Why is the WSO100 shaped the way it is?

Article Number: 4 | Rating: Unrated | Last Updated: Sun, Jul 12, 2015 9:48 PM

The WSO100 was designed from the ground up to work in the marine environment. Unlike ultrasonic wind measurement devices originally designed for land based applications where the unit is always mounted parallel with the earth, marine applications require the sensor to operate when the vessel is healed over in pitching and rolling seas. You can readily identify a land based sensor as opposed to a marine designed sensor by its shape. Land based sensors will have flat sides perpendicular to the wind, which are functional when the device is parallel to the earth, but as soon as the sensor is tilted, the wind strikes the flat areas and distorts the wind blowing through the sensor. The WSO100 is shaped such that the wind is deflected away from the sensors when it is tilted. Land based ultrasonic wind sensors become inaccurate when tilted at 5 to10 degrees, whereas the WSO100 maintains its accuracy when tilted as much as 30 degrees.