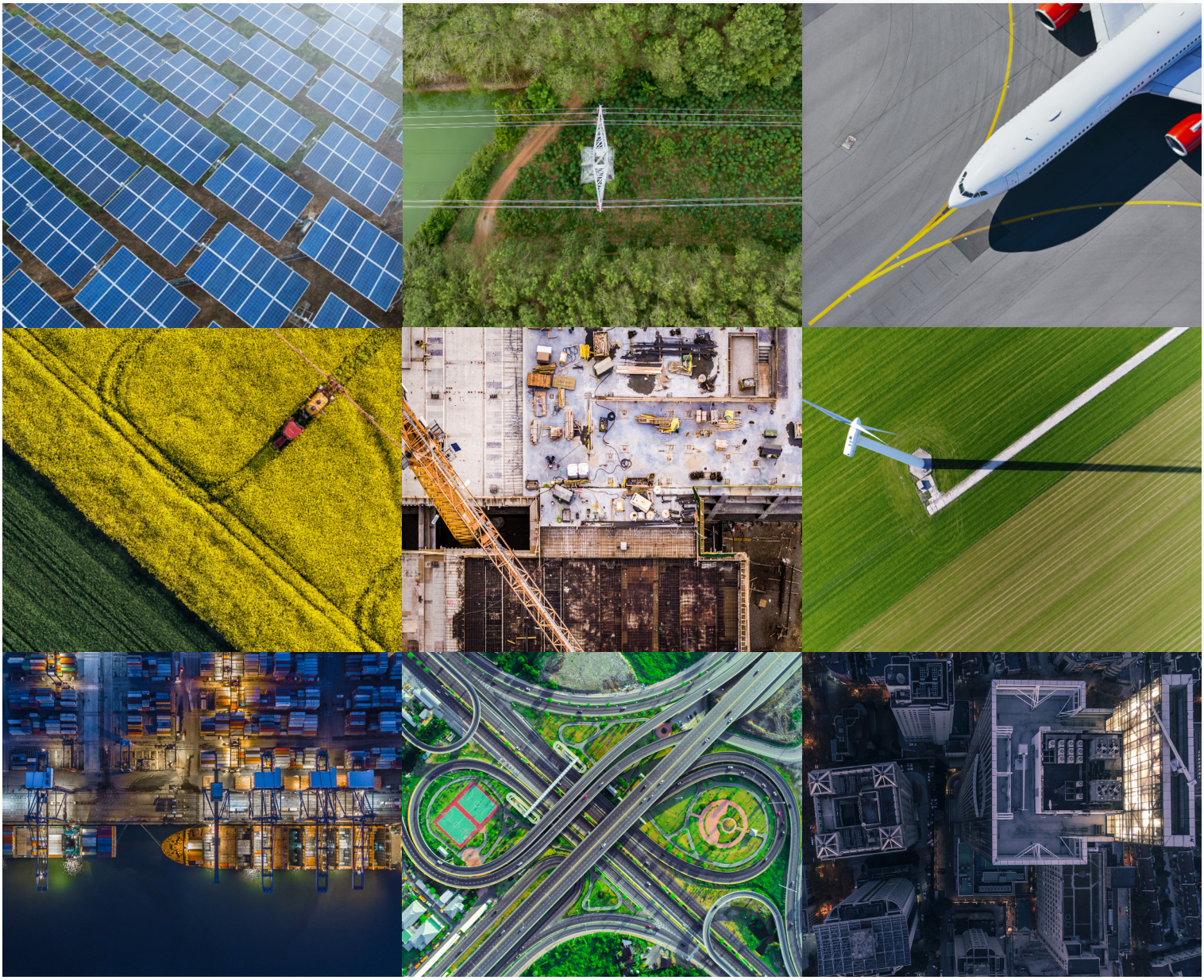
Product Catalogue

Anemometers & Weather Stations



gillinstruments.com

GILL

About Gill

About Gill Instruments

Founded in 1988, Gill Instruments designs and manufactures high-performance ultrasonic anemometers and weather stations for meteorological, research, and commercial applications. The company remains family-owned, with all design, manufacturing, and customer support based in the UK.

