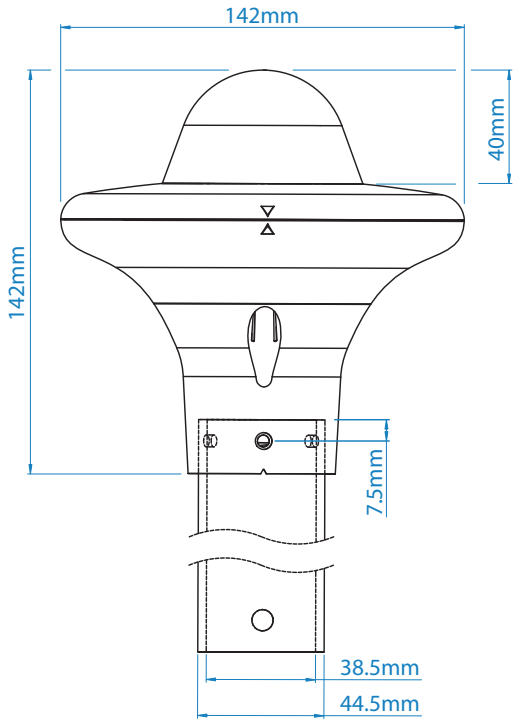
MaxiMet

GMX100 Compact Weather Station

The MaxiMet range of compact weather stations is designed and manufactured by Gill Instruments. MaxiMet products use reliable, high quality instruments to provide accurate meteorological information in a wide variety of applications.

GMX100 Features

Precipitation. An integrated optical rain gauge that automatically senses water hitting its outside surface and provides measurements based on the size and number of drops. Algorithms interpret this data and simulate the output of a tipping bucket rain gauge in a serial format. The optical rain gauge has no moving parts associated with tipping bucket gauges.



PRECIPITATION
▪ Rainfall total
▪ Rainfall intensity
▪ Rainfall Y/N
▪ Emulated tipping bucket
▪ Integrated heater
▪ No moving parts
▪ 0.08 mm tip Optical Rain Gauge (customer selectable)

PARAMETERS
▪ Precipitation *mm/hr, mm/total, in/hr, in/total*
▪ Angle of Tilt
▪ Outputs *RS232, 422, 485 (ASCII), SDI-12, NMEA, MODBUS, Analogue (option)*

GPS (MANUAL)
▪ Height above sea level *m*
▪ Sunrise/sunset
▪ Position of the sun
▪ Twilight
▪ Solar Noon
▪ MSL pressure

All MaxiMet Models Feature

- Quality Measurements
- Lightweight and Robust
- Low Power Mode
- Free of Charge Software
- Gill Proven Reliability
- Compact Integrated Design
- Real Time Output
- Easy Installation
- Gill Customer Support
- 2 Year Warranty

* Please see the manual for a full list of derived parameters

Applications

- Building and Industrial Controls
- Authorities
- Transport
- Coastal
- Agricultural
- Safety
- Educational
- Commercial
- Energy

PRECIPITATION	
Measurement type	Optical
Range	0 to >300 mm/hr
Precipitation Resolution	0.08 mm
Repeatability	3%
Sampling Rate	1 Hz
Units	mm/hr, mm/total, mm/24 hr, in/hr, in/total, in/24 hr
Heating	YES

OUTPUTS	
Output rate	1/s, 1/min, 1/hr
Digital Comms Modes	Serial RS232, RS422, RS485, SDI-12, NMEA, MODBUS, ASCII
Analogue Outputs	Available via separate optional device

POWER	
Power Supply	5 to 30 Vdc
Power (Nominal) 12 Vdc	42 mA continuous high mode. 0.7 mA eco-power mode (1 hour polled)

ENVIRONMENTAL CONDITIONS	
IP Rating	66
Operational Temperature Range:	-40°C to +70°C
EMC Standard:	BS EN 61326-2-1:2013 FCC, CFR Title 47, Part 15, Subpart B, Class A digital device
CE Marking	YES
RoHS compliant	YES
Weight	0.3 Kg
Origin	UK

Specifications may be subject to change without prior notice

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MaxiMet

GMX101 Compact Weather Station

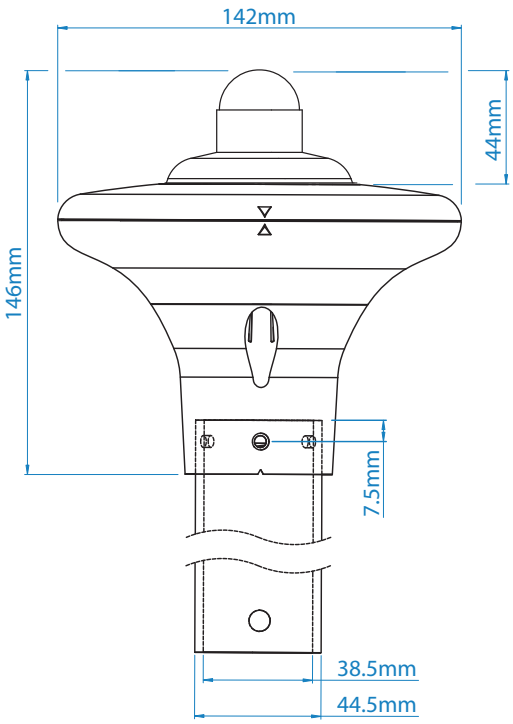
The MaxiMet range of compact weather stations is designed and manufactured by Gill Instruments. MaxiMet products use reliable, high quality instruments to provide accurate meteorological information in a wide variety of applications.

GMX101 Features

Solar radiation. An integrated solar radiation sensor/pyranometer. This highly accurate instrument uses a thermal sensor mounted at its base and protected by a single glass dome to record the amount of light in watts per metre^2.It is widely used in agro-meteorological applications and for monitoring the performance of solar panels. An inclinometer is fitted to provide the angle of tilt to aide correct vertical and angled mounting.

SOLAR RADIATION
▪ Complies with ISO 9060 and WMO Guidelines
▪ Output in watts per metre^2
▪ 180° hemispherical field of view
▪ Records sunshine hours
▪ Integrated Hukseflux LP02 pyranometer
▪ Glass dome

PARAMETERS
▪ Solar radiation *W/m^2*
▪ Sunshine hours *hrs*
▪ Twilight
▪ Sunrise
▪ Sunset
▪ Position of the sun
▪ Solar Noon
▪ Angle of Tilt
▪ Outputs *RS232, 422, 485 (ASCII), SDI-12, NMEA, MODBUS, Analogue (option)*



All MaxiMet Models Feature

- Quality Measurements
- Lightweight and Robust
- Free of Charge Software
- Gill Proven Reliability
- Compact Integrated Design
- Real Time Output
- Easy Installation
- Gill Customer Support
- 2 Year Warranty

* Please see the manual for a full list of derived parameters

Applications

- Building and Industrial Controls
- Authorities
- Transport
- Coastal
- Agricultural
- Safety
- Educational
- Commercial
- Energy

GLOBAL SOLAR RADIATION	
Wavelength Sensitivity	300 to 3000 nm
Output Range	0 to 1600 W/m^2
Resolution	1 W/m^2
DIN Standard	ISO 9060 Second Class
Sampling Rate	1 Hz
Units	W/m^2

INCLINOMETER	
Range	± 90°
Accuracy	± 3°
Resolution	1°

OUTPUTS	
Output rate	1/s, 1/min, 1/hr
Digital Comms Modes	Serial RS232, RS422, RS485, SDI-12, NMEA, MODBUS, ASCII
Analogue Outputs	Available via separate optional device

POWER	
Power Supply	5 to 30 Vdc
Power (Nominal) 12 Vdc	28 mA continuous high mode.

