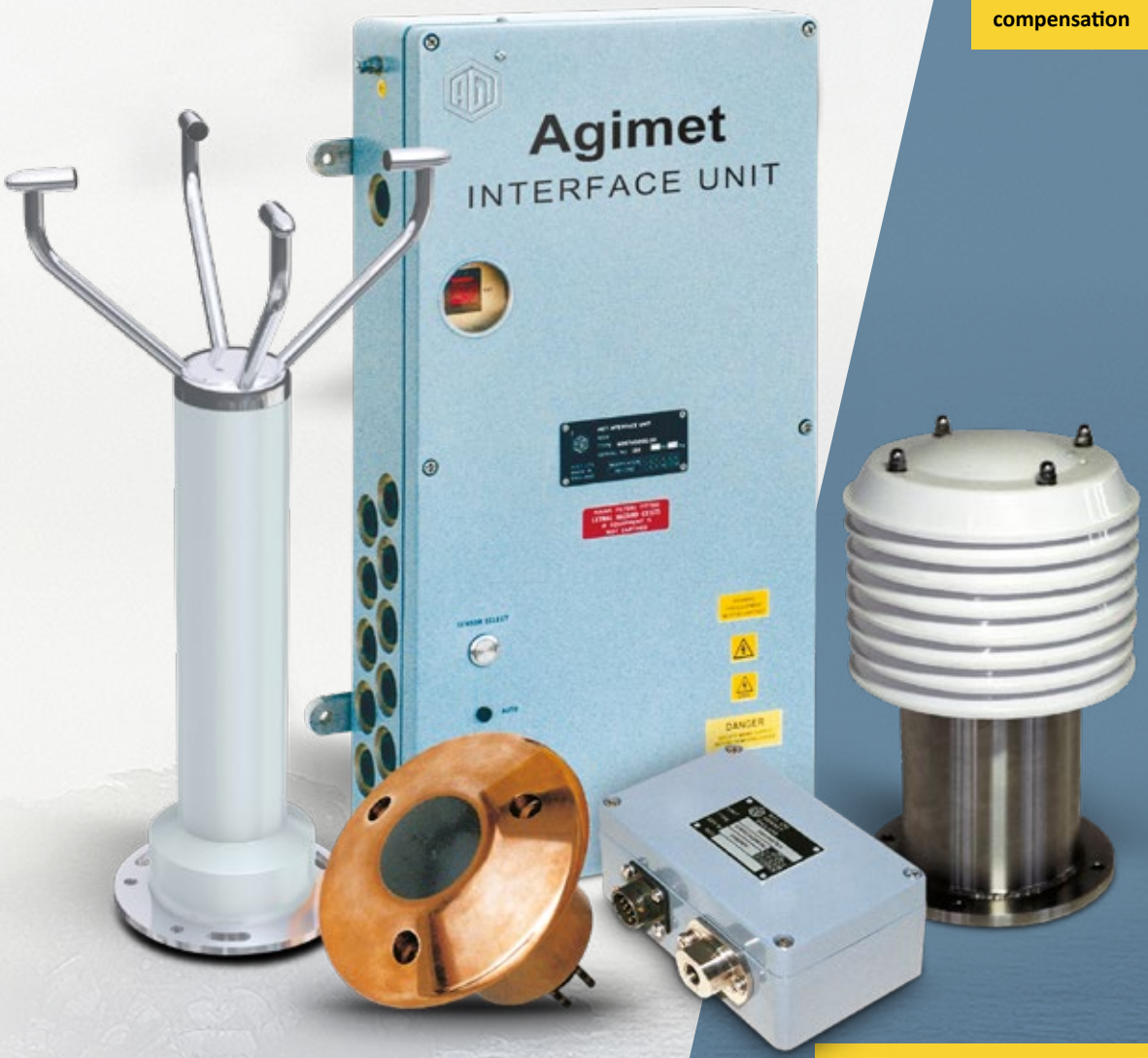
AGIMET

Ships Wind and Meteorological Measurement System & Data Distribution

- Auto wind sensor changeover
- Built-in test
- True & relative wind data
- Wind interference compensation



240+ units in global service

The *complete* advanced meteorological system

Designed and tested to full military standards specifically for use in surface warships and naval auxiliaries, AGIMET employs the latest proven and in-service solid state sensor technology to provide accurate measurement of wind-speed and direction, temperature, pressure, humidity and other local environment parameters.

With more than 240 systems in operation with 13 navies worldwide, the Meteorological Interface Unit (MIU) can be operated with up to three wind sensors and additional meteorological sensors are optional.

