

CTC AppNotes

A series of technical documents written by members of the CTC community

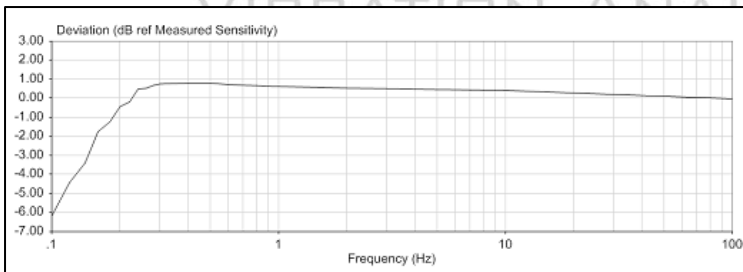
Dedicated Sensor for Wind Turbines and other Broad Spectrum Machinery Monitoring.



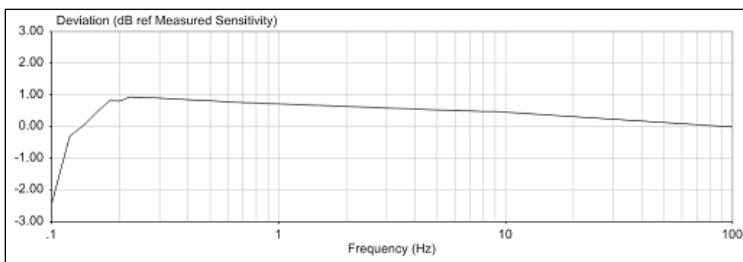
Engineers will sometimes create a specification for an application that has no currently available product in the market. One large manufacturing country had recently done just that in creating their specifications for certain power industry applications. The specifications require the values to be monitored to range from 0.1 Hz to 10 kHz. CTC responded to

the challenge and created a new sensor to fulfill this need. In order to create this high quality, low noise, 500 mV/g accelerometer, CTC combined a larger mass/ceramic/

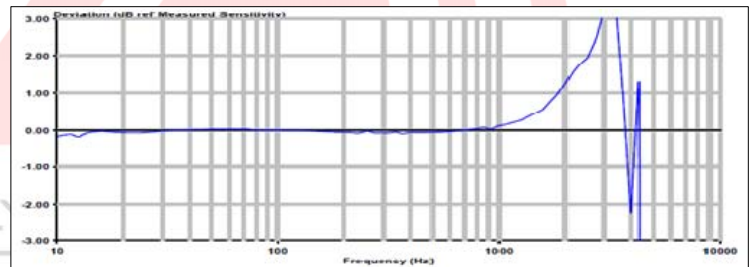
pedestal assembly with our state of the art electronics. This provides a superior sensor at a still reasonable cost. By offering the ability to generate data for both slow speed elements such as rotors and high speed elements like gear mesh and bearing frequencies, the AC133-1D should become a useful tool in the analysts arsenal of weapons to keep critical machines running. An analyst should be able to recommend the AC133-1D for many applications that have both low and high frequencies that need monitoring, such as mixers and compressors and even wind turbines. Datasheets for the AC133-1D can be obtained from our website, www.ctconline.com.



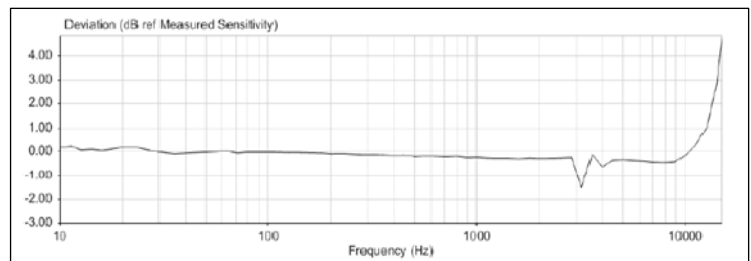
AC135-1A - typical low frequency response curve. Note the roll-off starts at approximately 0.3Hz, but remains in the 3dB range down to 0.16 Hz.



AC133-1D—typical low frequency response curve. Note the steeper response curve where roll-off does not begin till 0.2 Hz and remains within 3dB range all the way to below 0.1 Hz



AC135-1A - typical high frequency response curve. Note the sensor remains within specifications through the 3 kHz range, but cannot offer any usable data above that point.



AC133-1D—typical high frequency response curve. Note data remains in the 3dB range even past the specification of 10kHz.

If you have any questions or for further information please contact CTC directly via Email at dgripe@ctconline.com or jsmith@ctconline.com or feel free to call 1-800-999-5290 in the US and Canada or +1-585-924-5900 internationally.

**

If any CTC vibration analysis hardware product should ever fail, we will repair or replace it at no charge.