ENVIRONMENTAL CONDITIONS	
IP Rating	66
Operational Temperature Range:	-40°C to +70°C
EMC Standard:	BS EN 61326-2-1:2013 FCC, CFR Title 47, Part 15, Subpart B, Class A digital device
CE Marking	YES
RoHS compliant	YES
Weight	0.4 Kg
Origin	UK

Specifications may be subject to change without prior notice

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1957-015 Iss 5

MaxiMet

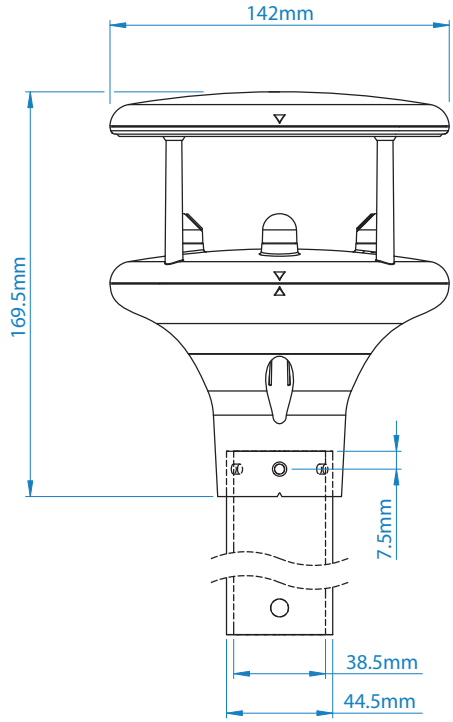
GMX200 Compact Weather Station

The MaxiMet range of compact weather stations is designed and manufactured by Gill Instruments. MaxiMet products use reliable, high quality instruments to provide accurate meteorological information in a wide variety of applications.

GMX200 Features

Wind. Wind speed and direction measurements are provided via an ultrasonic sensor and the addition of an electronic compass provides apparent wind measurements. Average speed and direction together with WMO averages and gust data is also provided. Add GPS (optional) to provide true wind and other features.

WIND	GPS (OPTION)	PARAMETERS
▪ Wind speed & direction ▪ Apparent and true wind (with GPS) ▪ WMO wind averages and gust ▪ Compass ▪ GPS (optional) gives height above sea level, latitude and longitude	▪ Height above sea level *m* ▪ MSL pressure ▪ Sunrise/sunset ▪ Position of the sun ▪ Twilight ▪ Solar Noon	▪ Wind speed *m/s, km/hr, mph, kts, ft/min* ▪ Wind direction ° ▪ True/apparent wind ▪ Angle of Tilt ▪ Outputs *RS232, 422, 485 (ASCII), SDI-12, NMEA, MODBUS, Analogue (option)*



All MaxiMet Models Feature

- Quality Measurements
- Lightweight and Robust
- Low Power Mode
- Free of Charge Software
- Gill Proven Reliability
- Compact Integrated Design
- Real Time Output
- Easy Installation
- Gill Customer Support
- 2 Year Warranty

* Please see the manual for a full list of derived parameters

Applications

- Building and Industrial Controls
- Authorities
- Transport
- Coastal
- Agricultural
- Safety
- Educational
- Commercial
- Energy

WIND SPEED	
Range	0.01 m/s to 60 m/s
Accuracy	± 3% to 40 m/s, ± 5% to 60 m/s
Resolution m/s	0.01
Starting Threshold	0.01 m/s
Sampling Rate	1 Hz
Units	m/s, km/hr, mph, kts, ft/min

WIND DIRECTION	
Range	0-359°
Accuracy	± 3° to 40 m/s ± 5° to 60 m/s
Resolution	1°
Starting Threshold	0.05 m/s
Sampling Rate	1 Hz
Units	Degrees

OUTPUTS	
Output rate	1/s, 1/min, 1/hr
Digital Comms Modes	Serial RS232, RS422, RS485, SDI-12, NMEA, MODBUS, ASCII
Analogue Outputs	Available via separate optional device

POWER	
Power Supply	5 to 30 Vdc
Power (Nominal) 12 Vdc	25 mA continuous high mode. 0.7 mA eco-power mode (1 hour polled)

ENVIRONMENTAL CONDITIONS	
IP Rating	66
Operational Temperature Range:	-40°C to +70°C
EMC Standard:	BS EN 61326-2-1:2013 FCC, CFR Title 47, Part 15, Subpart B, Class A digital device
CE Marking	YES
RoHS compliant	YES
Weight	0.5 Kg
Origin	UK

Specifications may be subject to change without prior notice

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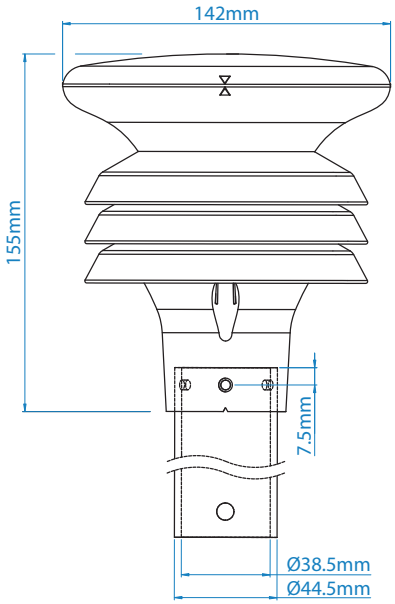
MaxiMet

GMX300 Compact Weather Station

The MaxiMet range of compact weather stations is designed and manufactured by Gill Instruments. MaxiMet products use reliable, high quality instruments to provide accurate meteorological information in a wide variety of applications.

GMX300 Features

Temperature, humidity, pressure. A combined instrument mounted inside three double louvered, naturally aspirated radiation shields with no moving parts. The results are high performance across each measurement over long periods of time.



TEMP, HUMIDITY & PRESSURE	PARAMETERS
▪ Air Pressure / Temperature ▪ Relative / Absolute humidity ▪ Naturally aspirated UV stable radiation shield ▪ Protection against wind-blown precipitation/dust	▪ Temperature *°C / °F / °K* ▪ Relative humidity *% Rh* ▪ Barometric pressure *hPa, mbar, mm Hg, In Hg* ▪ Absolute humidity *g/m³* ▪ Air density *kg/m3* ▪ Wet bulb temperature *°C / °F / °K* ▪ Angle of Tilt ▪ Outputs *RS232, 422, 485 (ASCII), SDI-12, NMEA, MODBUS, Analogue (option)*

GPS (MANUAL)
▪ Height above sea level *m* ▪ Sunrise/sunset ▪ Position of the sun ▪ Twilight ▪ Solar Noon ▪ MSL pressure

All MaxiMet Models Feature

- Quality Measurements
- Lightweight and Robust
- Low Power Mode
- Free of Charge Software
- Gill Proven Reliability
- Compact Integrated Design
- Real Time Output
- Easy Installation
- Gill Customer Support
- 2 Year Warranty

* Please see the manual for a full list of derived parameters

Applications

- Building and Industrial Controls
- Authorities
- Transport
- Coastal
- Agricultural
- Safety
- Educational
- Commercial
- Energy

TEMPERATURE	
Range	-40°C to +70°C
Resolution	0.1
Accuracy	± 0.3°C @ 20°C
Sampling Rate	1 Hz
Units	°C, °F, °K

HUMIDITY	
Range	0-100%
Resolution	1%
Accuracy	± 2% @ 20°C (10%-90% RH)
Sampling Rate	1 Hz
Units	% Rh, g/m^3

DEW POINT	
Range	-40°C to +70°C
Resolution	0.1
Accuracy	± 0.3°C @ 20°C
Units	°C, °F, °K
Sampling Rate	1 Hz

PRESSURE	
Range	300 to 1100 hpa
Resolution	0.1 hPa
Accuracy	± 0.5 hPa @ 25°C
Sampling Rate	1 Hz
Units	hPa, mbar, mmHg, inHg

OUTPUTS	
Output rate	1/s, 1/min, 1/hr
Digital Comms Modes	Serial RS232, RS422, RS485, SDI-12, NMEA, MODBUS, ASCII
Analogue Outputs	Available via separate optional device

POWER	
Power Supply	5 to 30 Vdc
Power (Nominal) 12 Vdc	5 mA continuous high mode. 0.7 mA eco-power mode (1 hour polled)

ENVIRONMENTAL CONDITIONS	
IP Rating	66
Operational Temperature Range:	-40°C to +70°C
EMC Standard:	BS EN 61326-2-1:2013 FCC, CFR Title 47, Part 15, Subpart B, Class A digital device
CE Marking	YES
RoHS compliant	YES
Weight	0.5 Kg
Origin	UK

