

Airmar PB200**Originated by: Tom Wilson (SUNY), Friday August 12, 2011****Originated by Thomas Wilson (SUNYSB) on Friday, Aug 12, 2011**

Speaking of alternatives to RM Young, does anyone have experience with the Airmar PB200? It's \$1,000 street price and has outputs of apparent AND true wind along with DGPS, heading, barometric pressure, air temperature, and wind chill. It even has a rate gyro and accelerometer to improve wind measurements when we're rocking and rolling out there.

Our R/V Seawolf has the earlier PB150 model which has held up for several years so it seems robust enough. The PB200 might be a real deal if the accuracy is sufficient.

<http://www.airmartechology.com/2009/products/marine-product.asp?prodid=105>

Tom

Reply From Robbie Laird (WHOI) on August 15, 2011

The Airmar wind sensors look interesting, but I have one concern. The oceanographic community has used sensors with magnetic compasses in them in the past. It's my understanding, (and note that I was not involved, but this is what I've been told), that they don't work well on ships, at least not the ones we have. WHOI took the compasses out of the IMET wind instruments years ago, because they did not work well. Unless you install soft iron and compensating magnets, compasses on ships are only good for the general area where they were originally compensated. I know that the newer electronic compasses can do some magic with compensating for deviation, but have to wonder if the system would need to be re-compensated if the ship was to travel for a large distance. Plus there are other issues with magnetic compasses, like staying on the same heading for days at a time causing additional temporary changes in the deviation. And putting steel vans on deck, etc.. It would be great if these could work, but I'm somewhat sceptical.

Robbie Laird
WHOI/SSSG

Reply From: Shawn R. Smith (FSU) on August 17, 2011

Hello all,

I agree completely with Robbie's comments concerning magnetic compasses in wind sensors.

Throughout the past 15 years, the FSU RV data center has received wind data from a number of vessels that have deployed magnetic compasses (including the earlier IMETs mentioned below), and the compass measurements were frequently unreliable. I too would be suspect of the operation of the Airmar all-in-one sensor on an RV.

Shawn
SAMOS Data Center
