Subject:	WindMaster, WindMasterPro, WindMasterHS and Research used in Eddy Covariance & Flux Measurement
Reference	AN0015

WindMaster, WindMasterPro, WindMasterHS and Research used in Eddy Covariance & Flux Measurement

Introduction

The measurement of weather not only relies on measurements at particular points but also researchers need to know how these conditions arise.

Various techniques used to assist in these studies rely on the measurement of surface fluxes of heat momentum, carbon dioxide and water vapour. The most common technique to measure these fluxes is the Eddy Covariance method.

Method

To make these measurements you need at least an infra-red gas analyser and an anemometer capable of monitoring wind in the vertical and horizontal axis, with a fast response above 20 Hz.



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Worldwide

Extensive networks have been set up world-wide to study important ecosystems which contribute to the carbon cycle. These systems are controlled by bespoke software that calculates the surface fluxes of momentum, sensible and latent heat and carbon dioxide.

WindMaster, WindMasterPro, WindMasterHS and the Research anemometers offer the user high accuracy 3-axis wind measurement at a high sample rate from 20-100Hz in an easy to use package with analogue inputs available for the addition of further sensors.

During the past 20-years Research anemometers have dominated this field with their 50-100Hz output rates, however, the new breed of WindMaster and WindMasterPro with 20-32Hz are now being extensively installed worldwide.







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