Specifications may be subject to change without prior notice

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1957-005 Iss 7

MaxiMet

GMX301 Compact Weather Station

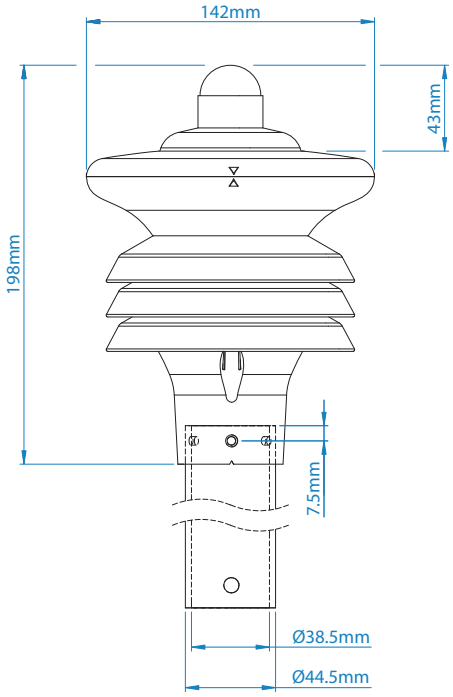
The MaxiMet range of compact weather stations is designed and manufactured by Gill Instruments. MaxiMet products use reliable, high quality instruments to provide accurate meteorological information in a wide variety of applications.

GMX301 Features

Temperature, humidity, pressure. A combined instrument mounted inside three double louvered, naturally aspirated radiation shields with no moving parts. The results are high performance across each measurement over long periods of time.

Solar radiation. An integrated solar radiation sensor/pyranometer. This highly accurate instrument uses a thermal sensor mounted at its base and protected by a single glass dome to record the amount of light in watts per metre^2.It is widely used in agro-meteorological applications and for monitoring the performance of solar panels.

TEMP, HUMIDITY & PRESSURE	SOLAR RADIATION
▪ Air Pressure / Temperature	▪ Complies with ISO 9060 and WMO Guidelines
▪ Relative / Absolute humidity	▪ Output in watts per metre^2
▪ Naturally aspirated UV stable radiation shield	▪ 180° hemispherical field of view
▪ Protection against wind-blown precipitation/dust	▪ Records sunshine hours
	▪ Integrated Hukseflux LP02 pyranometer
	▪ Glass dome



PARAMETERS

- Solar radiation *w/m²*
- Sunshine hours *hrs*
- Solar Noon
- Temperature *°C / °F / °K*
- Relative humidity *% Rh*
- Barometric pressure *hPa, mbar, mm Hg, In Hg*
- Wet bulb temperature *°C / °F / °K*
- Absolute humidity *g/m³*
- Air density *kg/m3*
- Angle of Tilt
- Outputs
  RS232, 422, 485 (ASCII), SDI-12, NMEA, MODBUS, Analogue (option)

GPS (MANUAL)

- Height above sea level *m*
- Sunrise/sunset
- Position of the sun
- Twilight
- Solar Noon
- MSL pressure

All MaxiMet Models Feature

- Quality Measurements
- Lightweight and Robust
- Low Power Mode
- Free of Charge Software
- Gill Proven Reliability
- Compact Integrated Design
- Real Time Output
- Easy Installation
- Gill Customer Support
- 2 Year Warranty

* Please see the manual for a full list of derived parameters

Applications

- Building and Industrial Controls
- Authorities
- Transport
- Coastal
- Agricultural
- Safety
- Educational
- Commercial
- Energy

TEMPERATURE	
Range	-40°C to +70°C
Resolution	0.1
Accuracy	± 0.3°C @ 20°C
Sampling Rate	1 Hz
Units	°C, °F, °K

HUMIDITY	
Range	0-100%
Resolution	1%
Accuracy	± 2% @ 20°C (10%-90% RH)
Sampling Rate	1 Hz
Units	% Rh, g/m^3

DEW POINT	
Range	-40°C to +70°C
Resolution	0.1
Accuracy	± 0.3°C @ 20°C
Units	°C, °F, °K
Sampling Rate	1 Hz

PRESSURE	
Range	300 to 1100 hpa
Resolution	0.1 hPa
Accuracy	± 0.5 hPa @ 25°C
Sampling Rate	1 Hz
Units	hPa, mbar, mmHg, inHg

GLOBAL SOLAR RADIATION	
Wavelength Sensitivity	300 to 3000 nm
Output Range	0 to 1600 W/m^2
Resolution	1 W/m^2
DIN Standard	ISO 9060 Second Class
Sampling Rate	1 Hz
Units	W/m^2

OUTPUTS	
Output rate	1/s, 1/min, 1/hr
Digital Comms Modes	Serial RS232, RS422, RS485, SDI-12, NMEA, MODBUS, ASCII
Analogue Outputs	Available via separate optional device

POWER	
Power Supply	5 to 30 Vdc
Power (Nominal) 12 Vdc	5.5 mA continuous high mode. 0.7 mA eco-power mode (1 hour polled)

ENVIRONMENTAL CONDITIONS	
IP Rating	66
Operational Temperature Range:	-40°C to +70°C
EMC Standard:	BS EN 61326-2-1:2013 FCC, CFR Title 47, Part 15, Subpart B, Class A digital device
CE Marking	YES
RoHS compliant	YES
Weight	0.6 Kg
Origin	UK

Specifications may be subject to change without prior notice

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1957-006 Iss 7

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MaxiMet

GMX400 Compact Weather Station

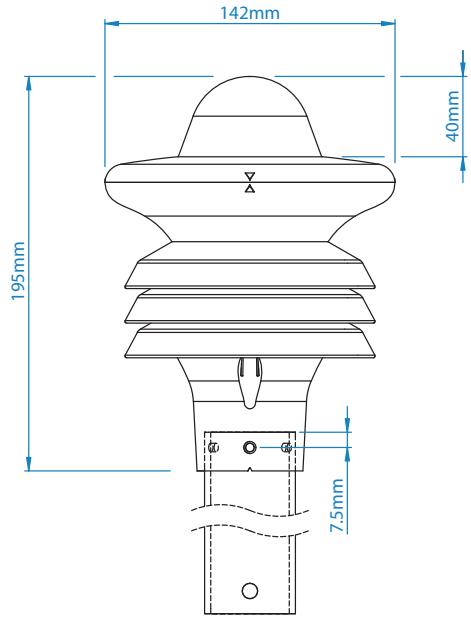
The MaxiMet range of compact weather stations is designed and manufactured by Gill Instruments. MaxiMet products use reliable, high quality instruments to provide accurate meteorological information in a wide variety of applications.

GMX400 Features

Temperature, humidity, pressure. A combined instrument mounted inside three double louvered, naturally aspirated radiation shields with no moving parts. The results are high performance across each measurement over long periods of time.

Precipitation. An integrated optical rain gauge that automatically senses water hitting its outside surface and provides measurements based on the size and number of drops. Algorithms interpret this data and simulate the output of a tipping bucket rain gauge in a serial format. The optical rain gauge has no moving parts associated with tipping bucket gauges.

