## CTC Applotes

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

## New! Small Side Exit Sensor for Portable Applications

CTC's newest sensor model is the AC146-1D. Incorporating elements of our previous portable sensor designs for the AC116-1A and

AC146-1D

Figure 1– CTC Newest small sensor AC146-1D. Designed for walkaround data collection and use in tight spots.

AC216-1A, The AC146-1A has the sensina element centered over the mounting point for the best frequenresponse. СУ smaller The body fits easily in the hand for route data collection and can fit into

tighter spaces than many of CTC's other sensors. The AC146-1D is only available in the 2 pin mini-MIL connector configuration which means that CTC's J2 series connectors must be used. Used with magnets like the MH122-1A, or with a quick disconnect system like the MH107-1A/1B, the AC146-1D is an excellent choice for walk-around data collection.

The small size of the sensor allows for excellent frequency response from about 10 Hz all the way up to 15,000 Hz(600CPM to 900,000cpm) Figure 2 shows a representative graph of the frequency response.

With the excellent response characteristics and small form factor, it is also possible to use the sensor in tight areas where other sensors might not fit.



Figure 3—AC146-1D small portable sensor mounted on MH122-1A magnet with J2C cable connection.

If you have any questions or for further information please contact us via email, <a href="mailto:techsupport@ctconline.com">techsupport@ctconline.com</a> or call 1-800-999-5290 in the US and Canada or +1-585-924-5900 internationally.

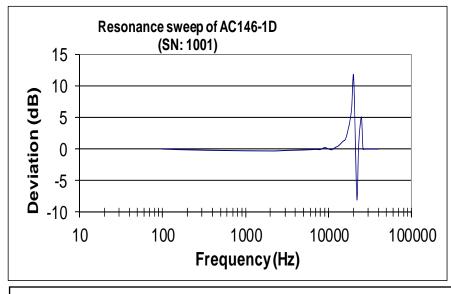


Figure 2—Frequency response curve for the AC146-1d and resonance sweep



Figure 4— CTC also manufactures other small sensors which all require the proprietary J2x series connectors. AC140 and AC144 shown here with the J2C Connector