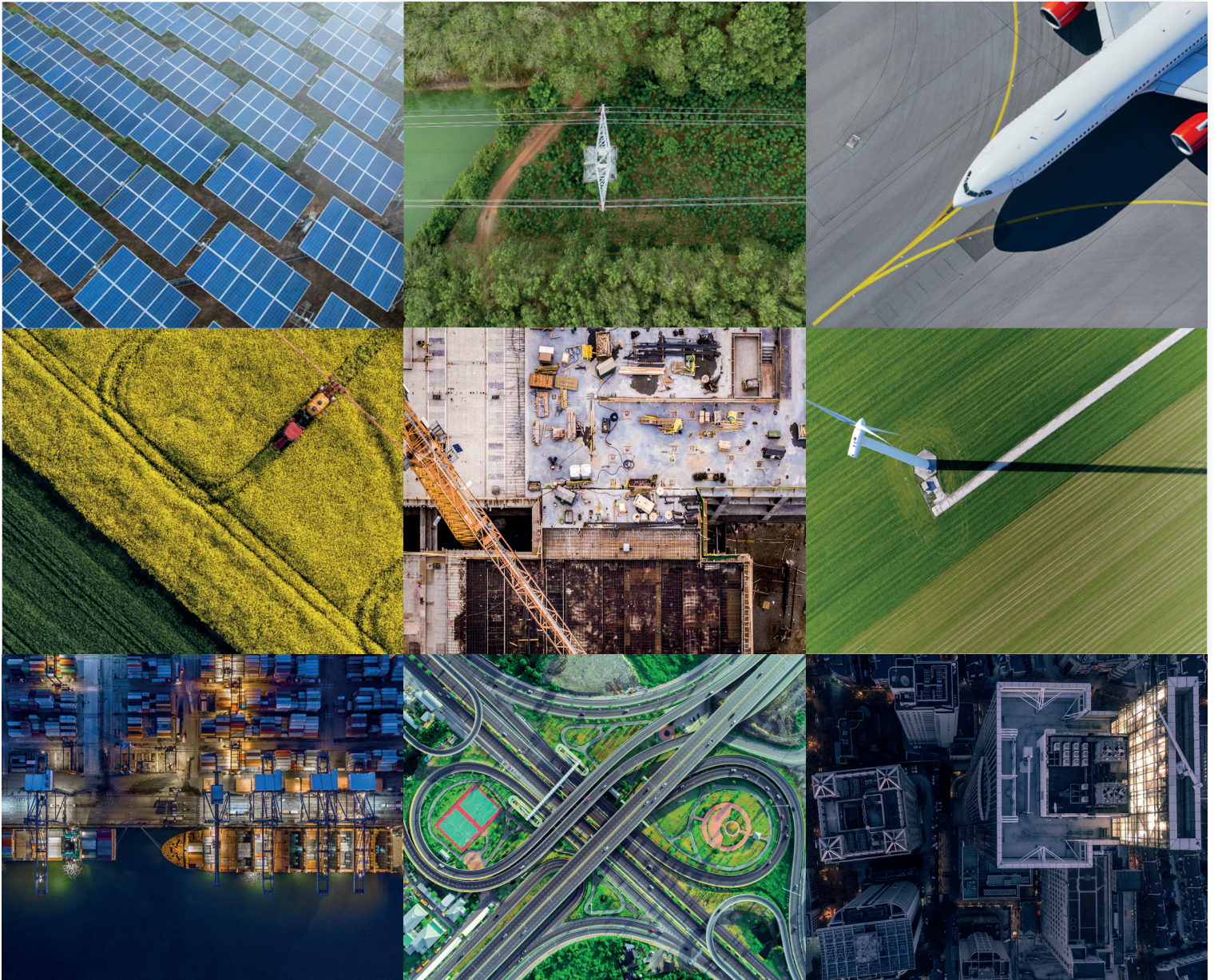


# Product Catalogue

## Anemometers & Weather Stations



# About Gill

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## About Gill

Gill Instruments was founded in 1988 to develop ultrasonic anemometers for the meteorological and commercial measurement markets. The company is 100% owned by the Gill family with product design, manufacture and support services located within the UK.

## Our Customers

Gill serves a range of customers around the world ranging from some of the most innovative global research programmes and many of the largest defence forces to a broad range of commercial and industrial partners.

Customer relationships are key to the company's success and a number of customers, integrators and distributors have been working with Gill Instruments for over 25 years.

## Our Products

Gill products are designed to operate effectively in challenging environments and in applications where the highest reliability is required. Products have been approved to Lloyds Register, ATEX, and FAA standards.