TEMP, HUMIDITY & PRESSURE	PRECIPITATION	PARAMETERS
▪ Air Pressure / Temperature ▪ Relative / Absolute humidity ▪ Naturally aspirated UV stable radiation shield ▪ Protection against wind-blown precipitation/dust	▪ Rainfall total ▪ Rainfall intensity ▪ Rainfall Y/N ▪ Emulated tipping bucket ▪ Integrated heater ▪ No moving parts ▪ 0.08mm tip Optical Rain Gauge (customer selectable)	▪ Temperature *°C / °F / °K* ▪ Relative humidity *% Rh* ▪ Barometric pressure *hPa, mbar, mm Hg, In Hg* ▪ Absolute humidity *g/m³* ▪ Precipitation *mm/hr, mm/total, in/hr, in/total* ▪ Wet bulb temperature *°C / °F / °K* ▪ Angle of Tilt ▪ Outputs *RS232, 422, 485 (ASCII), SDI-12, NMEA, MODBUS, Analogue (option)*



GPS (MANUAL)
▪ Height above sea level *m* ▪ Sunrise/sunset ▪ Position of the sun ▪ Twilight ▪ Solar Noon ▪ MSL pressure

All MaxiMet Models Feature

- Quality Measurements
- Lightweight and Robust
- Low Power Mode
- Free of Charge Software
- Gill Proven Reliability
- Compact Integrated Design
- Real Time Output
- Easy Installation
- Gill Customer Support
- 2 Year Warranty

* Please see the manual for a full list of derived parameters

Applications

- Building and Industrial Controls
- Authorities
- Transport
- Coastal
- Agricultural
- Safety
- Educational
- Commercial
- Energy

TEMPERATURE	
Range	-40°C to +70°C
Resolution	0.1
Accuracy	± 0.3°C @ 20°C
Sampling Rate	1 Hz
Units	°C, °F, °K

HUMIDITY	
Range	0-100%
Resolution	1%
Accuracy	± 2% @ 20°C (10%-90% RH)
Sampling Rate	1 Hz
Units	% Rh, g/m^3

DEW POINT	
Range	-40°C to +70°C
Resolution	0.1
Accuracy	± 0.3°C @ 20°C
Units	°C, °F, °K
Sampling Rate	1 Hz

PRESSURE	
Range	300 to 1100 hpa
Resolution	0.1 hPa
Accuracy	± 0.5 hPa @ 25°C
Sampling Rate	1 Hz
Units	hPa, mbar, mmHg, inHg

PRECIPITATION	
Measurement type	Optical
Range	0 to >300 mm/hr
Precipitation Resolution	0.08 mm
Repeatability	3%
Sampling Rate	1 Hz
Units	mm/hr, mm/total, mm/24 hr, in/hr, in/total, in/24 hr
Heating	YES

OUTPUTS	
Output rate	1/s, 1/min, 1/hr
Digital Comms Modes	Serial RS232, RS422, RS485, SDI-12, NMEA, MODBUS, ASCII
Analogue Outputs	Available via separate optional device

POWER	
Power Supply	5 to 30 Vdc
Power (Nominal) 12 Vdc	45 mA continuous high mode. 0.7 mA eco-power mode (1 hour polled)

ENVIRONMENTAL CONDITIONS	
IP Rating	66
Operational Temperature Range:	-40°C to +70°C
EMC Standard:	BS EN 61326-2-1:2013 FCC, CFR Title 47, Part 15, Subpart B, Class A digital device
CE Marking	YES
RoHS compliant	YES
Weight	0.5 Kg
Origin	UK

Specifications may be subject to change without prior notice

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MaxiMet

GMX500 Compact Weather Station

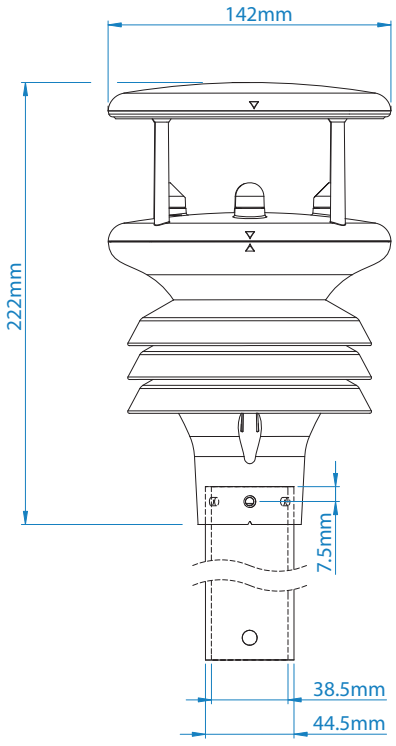
The MaxiMet range of compact weather stations is designed and manufactured by Gill Instruments. MaxiMet products use reliable, high quality instruments to provide accurate meteorological information in a wide variety of applications.

GMX500 Features

Temperature, humidity, pressure. A combined instrument mounted inside three double louvered, naturally aspirated radiation shields with no moving parts. The results are high performance across each measurement over long periods of time.

Wind. Wind speed and direction measurements are provided via an ultrasonic sensor and the addition of an electronic compass provides apparent wind measurements. Average speed and direction together with WMO averages and gust data is also provided. Add GPS (optional) to provide true wind and other features.

TEMP, HUMIDITY & PRESSURE	WIND	GPS (OPTION)	PARAMETERS
▪ Air Pressure / Temperature ▪ Relative / Absolute humidity ▪ Naturally aspirated UV stable radiation shield ▪ Protection against wind-blown precipitation/dust	▪ Wind speed & direction ▪ Apparent and true wind (with GPS) ▪ WMO wind averages and gust ▪ Compass	▪ Height above sea level *m* ▪ Sunrise/sunset ▪ Position of the sun ▪ Twilight ▪ Solar Noon ▪ MSL pressure	▪ Temperature *°C / °F / °K* ▪ Relative humidity *% Rh* ▪ Barometric pressure *hPa, mbar, mm Hg, In Hg* ▪ Wet bulb temperature *°C / °F / °K* ▪ Absolute humidity g/m^3 ▪ Air density *kg/m3* ▪ Wind speed *m/s, km/hr, mph, kts, ft/min* ▪ Wind direction ° ▪ Wind chill *°C / °F / °K* ▪ True/apparent wind ▪ Angle of Tilt ▪ Outputs *RS232, 422, 485 (ASCII), SDI-12, NMEA, MODBUS, Analogue (option)*



All MaxiMet Models Feature

- Quality Measurements
- Lightweight and Robust
- Low Power Mode
- Free of Charge Software
- Gill Proven Reliability
- Compact Integrated Design
- Real Time Output
- Easy Installation
- Gill Customer Support
- 2 Year Warranty

* Please see the manual for a full list of derived parameters

Applications

- Building and Industrial Controls
- Authorities
- Transport
- Coastal
- Agricultural
- Safety
- Educational
- Commercial
- Energy

WIND SPEED	
Range	0.01 m/s to 60 m/s
Accuracy	± 3% to 40 m/s, ± 5% to 60 m/s
Resolution m/s	0.01
Starting Threshold	0.01 m/s
Sampling Rate	1 Hz
Units	m/s, km/hr, mph, kts, ft/min

WIND DIRECTION	
Range	0-359°
Accuracy	± 3° to 40 m/s ± 5° to 60 m/s
Resolution	1°
Starting Threshold	0.05 m/s
Sampling Rate	1 Hz
Units	Degrees

TEMPERATURE	
Range	-40°C to +70°C
Resolution	0.1
Accuracy	± 0.3°C @ 20°C
Sampling Rate	1 Hz
Units	°C, °F, °K

HUMIDITY	
Range	0-100%
Resolution	1%
Accuracy	± 2% @ 20°C (10%-90% RH)
Sampling Rate	1 Hz
Units	% Rh, g/m^3

DEW POINT	
Range	-40°C to +70°C
Resolution	0.1
Accuracy	± 0.3°C @ 20°C
Units	°C, °F, °K
Sampling Rate	1 Hz

PRESSURE	
Range	300 to 1100 hpa
Resolution	0.1 hPa
Accuracy	± 0.5 hPa @ 25°C
Sampling Rate	1 Hz
Units	hPa, mbar, mmHg, inHg

OUTPUTS	
Output rate	1/s, 1/min, 1/hr
Digital Comms Modes	Serial RS232, RS422, RS485, SDI-12, NMEA, MODBUS, ASCII
Analogue Outputs	Available via separate optional device

POWER	
Power Supply	5 to 30 Vdc
Power (Nominal) 12 Vdc	25 mA continuous high mode. 0.7 mA eco-power mode (1 hour polled)

ENVIRONMENTAL CONDITIONS	
IP Rating	66
Operational Temperature Range:	-40°C to +70°C
EMC Standard:	BS EN 61326-2-1:2013 FCC, CFR Title 47, Part 15, Subpart B, Class A digital device
CE Marking	YES
RoHS compliant	YES
Weight	0.7 Kg
Origin	UK

Specifications may be subject to change without prior notice

GILL

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1957-008 Iss 7

Gill Instruments Limited, Reg No. 2281574
Registered Office: Towngate House, 2-8 Parkstone Road, Poole. BH15 2PW

MaxiMet

GMX501 Compact Weather Station

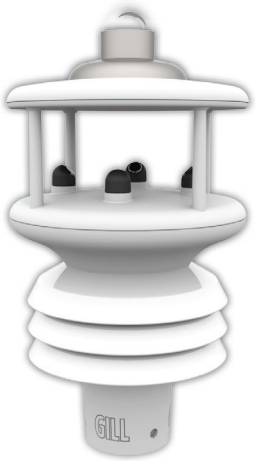
The MaxiMet range of compact weather stations is designed and manufactured by Gill Instruments. MaxiMet products use reliable, high quality instruments to provide accurate meteorological information in a wide variety of applications.

