

Bay Systems Wind Noise Microphone

An accurate and cost effective
solution for the measurement of
wind/turbulent flow induced noise

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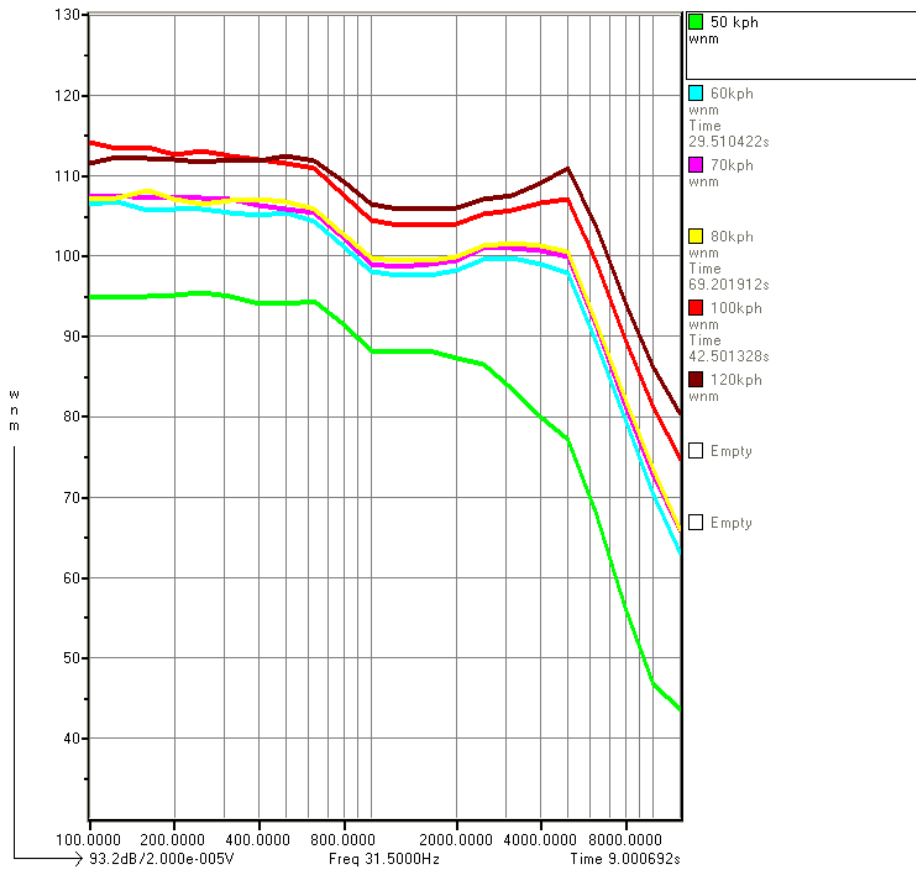
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Wind Noise Microphone attached using double sided tape on a SUV and a saloon car.

The BARS acquisition system, used to collect the data, is shown with the calibration signal on the screen.

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The WNM was positioned on the upper glass of the front passenger window of a Mercedes Benz S320 saloon, model type W140.

A clear transition occurs between 50kph and 60kph.

As speed increases from 60kph to 120kph the external turbulence/noise increases, as would be expected.

- Green 50kph
- Cyan 60kph
- Purple 70kph
- Yellow 80kph
- Red 100kph
- Brown 120kph

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The Bay Systems Wind Noise Microphone is supplied with all signal conditioning needed to allow the signal to be recorded using a standard ADC system. The data presented in this technical note was collected using the BAY Acquisition and Reporting System (BARS) which is a 24bit ADC with a choice of +/-1v and +/-10volt range and IEPE power. The input range used for this work was +/-10v.

The typical frequency response of the BAY WNM is flat to better than +/- 3dB from 80Hz-8kHz.