary data acquisition parameters can set via the configuration dialog interface. The configuration interface includes device selection, general settings, trigger settings, and start mode settings. Engineers can set the three function modes to follow the same configuration settings.



Scope Mode

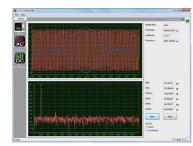
The Scope mode offers the following simple oscilloscope features:

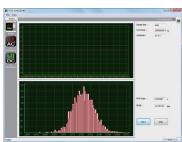
- Amplitude: Returns the difference between the signal highs and lows
- Average: The mean vertical level of the entire captured waveform
- Peak-to-Peak: Returns the difference between the extreme maximum and minimum values
- Frequency: Frequency is the inverse of period, where period is the average completion time for a cycle using the entire waveform in the capture window.

The Scope mode function not only supports simultaneous displays of the time and frequency domains, but also synchronous zoom.

AC and DC Performance Mode

The AC Performance function enables automatic calculation of the SNR, THD, and SIMAD—important information for data acquisition. For DC signals, the DC Performance function can be used to display RMS noise and plot a histogram. Overall, the interface is simple and easy to navigate.





Specifications

Supported Hardware

- PCI Express multifunction, analog input, and digital input cards
- PCI multifunction, analog input, and digital input cards
- USB multifunction, analog input, and digital input modules
- PC/104 and PCI-104 multifunction, analog input, and digital input cards