GMX501 Features

Temperature, humidity, pressure. A combined instrument mounted inside three double louvered, naturally aspirated radiation shields with no moving parts. The results are high performance across each measurement over long periods of time.

Solar radiation. An integrated solar radiation sensor/pyranometer. This highly accurate instrument uses a thermal sensor mounted at its base and protected by a single glass dome to record the amount of light in watts per metre^2. It is widely used in agro-meteorological applications and for monitoring the performance of solar panels.

Wind. Wind speed and direction measurements are provided via an ultrasonic sensor and the addition of an electronic compass provides apparent wind measurements. Average speed and direction together with WMO averages and gust data is also provided. Add GPS (optional) to provide true wind and other features.



TEMP, HUMIDITY & PRESSURE

- Air Pressure / Temperature
- Relative / Absolute humidity
- Naturally aspirated UV stable radiation shield
- Protection against wind-blown precipitation/dust

SOLAR RADIATION

- Complies with ISO 9060 and WMO Guidelines
- Output in watts per metre^2
- 180° hemispherical field of view
- Records sunshine hours
- Integrated Hukseflux LP02 pyranometer
- Glass dome

WIND

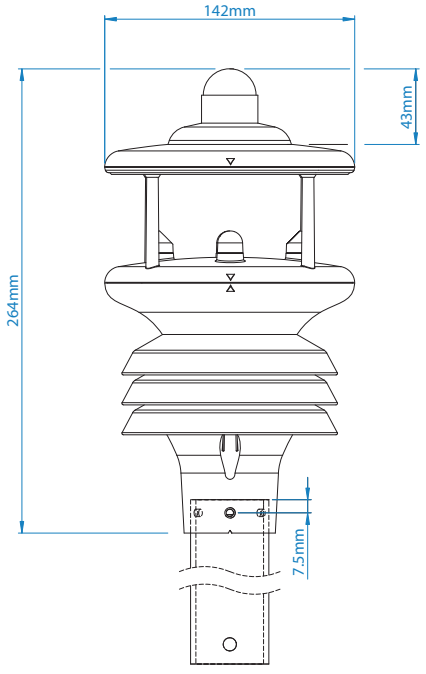
- Wind speed & direction
- Apparent and true wind (with GPS)
- WMO wind averages and gust
- Compass

GPS (OPTION)

- Height above sea level *m*
- Sunrise/sunset
- Position of the sun
- Twilight
- Solar Noon
- MSL pressure

PARAMETERS

- Solar radiation *W/m²*
- Sunshine hours *hrs*
- Temperature *°C / °F / °K*
- Relative humidity *% Rh*
- Barometric pressure *hPa, mbar, mm Hg, In Hg*
- Wet bulb temperature *°C / °F / °K*
- Absolute humidity *g/m³*
- Air density *kg/m3*
- Wind speed *m/s, km/hr, mph, kts, ft/min*
- Wind direction °
- Wind chill *°C / °F / °K*
- True/apparent wind
- Angle of Tilt
- Outputs *RS232,422, 485, SDI-12, NMEA, MODBUS, Analogue (option)*



All MaxiMet Models Feature

- Quality Measurements
- Lightweight and Robust
- Low Power Mode
- Free of Charge Software
- Gill Proven Reliability
- Compact Integrated Design
- Real Time Output
- Easy Installation
- Gill Customer Support
- 2 Year Warranty

* Please see the manual for a full list of derived parameters

Applications

- Building and Industrial Controls
- Authorities
- Transport
- Coastal
- Agricultural
- Safety
- Educational
- Commercial
- Energy

WIND SPEED	
Range	0.01 m/s to 60 m/s
Accuracy	± 3% to 40 m/s, ± 5% to 60 m/s
Resolution m/s	0.01
Starting Threshold	0.01 m/s
Sampling Rate	1 Hz
Units	m/s, km/hr, mph, kts, ft/min

WIND DIRECTION	
Range	0-359°
Accuracy	± 3° to 40 m/s ± 5° to 60 m/s
Resolution	1°
Starting Threshold	0.05 m/s
Sampling Rate	1 Hz
Units	Degrees

TEMPERATURE	
Range	-40°C to +70°C
Resolution	0.1
Accuracy	± 0.3°C @ 20°C
Sampling Rate	1 Hz
Units	°C, °F, °K

HUMIDITY	
Range	0-100%
Resolution	1%
Accuracy	± 2% @ 20°C (10%-90% RH)
Sampling Rate	1 Hz
Units	% Rh, g/m^3

DEW POINT	
Range	-40°C to +70°C
Resolution	0.1
Accuracy	± 0.3°C @ 20°C
Units	°C, °F, °K
Sampling Rate	1 Hz

PRESSURE	
Range	300 to 1100 hpa
Resolution	0.1 hPa
Accuracy	± 0.5 hPa @ 25°C
Sampling Rate	1 Hz
Units	hPa, bar, mmHg, inHg

GLOBAL SOLAR RADIATION	
Wavelength Sensitivity	300 to 3000 nm
Output Range	0 to 1600 W/m^2
Resolution	1 W/m^2
DIN Standard	ISO 9060 Second Class
Sampling Rate	1 Hz
Units	W/m^2

OUTPUTS	
Output rate	1/s, 1/min, 1/hr
Digital Comms Modes	Serial RS232, RS422, RS485, SDI-12, NMEA, MODBUS, ASCII
Analogue Outputs	Available via separate optional device

POWER	
Power Supply	5 to 30 Vdc
Power (Nominal) 12 Vdc	25 mA continuous high mode. 0.7 mA eco-power mode (1 hour polled)

ENVIRONMENTAL CONDITIONS	
IP Rating	66
Operational Temperature Range:	-40°C to +70°C
EMC Standard:	BS EN 61326-2-1:2013 FCC, CFR Title 47, Part 15, Subpart B, Class A digital device
CE Marking	YES
RoHS compliant	YES
Weight	0.6 Kg
Origin	UK

Specifications may be subject to change without prior notice

GILL

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1957-009 Iss 7

MaxiMet

GMX531 Compact Weather Station

GILL

The MaxiMet range of compact weather stations is designed and manufactured by Gill Instruments. MaxiMet products use reliable, high quality instruments to provide accurate meteorological information in a wide variety of applications.

GMX531 Features

Temperature, humidity, pressure. A combined instrument mounted inside three double louvered, naturally aspirated radiation shields with no moving parts. The results are high performance across each measurement over long periods of time.

Solar radiation. An integrated solar radiation sensor/pyranometer. This highly accurate instrument uses a thermal sensor mounted at its base and protected by a single glass dome to record the amount of light in watts per metre^2. It is widely used in agro-meteorological applications and for monitoring the performance of solar panels.

Wind. Wind speed and direction measurements are provided via an ultrasonic sensor and the addition of an electronic compass provides apparent wind measurements. Average speed and direction together with WMO averages and gust data is also provided. Add GPS (optional) to provide true wind and other features.

Precipitation. The Kalyx tipping bucket rain gauge supplied provides excellent performance in tropical or heavy convective precipitation locations. The low power Kalyx connects via a 20m cable (included).