Our Customers

We support organisations worldwide, from leading research institutions and major defence organisations to a wide range of commercial and industrial partners. Long-term relationships are central to our approach, with many customers, integrators, and distributors working with us for over 25 year.

Our Products

Gill products are engineered for reliability and accuracy in demanding environments where performance matters most. Our solutions meet internationally recognised standards, including ABS, Lloyd's Register, ATEX, and FAA.

Innovations and Quality

Continuous improvement is at the heart of what we do. We invest over 20% of our revenue in research and development to ensure our customers benefit from advanced, dependable technology that meets evolving industry needs.

Contents

TruMet

Present Weather Solutions

TrueMet PW100 is a solid-state, infrared optical rain gauge that delivers a modern, low-maintenance alternative to tipping buckets.

It addresses the well-known limitations of mechanical systems, including clogging and calibration drift.

The TruMet PW100 provides reliable rainfall measurement at a lower lifetime cost, with less complexity or servicing than traditional or specialist instruments.

Typical applications include:

- Meteorological and hydrological networks
- Flood forecasting and early-warning systems
- Smart city and urban drainage monitoring
- Transport, aviation and infrastructure operations
- Renewable energy and environmental monitoring

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 GMX552 incorporates heat stress measurement into a highly reliable integrated weather station with on-board calculation of WBGT (wet bulb globe temperature), the index for heat stress.

MaxiMet GMX603 features an integrated infrared optical rain gauge that delivers a modern, low-maintenance alternative to tipping bucket.

Our latest products

MaxiMet® GMX552

Wind	**Compass**
Temperature	**GPS** (option)
Humidity	**Black globe temperature**
Pressure	**Wet bulb sensor input**

MaxiMet® GMX603

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

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® GMX500

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

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)

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)

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 anemeometer 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

Smart cities

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

Max wind speed	60m/s (216km/h)
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 75

Max wind speed	75m/s (270km/h)
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

WindSonicM

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

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

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

WindObserver70

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

WindObserverIS

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

WindObserver 75

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

WindObserver 90

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

Anemometer applications

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. WindMaster is 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

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

WindMasterPro

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

WindMaster

Wind speed range	50m/s (180km/h)
Construction	Aluminium and carbon ibre
Operational temp	-40° to +70°C
Weight	1.0kg (35oz)
Output rate	20Hz
Analogue inputs	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

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

R3-100

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

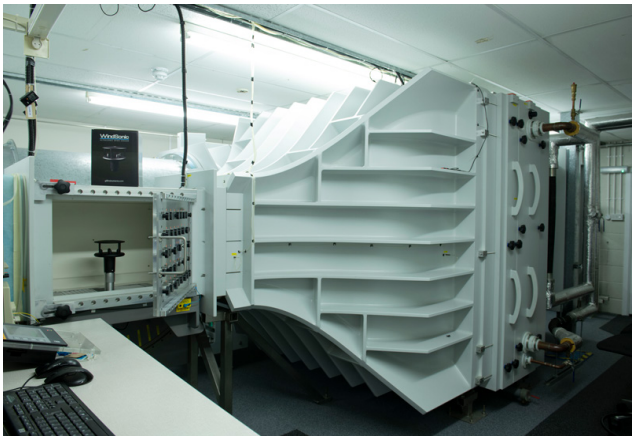
HS-50 HS-100

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

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.

Wet bulb sensor

Stand-alone wet bulb sensor for heat stress monitoring, compatible with GMX552, providing greater accuracy for real-time Wet Bulb Globe Temperature (WBGT) output. It meets ISO 7243:2017 design requirements and is available in 1L volume (5437-PK-046) or 0.5L volume (5437-PK-047) and with optional wet bulb sunshade kit (5437-PK-048).

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

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