

# Surface Wind Measurement

UWS Ultrasonic Wind System



## Features

- o **Ultrasonic Wind Sensor**
- o **Co-located processor unit**
- o **Embedded processing software**
- o **Low maintenance high reliability system design**



Aeronautical & Genral  
Instruments Ltd

AGI has designed and manufactured airport meteorological systems for over 20 years. Many of the major UK airports use the AGIVIS 2000 Runway Visual Range (RVR) system and the SW2000 surface wind system. The Ultrasonic Wind System uses advanced technology to meet the continuing demand for high availability, lower cost airport meteorology solutions.

#### Specifications - Ultrasonic Wind Sensor

o Range	0 - 65m/s
o Resolution	0.01m/s
o Direction	0 - 359°
o Resolution	1°
o Regulation	Meets ICAO Annex 3 MET requirements Meets UK CAP 670 MET01 requirements

### Ultrasonic Wind System (UWS)

The UWS is a modular system comprising hardware and software. The system modules can be used to upgrade existing AGI SW 2000 systems or used as a new wind measurement system.

The system comprises the following modules

- o Ultrasonic Wind Sensor
- o Co-located processor unit
- o Embedded software module
- o AGI multi purpose colour displays

Ultrasonic wind sensors have established themselves as highly accurate, stable, low maintenance sensors. AGI use the Gill Wind Observer sensor which is also used in the AGIMET naval meteorological system. These systems are deployed on naval ships worldwide and operate in very harsh environments. The Gill wind sensor directly replaces an existing analog anemometer and wind vane and is located in the same position on the Met mast.

Sensor interface electronics and power is contained in the Field Site Electronics Unit (FSEU). It is located in a convenient position at the bottom of the Met mast and has provision to take inputs from other meteorological sensors. Output data from the FSEU is transmitted to the processor module located in the Control Tower. This module contains the embedded software which directly drives wind displays either locally or remotely located.

### System Outputs

- o Instantaneous wind speed & direction
- o 2 minute average speed & direction
- o 10 minute speed maximum /minimum
- o Runway selection
- o Cross wind reading



#### About AGI

AGI is backed by over 30 years of experience in the design, development, manufacture and installation of defence systems and provides full Integrated Logistic Support services, training, installation and documentation.

AGI is accredited to International Quality Standards ISO 9001/BS5750 Part 1 and Tick-IT software procedures.

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