TEMP, HUMIDITY & PRESSURE

- Air Pressure / Temperature
- Relative / Absolute humidity
- Naturally aspirated UV stable Radiation shield
- Protection against wind-blown precipitation/dust

SOLAR RADIATION

- Complies with ISO 9060 and WMO Guidelines
- Output in watts per metre^2
- 180° hemispherical field of view
- Records sunshine hours
- Integrated Hukseflux LP02 pyranometer
- Glass dome

WIND

- Wind speed & direction
- Apparent and true wind (with GPS)
- WMO wind averages and gust
- Compass

GPS (OPTION)

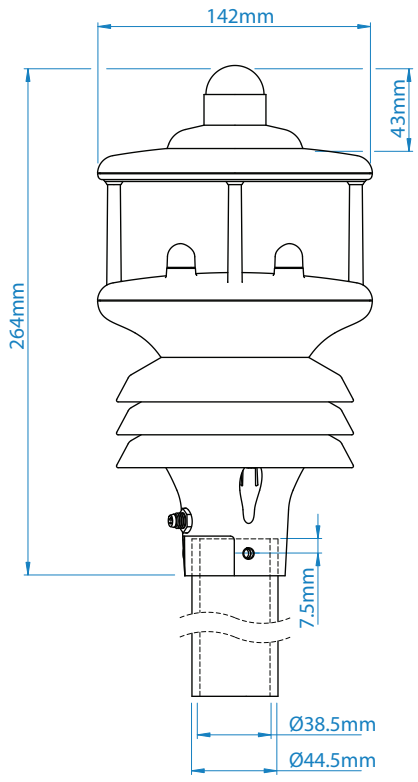
- Height above sea level *m*
- Sunrise/sunset
- Position of the sun
- Twilight
- MSL pressure

PRECIPITATION (INPUT)

- 0.2mm tip Kaylx rain gauge
- 20m Cable

PARAMETERS

- Solar radiation *w/m^2*
- Sunshine hours *hrs*
- Solar Noon
- Temperature *°C / °F / °K*
- Relative humidity *% Rh, g/m3*
- Barometric pressure *hPa, mbar, mm Hg, In Hg*
- Wet bulb temperature *°C / °F / °K*
- Absolute humidity *g/m^3*
- Air density *kg/m^3*
- Precipitation *mm/hr, mm/total, in/hr, in/total*
- Wind speed *m/s, km/hr, mph, kts, ft/min*
- Wind direction °
- Wind chill *°C / °F / °K*
- True/apparent wind
- Angle of Tilt
- Outputs *RS232, 422, 485 (ASCII), SDI-12, NMEA, MODBUS, Analogue (option)*



All MaxiMet Models Feature

- Quality Measurements
- Lightweight and Robust
- Low Power Mode
- Free of Charge Software
- Gill Proven Reliability
- Compact Integrated Design
- Real Time Output
- Easy Installation
- Gill Customer Support
- 2 Year Warranty

* Please see the manual for a full list of derived parameters

MaxiMet

Kalyx Rain Gauge

The MaxiMet range of compact weather stations is designed and manufactured by Gill Instruments. MaxiMet products use reliable, high quality instruments to provide accurate meteorological information in a wide variety of applications.

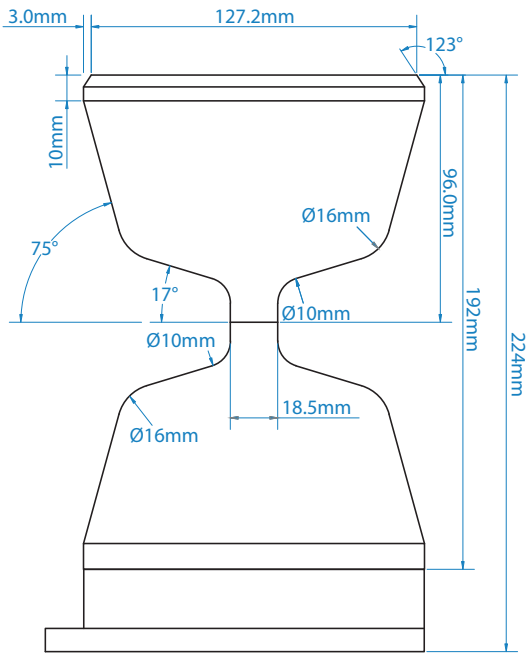
Kalyx Rain Gauge Features

Precipitation. The Kalyx tipping bucket rain gauge provides excellent performance in tropical or heavy convective precipitation locations. The low power Kalyx connects via a 20m cable (included) that the user can cut to length.

The sensor has a tipping bucket mechanism which automatically tips when precipitation accumulates inside of it. Total precipitation is determined by the number of tips.

An adjustable mouting plate compensates for uneven surfaces and the unique aerodynamic shape of the rain gauge reduces the effects of wind blown rain being carried away from the collecting vessel.

The tipping bucket includes a drain hole and does not need to be emptied.



SPECIFICATION	
Measurement type	TBRG (Kalyx)
Range	0-1000 mm/hr
Precipitation Resolution	0.2 mm
Accuracy	2%
Sampling Rate	1 Hz
Units	mm/hr, mm/total, mm/24 hr, in/hr, in/total, in/24 hr
Heating	N/A
Output	Contact closure via 20m cable to GMX
Mounting	Adjustable mounting plate

Applications

- Building and Industrial Controls
- Authorities
- Transport
- Coastal
- Agricultural
- Safety
- Educational
- Commercial
- Energy

WIND SPEED	
Range	0.01 m/s to 60 m/s
Accuracy	± 3% to 40 m/s, ± 5% to 60 m/s
Resolution m/s	0.01
Starting Threshold	0.01 m/s
Sampling Rate	1 Hz
Units	m/s, km/hr, mph, kts, ft/min

WIND DIRECTION	
Range	0-359°
Accuracy	± 3° to 40 m/s ± 5° to 60 m/s
Resolution	1°
Starting Threshold	0.05 m/s
Sampling Rate	1 Hz
Units	Degrees

TEMPERATURE	
Range	-40°C to +70°C
Resolution	0.1
Accuracy	± 0.3°C @ 20°C
Sampling Rate	1 Hz
Units	°C, °F, °K

HUMIDITY	
Range	0-100%
Resolution	1%
Accuracy	± 2% @ 20°C (10%-90% RH)
Sampling Rate	1 Hz
Units	% Rh, g/m^3

DEW POINT	
Range	-40°C to +70°C
Resolution	0.1
Accuracy	± 0.3°C @ 20°C
Units	°C, °F, °K
Sampling Rate	1 Hz

PRESSURE	
Range	300 to 1100 hpa
Resolution	0.1 hPa
Accuracy	± 0.5 hPa @ 25°C
Sampling Rate	1 Hz
Units	hPa, mbar, mmHg, inHg

PRECIPITATION	
Measurement type	TBRG (Kalyx)
Range	0-1000 mm/hr
Precipitation Resolution	0.2 mm
Accuracy	2%
Sampling Rate	1 Hz
Units	mm/hr, mm/total, in/hr, in/total
Heating	N/A
Output	Contact closure via 20m cable to GMX

GLOBAL SOLAR RADIATION	
Wavelength Sensitivity	300 to 3000 nm
Output Range	0 to 1600 W/m^2
Resolution	1 w/m^2
DIN Standard	ISO 9060 Second Class
Sampling Rate	1 Hz
Units	w/m^2

OUTPUTS	
Output rate	1/s, 1/min, 1/hr
Digital Comms Modes	Serial RS232, RS422, RS485, SDI-12, NMEA, MODBUS, ASCII
Analogue Outputs	Available via separate optional device

POWER	
Power Supply	5 to 30 Vdc
Power (Nominal) 12 Vdc	25mA continuous high mode. 0.7mA eco-power mode (1 hour polled)

ENVIRONMENTAL CONDITIONS	
IP Rating	66
Operational Temperature Range:	-40°C to +70°C
EMC Standard:	BS EN 61326-2-1:2013 FCC, CFR Title 47, Part 15, Subpart B, Class A digital device
CE Marking	YES
RoHS compliant	YES
Weight	0.8 Kg (+ 1.2 kg Rain Gauge inc Cable)
Origin	UK

Specifications may be subject to change without prior notice

GILL

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1957-012 Iss 6

MaxiMet

GMX541 Compact Weather Station

The MaxiMet range of compact weather stations is designed and manufactured by Gill Instruments. MaxiMet products use reliable, high quality instruments to provide accurate meteorological information in a wide variety of applications.

GMX541 Features

Temperature, humidity, pressure. A combined instrument mounted inside three double louvered, naturally aspirated radiation shields with no moving parts. The results are high performance across each measurement over long periods of time.