TRIDENT
Maritime Systems

AGIMET: Tested to *full military standards*

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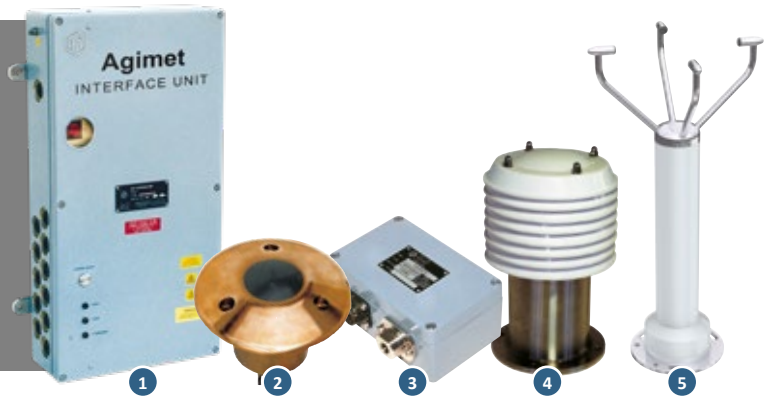

MIU CORRECTION FACILITIES

- Wind sensors should be mounted as far as possible from structures that will disturb the wind flow. For ships with two or three sensors, they should ideally be mounted so that they each see uninterrupted and undisturbed wind flow for 220°, mounted at a distance of 10x diameter of the flow distorting objects.
- The modern "stealth" ship design often compromises this approach which means a compensation for the hull's wind distortion is required in order to gain accurate measurements.
- Typically, systems that do not employ wind flow compensation can be out on wind speed by 20% and 10 – 30 degrees on wind direction. This deviation would have a negative influence when using wind measurements for decoy and weapon systems.
- The safety of flight also depends on accurate wind and meteorological data. Most navies classify the wind as flight critical information: no wind data – no fly.
- The solution, the AGIMET interface unit accepts calibration data - the correction factors - to compensate for disturbances which can be programmed into the MIU for this purpose. Contact Trident for information on how to obtain the correction factors.

METEOROLOGICAL INTERFACE UNIT (MIU) FEATURES

- Solid State (no moving parts) Wind Measurement & Meteorological System
- High performance – individually calibrated sensors
- Automatic wind sensor changeover, depending on wind direction
- Designed specifically for NAVAL ships
- Wind Sensor power (4 without heaters, 2 with heaters) and Meteorological Sensor power
- Filtering and damping facilities.

ULTRASONIC ANEMOMETER FEATURES

- High Accuracy, long term stability
- Low IR and radar signature
- Rugged construction

METEOROLOGICAL INTERFACE UNIT (MIU) (1)	
Ship's speed input	RS422/NMEA Serial Data Format
Heading input	RS422/NMEA Serial Data Format
Other inputs	Synchro and pulses are also optionally available
System outputs	10x RS422 NMEA as standard, alternative outputs available. True and Relative wind speed and direction, barometric pressure, humidity, dew point, ambient temperature, sea water temperature, ship's speed & heading
Power	115V 60Hz
Dimension	600 x 310 x 110 mm
Weight:	22 kg

ULTRASONIC ANEMOMETER (5)	
Wind speed range	0-125 kts
Wind speed accuracy	0-50 kts ±1.5 kts / 50-125 kts - ±2.5 kts
Wind speed resolution	(MIU output): 0.1 kts
Wind speed offset	0.01 m/s (0.02 kts)
Wind direction range	0-360º
Wind direction accuracy	±0.7º Typical, ±2.0º (max)
Wind direction resolution	(MIU output): 1º
Anti-Icing:	Employs sensor head heaters
Dimensions	446 x 212 mm (max)
Weight	3 kg

SEA WATER TEMPERATURE SENSOR (2)	
Range	-40 to +60 C
Accuracy	± 0.3 C
Resolution	(MIU output): 0.1ºC
Dimensions	Ø 150mm x 166mm
Weight	3.5 kg

BAROMETRIC PRESSURE SENSOR (3)	
Range	750 to 1150 mbar
Accuracy	0.01% full scale
Resolution	(MIU output): 0.1 mbar
Temperature stability	0.02% full scale
Operating temperature	-20 to +70 C
Dimensions	125 x 80 x 60 mm
Weight	1.1 kg

TEMPERATURE & HUMIDITY SENSOR (4)	
Air temperature range	-40ºC to +60ºC
Air temperature accuracy	±0.1ºC
Air temperature resolution	(MIU output): 0.1ºC
Humidity range	0 to 100% RH
Humidity accuracy	± 0.8% RH @ 20°C
Humidity resolution	(MIU output): 0.1% RH
Operating temperature	-30 to +45ºC
Dimensions	Ø 285 x 180 mm
Weight	7 kg

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