Research and product innovation remain at the core of Gill's philosophy and over 20% of sales are invested in research and development. This ensures that the products continue to support the market's ongoing demand for high quality, reliable products.

# WEATHER STATIONS

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## MaxiMet®

Compact, integrated weather stations



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## MetConnect

Flexible, multi-parameter weather stations



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# 2 AXIS ANEMOMETERS

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## WindSonic

Cost-effective, high performance anemometers



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## WindUltra

Compact, extremely tough, high accuracy anemometers



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## WindObserver

Robust internationally certified precision anemometers



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# 3 AXIS ANEMOMETERS

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## WindMaster

High quality, general purpose 3-axis (3D) wind sensors



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## Research

Research quality 3-axis (3D) ultrasonic wind sensors



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# MaxiMet®

## Compact, integrated weather stations



MaxiMet is a compact, integrated commercial weather station with multiple measurement parameters and output protocols designed to provide insight in a wide range of commercial and industrial applications. MaxiMet offers a variety of configurations to enable the user to specify the parameters required for their specific application.

\* MaxiMet Marine GMX260 and GMX560 models offer enhanced marine performance including IP68 for water resistance including temporary submersion and a 6-axis compass for tilt compensation and pitch & roll data.



\*



### MaxiMet® GMX500

Wind	Compass
Temperature	GPS (option)
Humidity	Heating (option)
Pressure	

### MaxiMet® GMX560

Wind	6-axis compass
Temperature	IP68
Humidity	GPS (option)
Pressure	Heating (option)

### MaxiMet® GMX600

Wind	Compass
Temperature	Precipitation
Humidity	GPS (option)
Pressure	Heating (option)



### MaxiMet® GMX200

Wind

Compass

GPS (option)



### MaxiMet® GMX240

Wind

Precipitation

Compass

GPS (option)

\*



### MaxiMet® GMX260

Wind

6-axis compass

IP68

GPS (option)



### MaxiMet® GMX300

Temperature

Humidity

Pressure



### MaxiMet® GMX301

Temperature

Humidity

Pressure

Solar radiation



### MaxiMet® GMX400

Temperature

Humidity

Pressure

Precipitation



### MaxiMet® GMX501

Wind

Compass

Temperature

Solar radiation

Humidity

GPS (option)

Pressure

Heating (option)



### MaxiMet® GMX550

Wind

Compass

Temperature

Remote rain sensor input

Humidity

GPS (option)

Pressure

Heating (option)

Precipitation



### MaxiMet® GMX551

Wind

Solar radiation

Temperature

Compass

Humidity

Remote rain sensor input

Pressure

GPS (option)

Precipitation

Heating (option)

# MetConnect

Flexible, multi-parameter weather stations



MetConnect is a flexible, professional multi-parameter weather station which features wind speed and direction, temperature, relative humidity and pressure measurements. MetConnect can combine up to four further sensors or systems with additional analogue, PRT and rain gauge inputs.



## MetConnect THP

Temperature

Humidity

Pressure

1 Gill anemometer input

2 analogue inputs (0-5V or 4-20mA)

1 PRT input

1 rain gauge input



## MetConnect ONE

Temperature

Humidity

Pressure

Wind

2 analogue inputs (0-5V or 4-20mA)

1 PRT input

1 rain gauge input

# Weather station applications

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## Smart buildings

As energy efficiency and low carbon impact gain importance, buildings have been designed to be smarter and react to the weather. MaxiMet has been integrated into a range of building control systems to provide the environmental data needed to drive decisions such as increasing ventilation or activating window shades.



## Agriculture

With an increasing focus on efficiency and environmental concerns, the agricultural industry has looked to achieve a better understanding of the soil and weather conditions. MetConnect has been deployed to measure rainfall, temperature and humidity, and collect additional inputs from sensors measuring parameters such as soil moisture.



## Solar farm monitoring

Solar power generation is a fast growing industry and the efficiency and safety of solar panels is essential to owners. Gill weather stations have proven to be effective sensors for the industry, combining measurement of solar radiation and back of panel temperature to monitor panel efficiency, rainfall to monitor panel cleanliness and wind to ensure panel safety.



# WindSonic

Cost effective,  
high performance  
anemometers



The WindSonic range of commercial anemometers can measure wind speed or air flow up to 75m/s. The WindSonic range is available in polycarbonate construction for indoor or normal outdoor use. The WindSonic M is constructed from aluminium and is available with optional heating for more challenging environments.



