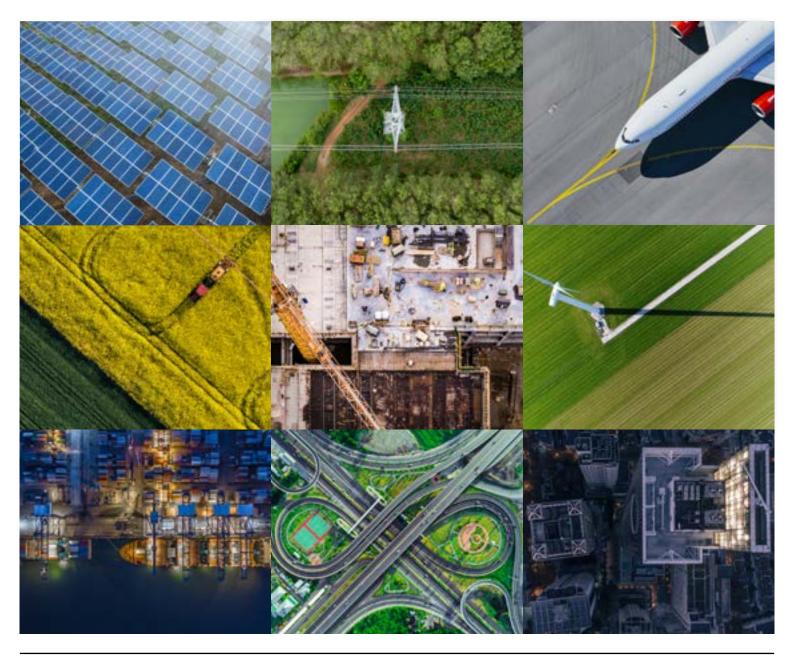
# Product Catalogue

# Meteorological Technology



# **About Gill**



#### **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 development and manufacturing facilities located in the UK.

#### **Our Customers**

Gill serve 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**

Our 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.

## MaxiMet®

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Compact, Integrated, Commercial Weather Stations

#### MetPak®

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Flexible, Professional, Multi-Parameter Weather Stations

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Lightweight and Compact Commercial Anemometers

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Internationally Certified and Robust Professional Anemometers

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3D Anemometers for Meteorological and Industrial Applications

#### Research

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3D Anemometers for Scientific Research Studies

#### Additional Services & Accessories

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# MaxiMet®

Compact, Integrated, Commercial 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®GMX200

Wind	
Compass	
GPS (option)	

## MaxiMet® GMX500

Wind	Compass
Temperature	GPS (option)
Humidity	
Pressure	



MaxiMet® GMX600

Compass

Precipitation GPS (option)

Wind

**Temperature** 

Humidity Pressure

Compact, Integrated, Commercial Weather Stations

# MaxiMet®

#### MaxiMet® GMX100

Precipitation

#### MaxiMet® GMX240 Wind

Precipitation Compass 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	



#### MaxiMet® GMX531

Wind	<b>Solar Radiation</b>
Temperature	Compass
Humidity	Tipping Bucket &
Pressure	Tipping Bucket & Cable Supplied
Precipitation	GPS (option)



#### MaxiMet® GMX541

Wind	<b>Solar Radiation</b>
Temperature	Compass
Humidity	Optical Rain Gauge
Pressure	& Cable Supplied
Precipitation	GPS (option)



#### MaxiMet® GMX550

Wind	Compass
Temperature	Tipping Bucket Connector*
Humidity	Connector*
Pressure	GPS (option)
Precipitation	



#### MaxiMet® GMX551

Solar Radiation
Compass
Tipping Bucket Connector*
Connector*
GPS (option)









# MetPak®

Flexible, Professional, Multi-Parameter Weather Stations



MetPak is a flexible, professional multi-parameter weather station which features wind speed and direction, temperature, relative humidity, pressure and dew point measurements. MetPak Pro can combine up to four further sensors or systems with additional analogue, digital and PRT inputs and can be supplied with a tipping bucket rain gauge (optional). MetPak is specified to operate to WMO international recommendations.

#### MetPak®

Wind Speed & Direction	Dew Point
Temperature	
Humidity	
Droccura	

# MetPak® Pro

Wind Speed & Direction	0-5V DC Input
Temperature	4-20mA Input
Humidity	PRT Input
Pressure	Digital Input (for
Dew Point	optional rain gauge)

## MetPak® RG

Wind Speed & Direction	ARG314 Rain Gauge
Temperature	Dew Point
Humidity	
Pressure	





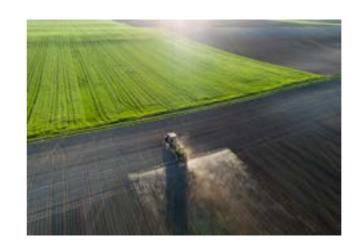


# Weather Station Applications

## Solar Farm Monitoring

Solar power generation is a fast growing industry and the efficiency and safety of solar panels is essential to owners. MaxiMet has proven to be an effective sensor for the industry, combining measurement of solar radiation to monitor panel efficiency, rainfall to monitor panel cleanliness, and wind to ensure panel safety.





## 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. MetPak has been deployed to measure rainfall, temperature and humidity, and collect additional inputs from sensors measuring parameters such as soil moisture.

