# WindSonic M超声波风速风向仪

英国 Gill 公司的 WindSonic M 超声波风速风向仪应用了业已证明的 Gill 公司世界领先的超声波专业技术。该超声波风速风向传感器具有抗冲击性和耐腐蚀的铝合金壳体和另选加热系统，可用于恶劣环境条件，尤其适用于海洋及陆基安装。WindSonic M 超声波风速风向仪没有移动部件，在宽的应用领域免维护工作。

## WindSonicM 超声波风速风向仪技术规格

**风速**

| | |
|---|---|
| 风速范围 | 0 - 60 m/s (116 Knots) |
| 精度 | ±2% @ 12m/s |
| 分辨率 | 0.01m/s (0.02 Knots) |
| 反应时间 | 0.25 秒 |
| 最低值 | 0.01m/s |

**风向**

| | |
|---|---|
| 风向范围 | 0 - 359$^0$ (无死角) |
| 精度 | ±3$^0$ @ 12m/s |
| 分辨率 | 1$^0$ |
| 反应时间 | 0.25 秒 |

**测量**

| | |
|---|---|
| 超声波输出率 | 0.25Hz, 0.5Hz, 1Hz, 2Hz 或 4Hz |
| 参数 | 风速和风向 或 U 和 V (矢量) |
| 测量单位 | m/s, knots, mph, kph, ft/min |

**输出**

| | |
|---|---|
| 输出 | RS232+RS422+RS485 +NMEA* |
| 波特率 | 2400 - 38400 |

**电源要求**

| | |
|---|---|
| 风速风向仪 | 5-30 VDC (5.5mA @ 12V) |
| 另选加热 | 24 VAC/DC (3.5A @ 24V) 或 |
| (推荐 24V 供电) | 12 VAC (2.1A @ 24V) |
| | 启动时间 < 5 秒 |

**材料**

| | |
|---|---|
| 外部结构 | 铝合金 6082 T6 |
| 表面处理 | 硬阳极氧化 |
| 尺寸 | 142mm x 160mm |
| 重量 | 0.9Kg |

**环境**

| | |
|---|---|
| 防护等级 | IP66 |
| 工作温度 | -40$^0$C 到 +70$^0$C (带加热)<br>-35$^0$C 到 +70$^0$C (不带加热) |
| 储存温度 | -40$^0$C ~ +80$^0$C |
| 湿度 | < 5% 到 100% RH |
| EMC | EN 61326:1998 & BSEN 60945 |
| 耐冲击性 | UL2218 等级 1 |

**工作**

| | |
|---|---|
| **工厂校准** | 国家标准溯源 |

**可选配件(需另购)**

| | |
|---|---|
| 安装管 | 直径 44.45mm |
| WindView 软件 | 显示/采集 |
| 电缆 | 相匹配的电缆选择 |
| 显示器 | 见 GILL 显示器规格 |

## 典型应用

野外气象监测站
大楼控制
数据浮标
海洋船只
道路和铁路隧道
环境
港口
车载移动气象监测
远途机场和直升机停机坪
海岸气象监测站

# WindSonic™ M

# Ultrasonic Wind Sensor

## Robust Aluminium Construction
## Optional Heating System

## Key Features

- Compact Wind Speed & Direction Sensor
- Hard Anodised Aluminium Alloy Construction
- -40°C Operation (with optional heating)
- NMEA output
- Impact Resistance to UL2218 Class 1
- Maintenance Free

The Gill WindSonic M utilises Gill's proven ultrasonic technology that has a proven performance over many years of operation in the popular WindSonic.

With an impact resistant, corrosion-free aluminium alloy housing and optional heating system this wind sensor is recommended for use in harsh environmental conditions and is particularly suited to both marine and land based installations. The WindSonic M has no moving parts, offering maintenance-free operation in a wide range of applications.



### Wind Speed

| | |
|---|---|
| Range | 0 - 60 m/s (116 knots) |
| Accuracy | ±2% @12 m/s |
| Resolution | 0.01 m/s (0.02 knots) |
| Response Time | 0.25 seconds |
| Threshold | 0.01 m/s |

### Direction

| | |
|---|---|
| Range | 0 - 359° (No dead band) |
| Accuracy | ±3° @12 m/s |
| Resolution | 1° |
| Response Time | 0.25 seconds |

### Measurement

| | |
|---|---|
| Ultrasonic Output Rate | 0.25, 0.5, 1, 2 or 4 Hz |
| Parameters | Wind Speed & Direction or U and V (vectors) |
| Units of Measure | m/s, knots, mph, kph, ft/min |

### Output

| | |
|---|---|
| Outputs | RS232 + RS422 + RS485 + NMEA* |
| Baud Rate | 2400 to 38400 |

### Power Requirement

| | |
|---|---|
| Anemometer | 5-30V DC (5.5mA @ 12V) |
| Optional heating** | 24V AC/DC (4.2A @ 24V) |
| | Start up time < 5 seconds |

### Mechanical

| | |
|---|---|
| External Construction | Al. Alloy 6082 T6 |
| Finish | Hard Anodised |
| Size | 142mm x 160mm |
| Weight | 0.9kg |