## WindSonic

<b>Max wind speed</b>	60m/s (216km/h)
<b>Construction</b>	Luran
<b>Operational temp</b>	-35° to +70°C
<b>Weight</b>	0.5kg (18oz)
<b>Heating option</b>	No
<b>Analogue option</b>	0-5V, 0-20mA or 4-20mA
<b>Environmental</b>	IP66

## WindSonic75

<b>Max wind speed</b>	75m/s (270km/h)
<b>Construction</b>	Luran
<b>Operational temp</b>	-35° to +70°C
<b>Weight</b>	0.5kg (18oz)
<b>Heating option</b>	No
<b>Analogue option</b>	0-5V, 0-20mA or 4-20mA
<b>Environmental</b>	IP66

## WindSonicM

<b>Max wind speed</b>	60m/s (216km/h)
<b>Construction</b>	Aluminium
<b>Operational temp</b>	-40° to +70°C
<b>Weight</b>	0.9kg (32oz)
<b>Heating option</b>	Yes
<b>Analogue option</b>	0-5V, 0-20mA or 4-20mA
<b>Environmental</b>	IP66, impact resistant to UL2218 Class 1



# WindUltra

Compact, extremely tough, high accuracy anemometers



WindUltra compact ultrasonic anemometers have been developed for use in a wide range of applications. WindUltra is Gill's smallest and lightest anemometer. It can be used in land or marine applications for stand-alone measurements or as part of a larger measurement or monitoring system. WindUltra has an extremely robust design, has been aggressively tested\* to IP69k, provides high accuracy measurement, and is easy to install and use.

*\* including wind blown dust & sand, pressurised water, hammer impact, shock & vibration and altitude testing*



## WindUltra

<b>Max wind speed</b>	0-75m/s (270 km/h)
<b>Construction</b>	thermoplastic & stainless steel
<b>Operational temp</b>	-40° to +70°C
<b>Weight</b>	Sensor 0.15kg, 1" (25-26mm) pole mount 0.12kg
<b>Mounting</b>	Innovative quick installation & alignment features
<b>Heating option</b>	up to 7w
<b>Digital outputs</b>	RS485, NMEA, SDI-12, MODBUS
<b>Environmental</b>	IP66, IP68, IP69k

# WindObserver

Robust internationally certified anemometers



The WindObserver range of professional anemometers is approved for use in the marine and aviation markets. WindObservers are able to measure wind speeds up to 90m/s. The stainless steel construction and optional heating capability enable operation in the most challenging environments. The WindObserver IS is approved for applications where Intrinsically Safe certification is required.



\*Anemometer only

## WindObserver65

<b>Wind Speed range</b>	65m/s (234km/h)
<b>Operational temp</b>	-55° to +70°C
<b>Weight</b>	1.4kg (50oz)
<b>Heating option</b>	Yes
<b>Environmental</b>	IP66
<b>Analogue option</b>	±2.5V, 0-5V or 4-20mA

## WindObserver70

<b>Wind speed range</b>	70m/s (252km/h)
<b>Operational temp</b>	-55° to +70°C
<b>Weight</b>	1.4kg (50oz)
<b>Heating option</b>	Yes
<b>Environmental</b>	IP66

## WindObserverIS

<b>Wind speed range</b>	75m/s (270km/h)
<b>Operational temp</b>	-30° to +70°C*
<b>Weight</b>	1.9kg (67oz)
<b>Heating option</b>	None
<b>Environmental</b>	IP66

# WindObserver

Robust internationally certified anemometers



For wind speeds above 70m/s the range includes the WindObserver 75 and WindObserver 90. Both products are available with an enhanced heating option that ensures continued operation in low temperature, high wind speed environments.



## WindObserver75

<b>Wind speed range</b>	75m/s (270km/h)
<b>Operational temp</b>	-55° to +70°C
<b>Weight</b>	1.4kg (50oz)
<b>Heating option</b>	Yes
<b>Environmental</b>	IP66

## WindObserver90

<b>Wind speed range</b>	90m/s (324km/h)
<b>Operational temp</b>	-55° to +70°C
<b>Weight</b>	1.4kg (50oz)
<b>Heating option</b>	Yes
<b>Environmental</b>	IP66

# Anemometer applications

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## Tunnel monitoring

Air flow in road and rail tunnels has to be closely monitored to ensure that exhaust gases do not build up. Gill supply WindSonic anemometers to a range of ventilation system integrators for use in their solutions. Systems have been deployed in tunnels in Europe, America and Asia, providing safe journeys for road, rail and metro passengers.



## Marine weather

Measurement of marine weather ensures safe passage for ships and aids global weather forecasting. WindSonic anemometers have been extensively deployed on coastal safety and ocean observatory buoys for many years. WindObserver products are integrated into a wide range of navigation and dynamic positioning systems.