Solar radiation. An integrated solar radiation sensor/pyranometer. This highly accurate instrument uses a thermal sensor mounted at its base and protected by a single glass dome to record the amount of light in watts per metre^2. It is widely used in agro-meteorological applications and for monitoring the performance of solar panels.

Wind. Wind speed and direction measurements are provided via an ultrasonic sensor and the addition of an electronic compass provides apparent wind measurements. Average speed and direction together with WMO averages and gust data is also provided. Add GPS (optional) to provide true wind and other features.

Precipitation. The Optical rain gauge supplied provides excellent performance in a low maintenance package. The Optical RG connects via a 20m cable (included).

TEMP, HUMIDITY & PRESSURE

- Air Pressure / Temperature
- Relative / Absolute humidity
- Naturally aspirated UV stable Radiation shield
- Protection against wind-blown precipitation/dust

SOLAR RADIATION

- Complies with ISO 9060 and WMO Guidelines
- Output in watts per metre^2
- 180° hemispherical field of view
- Records sunshine hours
- Integrated Hukseflux LP02 pyranometer
- Glass dome

WIND

- Wind speed & direction
- Apparent and true wind (with GPS)
- WMO wind averages and gust
- Compass

GPS (OPTION)

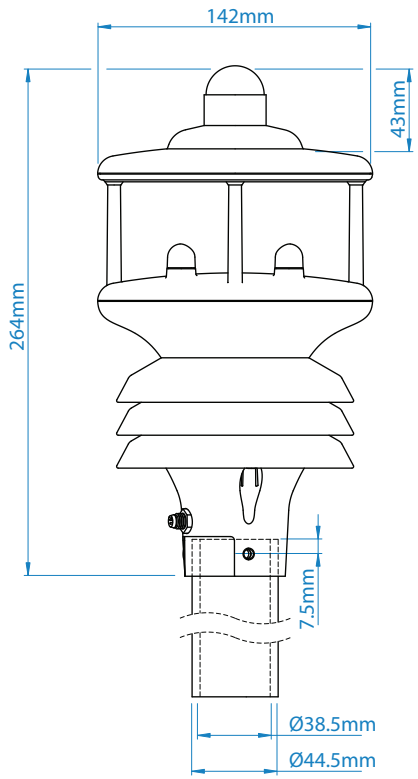
- Height above sea level *m*
- Sunrise/sunset
- Position of the sun
- Twilight
- Solar Noon
- MSL pressure

PRECIPITATION (INPUT)

- 0.08 mm tip Optical rain gauge (customer selectable)
- 20m Cable

PARAMETERS

- Solar radiation *W/m^2*
- Sunshine hours *hrs*
- Solar Noon
- Temperature *°C / °F / °K*
- Relative humidity *% Rh,*
- Barometric pressure *hPa, mbar, mm Hg, In Hg*
- Wet bulb temperature *°C / °F / °K*
- Absolute humidity *g/m^3*
- Air density *kg/m^3*
- Precipitation *mm/hr, mm/total, in/hr, in/total*
- Wind speed *m/s, km/hr, mph, kts, ft/min*
- Wind direction °
- Wind chill *°C / °F / °K*
- True/apparent wind
- Angle of Tilt
- Outputs *RS232, 422, 485 (ASCII), SDI-12, NMEA, MODBUS, Analogue (option)*



All MaxiMet Models Feature

- Quality Measurements
- Lightweight and Robust
- Low Power Mode
- Free of Charge Software
- Gill Proven Reliability
- Compact Integrated Design
- Real Time Output
- Easy Installation
- Gill Customer Support
- 2 Year Warranty

MaxiMet

Optical Rain Gauge

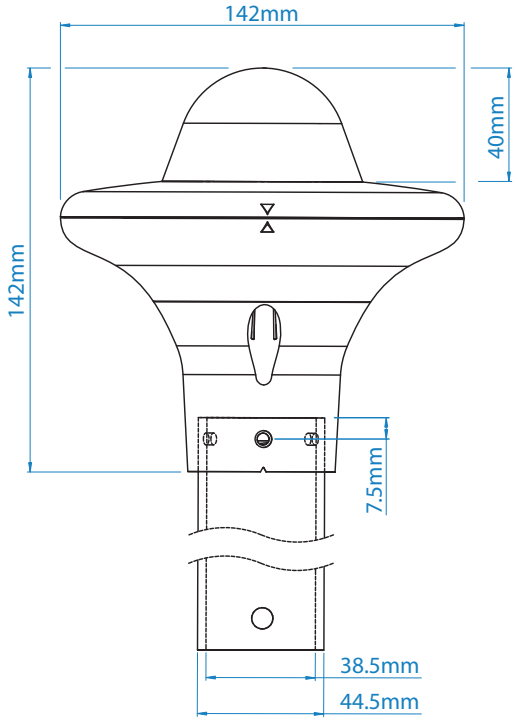
The MaxiMet range of compact weather stations is designed and manufactured by Gill Instruments. MaxiMet products use reliable, high quality instruments to provide accurate meteorological information in a wide variety of applications.

Optical Rain Gauge Features

Precipitation. An integrated optical rain gauge that automatically senses water hitting its outside surface and provides tip measurement.

Algoirthms in the GMX541 interpret this tip data and simulate the output of a tipping bucket rain gauge as part of the serial output from the GMX541. The optical rain gauge has no moving parts associated with tipping bucket gauges.

Output and power to the GMX541 is via a 20m cable (included) that the user can cut to length.



SPECIFICATION	
Measurement type	Optical RG
Range	0 to > 300 mm/hr
Precipitation Resolution	0.08 mm (Customer Selectable)
Repeatability	3%
Sampling Rate	1 Hz
Units	mm/hr, mm/total, in/hr, in/total
Heating	N/A
Output	Contact closure via 20m cable to GMX
Power Supply	12Vdc via above 20m cable to GMX

Applications

- Building and Industrial Controls
- Authorities
- Transport
- Coastal
- Agricultural
- Safety
- Educational
- Commercial
- Energy

WIND SPEED	
Range	0.01 m/s to 60 m/s
Accuracy	± 3% to 40 m/s, ± 5% to 60 m/s
Resolution m/s	0.01
Starting Threshold	0.01 m/s
Sampling Rate	1 Hz
Units	m/s, km/hr, mph, kts, ft/min

WIND DIRECTION	
Range	0-359°
Accuracy	± 3° to 40 m/s ± 5° to 60 m/s
Resolution	1°
Starting Threshold	0.05 m/s
Sampling Rate	1 Hz
Units	Degrees

TEMPERATURE	
Range	-40°C to +70°C
Resolution	0.1
Accuracy	± 0.3°C @ 20°C
Sampling Rate	1 Hz
Units	°C, °F, °K

HUMIDITY	
Range	0-100%
Resolution	1%
Accuracy	± 2% @ 20°C (10%-90% RH)
Sampling Rate	1 Hz
Units	% Rh, g/m^3

DEW POINT	
Range	-40°C to +70°C
Resolution	0.1
Accuracy	± 0.3°C @ 20°C
Units	°C, °F, °K
Sampling Rate	1 Hz

PRESSURE	
Range	300 to 1100 hpa
Resolution	0.1 hPa
Accuracy	± 0.5 hPa @ 25°C
Sampling Rate	1 Hz
Units	hPa, mbar, mmHg, inHg

PRECIPITATION	
Measurement type	Optical RG
Range	0 to > 300 mm/hr
Precipitation Resolution	0.08 mm (Customer Selectable)
Repeatability	3%
Sampling Rate	1 Hz
Units	mm/hr, mm/total, in/hr, in/total
Heating	N/A
Output	Contact closure via 20m cable to GMX

GLOBAL SOLAR RADIATION	
Wavelength Sensitivity	300 to 3000 nm
Output Range	0 to 1600 W/m^2
Resolution	1 W/m^2
DIN Standard	ISO 9060 Second Class
Sampling Rate	1 Hz
Units	W/m^2

OUTPUTS	
Output rate	1/s, 1/min, 1/hr
Digital Comms Modes	Serial RS232, RS422, RS485, SDI-12, NMEA, MODBUS, ASCII
Analogue Outputs	Available via separate optional device

POWER	
Power Supply	5 to 30 Vdc
Power (Nominal) 12 Vdc	64mA continuous high mode. 0.7mA eco-power mode (1 hour polled)

ENVIRONMENTAL CONDITIONS	
IP Rating	66
Operational Temperature Range:	-40°C to +70°C
EMC Standard:	BS EN 61326-2-1:2013 FCC, CFR Title 47, Part 15, Subpart B, Class A digital device
CE Marking	YES
RoHS compliant	YES
Weight	0.8 Kg (+ 1.1 kg Rain Gauge inc 20m Cable)
Origin	UK

Specifications may be subject to change without prior notice

GILL

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1957-017 Iss 10

MaxiMet

GMX550 Compact Weather Station

The MaxiMet range of compact weather stations is designed and manufactured by Gill Instruments. MaxiMet products use reliable, high quality instruments to provide accurate meteorological information in a wide variety of applications.

