

CTC AppNotes

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

Low Power Accelerometers for Wireless Transmission

Many companies have been striving to bring the convenience and cost savings of wireless transmission of vibration data to the industrial market. One of the biggest hurdles for wireless systems has been the power consumption required to transmit dynamic data from standard IEPE sensors.



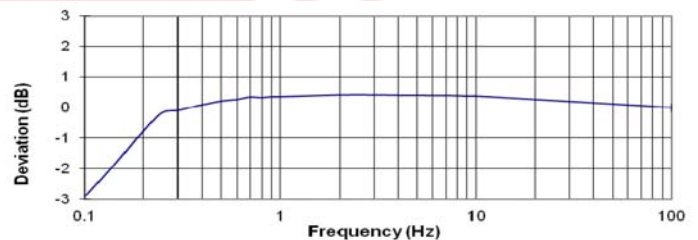
New Low power option

CTC has developed a new low power sensor series using a three wire positive voltage system that allows the sensors to operate with a supply voltage in the 3 -5 volt range. With a 25 mV/g output and a dynamic range of 80 gs, the AC302 and AC304 sensors can provide excellent data at reasonable cost.

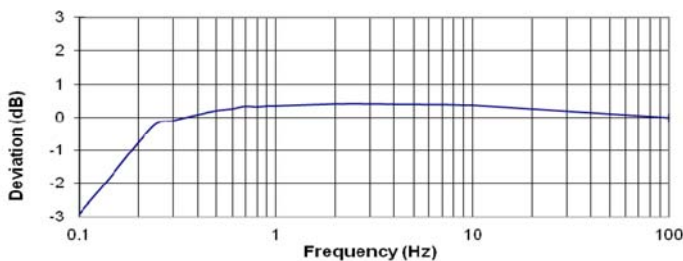


AC304 sensor for use with selected wireless systems.

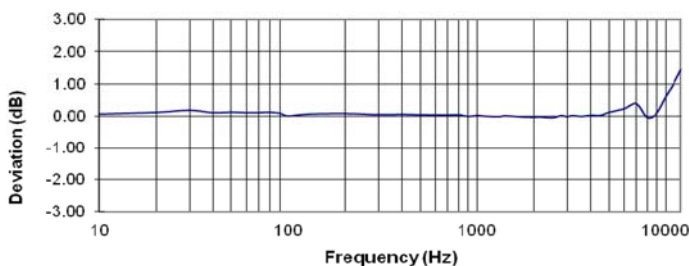
Large range but low power consumption. AC302 and 304 series sensors provide excellent data at 3dB from 0.5 Hz to 12,000 Hz, with a dy-



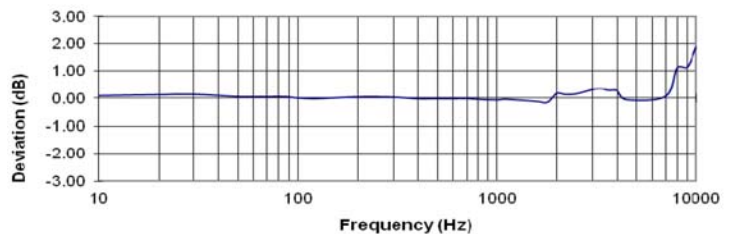
Low frequency response curve for AC304 showing the excellent response down to .1 hz



Low frequency response curve for AC302 showing the data down to .5 hz.



AC302 High frequency response curve.



High frequency response curve for AC304

dynamic range of +/-80 g's peak with 5Vdc supply , these sensors can be utilized on a broad range of rotating machinery.

AC300 series accelerometers can be ordered from our website, www.ctconline.com or from your local CTC distributor.

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.

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