## Aircraft take off and landing

Accurate monitoring of wind speed and direction is essential for the safe take-off and landing of all aircraft. The WindObserver range is trusted to provide this vital information by organisations around the world including major airports in the UK and worldwide, a range of European and NATO defence forces and many oil and gas rig operators.



# WindMaster

3D anemometers for meteorological and industrial applications



The WindMaster range of professional ultrasonic anemometers is capable of measuring wind speed or air flows up to 65m/s in three dimensions. WindMasters are available in stainless steel or lightweight aluminium/carbon fibre construction. The range is extensively used for commercial development projects to support high value investment and performance decisions.



## WindMaster

<b>Wind speed range</b>	50m/s (180km/h)
<b>Construction</b>	Aluminium and carbon fibre
<b>Operational temp</b>	-40° to +70°C
<b>Weight</b>	1.0kg (35oz)
<b>Output rate</b>	20Hz
<b>Analogue inputs</b>	4 single ended or 2 differential

## WindMasterPro

<b>Wind speed range</b>	65m/s (234km/h)
<b>Construction</b>	Stainless steel
<b>Operational temp</b>	-40° to +70°C
<b>Weight</b>	1.7kg (60oz)
<b>Output rate</b>	32Hz
<b>Analogue inputs</b>	4 single ended or 2 differential, plus PRT 100 input

## WindMasterRA

<b>Wind speed range</b>	50m/s (180km/h)
<b>Construction</b>	Aluminium and carbon fibre
<b>Operational temp</b>	-40° to +70°C
<b>Weight</b>	1.0kg (35oz)
<b>Output rate</b>	20Hz
<b>Analogue inputs</b>	4 single ended or 2 differential

# Research

## 3D anemometers for scientific research



The Research range of anemometers is optimised for scientific studies. The range offers measurements at 50Hz and 100Hz, provides U, V, W vector outputs as well as sonic temperature and speed of sound. The range is specifically designed for research projects including fine scale eddy covariance or trace gas dispersion analysis studies.



### R3-50

<b>Wind speed range</b>	45m/s (162km/h)
<b>Construction</b>	Aluminium and carbon fibre
<b>Operational temp</b>	-40° to +60°C
<b>Weight</b>	1.0kg (35oz)
<b>Output rate</b>	50Hz
<b>Analogue inputs</b>	6 differential inputs



### R3-100

<b>Wind speed range</b>	45m/s (162km/h)
<b>Construction</b>	Aluminium and carbon fibre
<b>Operational temp</b>	-40° to +60°C
<b>Weight</b>	1.0kg (35oz)
<b>Output rate</b>	100Hz
<b>Analogue inputs</b>	6 differential inputs



### HS-50

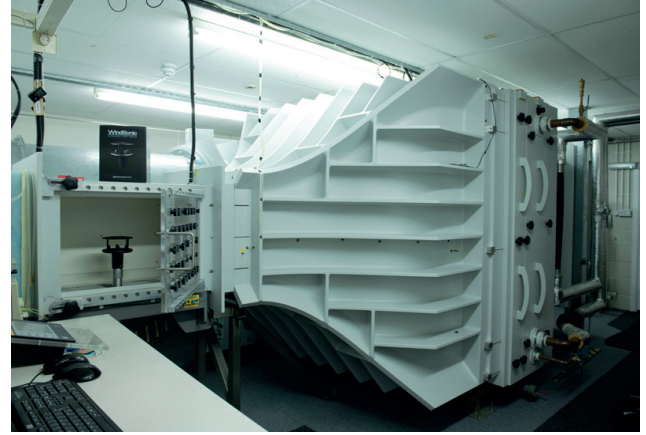
<b>Wind speed range</b>	45m/s (162km/h)
<b>Construction</b>	Stainless steel
<b>Operational temp</b>	-40° to +60°C
<b>Weight</b>	2.5kg (88oz)
<b>Output rate</b>	50Hz (100Hz option)
<b>Analogue inputs</b>	6 differential inputs

### HS-100

# Additional services & accessories

## Calibration

For applications where individual calibration or independent certification is required, Gill offers a calibration service. This service provides a range of options from a single wind direction, single speed calibration traceable to national standards, to a multi speed full rotate calibration service undertaken by a UKAS accredited calibration service.



## Software

Gill products are supported by complementary software, such as MetSet and MetView. MetSet software allows the sensor including the data output to be configured. MetView software allows the measurements taken by the sensor to be viewed.

## Accessories

Gill offers a range of accessories for each product range to enable the products to be used quickly and easily. These include connection, mounting, measurement and configuration accessories.





For more information on our products and services please visit [www.gillinstruments.com](http://www.gillinstruments.com)



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