## **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.





# WindSonic®

Lightweight and Compact Commercial Anemometers



# WindObserver®

Internationally Certified and Robust Professional 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 available with optional heating for more challenging environments.

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.

#### WindSonic®

Max wind Speed	60m/s (134mph)
Construction	Luran
Operational Temp	-35° to +70°C
Weight	0.5kg (18oz)
Heating Option	No
Analogue Option	0-5V, 0-20mA or 4-20mA
Fnvironmental	IP66



## WindSonic® 75

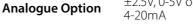
Max wind Speed	75m/s (168mph)
Construction	Luran
Operational Temp	-35° to +70°C
Weight	0.5kg (18oz)
Heating Option	No
Analogue Option	0-5V, 0-20mA or 4-20mA
Environmental	IP66

## WindSonic® M

Max wind Speed	60m/s (134mph)
Construction	Aluminium
Operational Temp	-40° to +70°C
Weight	0.9kg (32oz)
<b>Heating Option</b>	Yes
Analogue Option	0-5V, 0-20mA or 4-20mA
Environmental	IP66, impact resistant to UL2218 Class 1



Wind Speed Range	65m/s (145mph)
Operational Temp	-55° to +70°C
Weight	1.4kg (50oz)
Heating Option	Yes
Environmental	IP66
	+25\/ 0-5\/ or





## WindObserver® 65 WindObserver® 70 WindObserver® IS

Wind Speed Range	70m/s (157mph)
Operational Temp	-55° to +70°C
Weight	1.4kg (50oz)
Heating Option	Enhanced
Environmental	IP66



Wind Speed Range	75m/s (168mph)
Operational Temp	-30° to +70°C*
Weight	1.9kg (67oz)
<b>Heating Option</b>	None
F. C	IDCC









# WindObserver®

Internationally Certified and Robust Professional 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 is able to ensure correct operation in condensing environments experienced at these wind speeds.

Wind Speed Range	75m/s (168mph)
Operational Temp	-55° to +70°C
Weight	1.4kg (50oz)
Heating Option	Enhanced Heating
Environmental	 IP66

## WindObserver® 75 WindObserver® 90

Wind Speed Range	90m/s (201mph)
Operational Temp	-55° to +70°C
Weight	1.4kg (50oz)
Heating Option	Enhanced Heating
Environmental	IP66





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# Anemometer Applications

# 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 a range of European and NATO forces, a number of oil and gas rig operators, and major airports in the UK and worldwide.



## **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 the WindSonic 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. More recently Gill products have been integrated into autonomous, ocean going drones that can actively navigate into areas of particular interest.





# WindMaster®

3D Anemometers for Meteorological and Industrial Applications



# Research

3D Anemometers for Scientific Research Studies



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.

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.

### WindMaster®

Wind Speed Range	50m/s (112mph)
Construction	Aluminium and Carbon Fibre
Operational Temp	-40° to +70°C
Weight	1.0kg (35oz)
Output Rate	20Hz
Sonic Temperature	-40° to +70°C
Analogue Inputs	4 single ended or 2



# WindMaster® Pro

Wind Speed Range	65m/s (145mph)
Construction	Stainless Steel
Operational Temp	-40° to +70°C
Weight	1.7kg (50oz)
Output Rate	32Hz
Sonic Temperature	-40° to +70°C
_	4 single ended or 2

Analogue Inputs

differential, plus PRT

# WindMaster® RA

Wind Speed Range	50m/s (112mph)
Construction	Aluminium and Carbon Fibre
Operational Temp	-40° to +70°C
Weight	1.0kg (35oz)
Output Rate	20Hz
Sonic Temperature	-40° to +70°C
Analogue Inputs	4 single ended or 2 differential



## Research R3-50

Wind Speed Range	45m/s (100mph)
Construction	Aluminium and Carbon Fibre
Operational Temp	-40° to +60°C
Weight	1.0kg (35oz)
Output Rate	50Hz
Analogue Inputs	6 differential inputs

## Research R3-100

Wind Speed Range	45m/s (100mph)
Construction	Aluminium and Carbon Fibre
Operational Temp	-40° to +60°C
Weight	1.0kg (35oz)
Output Rate	100Hz
Analogue Inputs	6 differential inputs

# Research HS-50/100

Wind Speed Range	45m/s (100mph)
Construction	Stainless Steel
Operational Temp	-40° to +60°C
Weight	2.5kg (88.2oz)
Output Rate	50Hz / 100Hz
Analogue Inputs	6 differential inputs

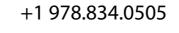


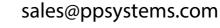






Proud, authorized U.S. distributor for





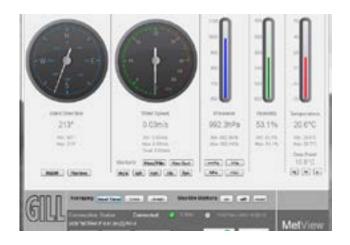


# Additional Services & Accessories

#### 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 user to set up a sensor, including configuration of the data output. MetView software allows the user to view the measurements taken by the sensor.

#### **Brackets**

The appropriate installation and positioning of weather sensors is essential for the data to be reliable. Gill offer a range of brackets and mounts to enable the user to properly position and secure their sensor.