### Environmental

| | |
|---|---|
| Protection Class | IP66 |
| OperatingTemperature | -40°C to +70°C (with heating)<br>-35°C to +70°C (without heating) |
| Storage Temperature | -40°C to +80°C |
| Operating Humidity | < 5% to 100% RH |
| EMC | EN 61326: 1998 & BSEN 60945 |
| Impact Resistance | UL2218 Class 1 |

### Operational

| | |
|---|---|
| Warranty | 2 years |
| Factory Calibration | Traceable to National Standards |

### Accessories

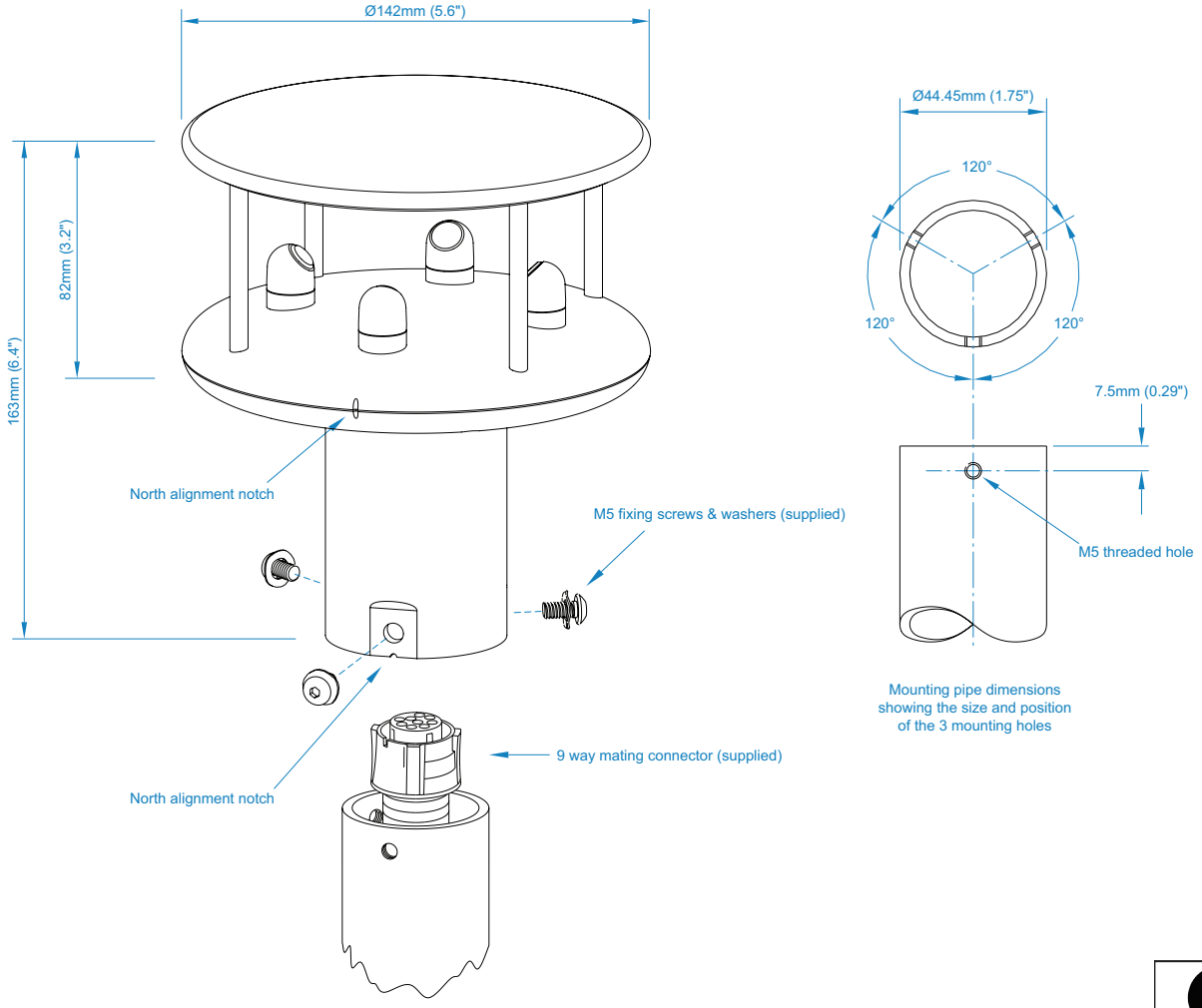
| | |
|---|---|
| Pipe Mounting | 44.45mm (1.75 in) diameter |
| Windview Software | Display/logging*** |
| Cables | Available to match output options |
| Display | See Gill display datasheet |

* NMEA 0183
** Consult the technical manual for optimum heating supply voltage.
*** Download software free from www.gill.co.uk

# WindSonic™M
# Ultrasonic Wind Sensor

## Typical Applications

- Remote weather monitoring stations
- Building controls
- Data buoys
- Marine vessels
- Road & rail tunnels
- Environmental field sites
- Ports & harbours
- Mobile weather monitoring vehicles
- Remote airports & helipads
- Coastal weather monitoring stations




Specifications may be subject to change without prior notice.

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