GMX550 Features

Temperature, humidity, pressure. A combined instrument mounted inside three double louvered, naturally aspirated radiation shields with no moving parts. The results are high performance across each measurement over long periods of time.

Wind. Wind speed and direction measurements are provided via an ultrasonic sensor and the addition of an electronic compass provides apparent wind measurements. Average speed and direction together with WMO averages and gust data is also provided. Add GPS (optional) to provide true wind and other features.

Precipitation. An integrated side connector allows users to connect any tipping bucket rain gauge. The measurements are included in the output data string.

TEMP, HUMIDITY & PRESSURE

- Air Pressure / Temperature
- Relative / Absolute humidity
- Naturally aspirated UV stable radiation shield
- Protection against wind-blown precipitation/dust

WIND

- Wind speed & direction
- Apparent and true wind (with GPS)
- WMO wind averages and gust
- Compass

GPS (OPTION)

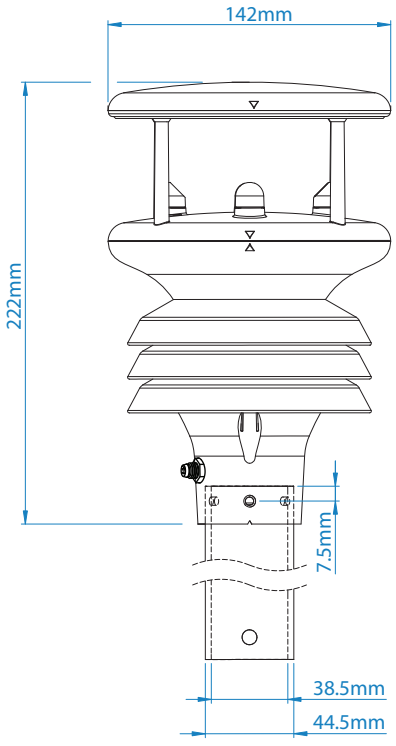
- Height above sea level *m*
- Sunrise/sunset
- Position of the sun
- Solar Noon
- Twilight
- MSL pressure

PRECIPITATION (INPUT)

- Ready for customer supplied custom tip rain gauge via connector

PARAMETERS

- Temperature *°C / °F / °K*
- Relative humidity *% Rh*
- Barometric pressure *hPa, mbar, mm Hg, In Hg*
- Wet bulb temperature *°C / °F / °K*
- Absolute humidity *g/m³*
- Air density *kg/m³*
- Wind speed *m/s, km/hr, mph, kts, ft/min*
- Wind direction °
- Wind chill *°C / °F / °K*
- True/apparent wind
- Precipitation *mm/hr, mm/total, in/hr, in/total*
- Angle of Tilt
- Outputs *RS232, 422, 485 (ASCII), SDI-12, NMEA, MODBUS, Analogue (option)*



All MaxiMet Models Feature

- Quality Measurements
- Lightweight and Robust
- Low Power Mode
- Free of Charge Software
- Gill Proven Reliability
- Compact Integrated Design
- Real Time Output
- Easy Installation
- Gill Customer Support
- 2 Year Warranty

* Please see the manual for a full list of derived parameters

Applications

- Building and Industrial Controls
- Authorities
- Transport
- Coastal
- Agricultural
- Safety
- Educational
- Commercial
- Energy

WIND SPEED	
Range	0.01 m/s to 60 m/s
Accuracy	± 3% to 40 m/s, ± 5% to 60 m/s
Resolution m/s	0.01
Starting Threshold	0.01 m/s
Sampling Rate	1 Hz
Units	m/s, km/hr, mph, kts, ft/min

WIND DIRECTION	
Range	0-359°
Accuracy	± 3° to 40 m/s ± 5° to 60 m/s
Resolution	1°
Starting Threshold	0.01 m/s
Sampling Rate	1 Hz
Units	Degrees

TEMPERATURE	
Range	-40°C to +70°C
Resolution	0.1
Accuracy	± 0.3°C @ 20°C
Sampling Rate	1 Hz
Units	°C, °F, °K

HUMIDITY	
Range	0-100%
Resolution	1%
Accuracy	± 2% @ 20°C (10%-90% RH)
Sampling Rate	1 Hz
Units	% Rh, g/m^3

DEW POINT	
Range	-40°C to +70°C
Resolution	0.1
Accuracy	± 0.3°C @ 20°C
Units	°C, °F, °K
Sampling Rate	1 Hz

PRESSURE	
Range	300 to 1100 hpa
Resolution	0.1 hPa
Accuracy	± 0.5 hPa @ 25°C
Sampling Rate	1 Hz
Units	hPa, mbar, mmHg, inHg

PRECIPITATION (Input)	
Measurement input type	TBRG
Range	0-1000 mm/hr
Precipitation Resolution	From 0.001 mm
Units	mm/hr, mm/total, in/hr, in/total
Input to GMX	Contact closure via an M8 male 4-Pin connector Optional 20m cable or mating female connector required

OUTPUTS	
Output rate	1/s, 1/min, 1/hr
Digital Comms Modes	Serial RS232, RS422, RS485, SDI-12, NMEA, MODBUS, ASCII
Analogue Outputs	Available via separate optional device

POWER	
Power Supply	5 to 30 Vdc
Power (Nominal) 12 Vdc	25 mA continuous high mode. 0.7 mA eco-power mode (1 hour polled)

ENVIRONMENTAL CONDITIONS	
IP Rating	66
Operational Temperature Range:	-40°C to +70°C
EMC Standard:	BS EN 61326-2-1:2013 FCC, CFR Title 47, Part 15, Subpart B, Class A digital device
CE Marking	YES
RoHS compliant	YES
Weight	0.7 Kg
Origin	UK

Specifications may be subject to change without prior notice

GILL

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1957-020 Iss 5

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MaxiMet

GMX551 Compact Weather Station

GILL

The MaxiMet range of compact weather stations is designed and manufactured by Gill Instruments. MaxiMet products use reliable, high quality instruments to provide accurate meteorological information in a wide variety of applications.

GMX551 Features

Temperature, humidity, pressure. A combined instrument mounted inside three double louvered, naturally aspirated radiation shields with no moving parts. The results are high performance across each measurement over long periods of time.

Solar radiation. An integrated solar radiation sensor/pyranometer. This highly accurate instrument uses a thermal sensor mounted at its base and protected by a single glass dome to record the amount of light in watts per metre^2. It is widely used in agro-meteorological applications and for monitoring the performance of solar panels.

Wind. Wind speed and direction measurements are provided via an ultrasonic sensor and the addition of an electronic compass provides apparent wind measurements. Average speed and direction together with WMO averages and gust data is also provided. Add GPS (optional) to provide true wind and other features.

Precipitation. An integrated side connector allows users to connect any tipping bucket rain gauge and select the tip size from 0-9.998 mm. The measurements are included in the output data string.

TEMP, HUMIDITY & PRESSURE

- Air Pressure / Temperature
- Relative / Absolute humidity
- Naturally aspirated UV stable Radiation shield
- Protection against wind-blown precipitation/dust

SOLAR RADIATION

- Complies with ISO 9060 and WMO Guidelines
- Output in watts per metre^2
- 180° hemispherical field of view
- Records sunshine hours
- Integrated Hukseflux LP02 pyranometer
- Glass dome

WIND

- Wind speed & direction
- Apparent and true wind (with GPS)
- WMO wind averages and gust
- Compass

GPS (OPTION)

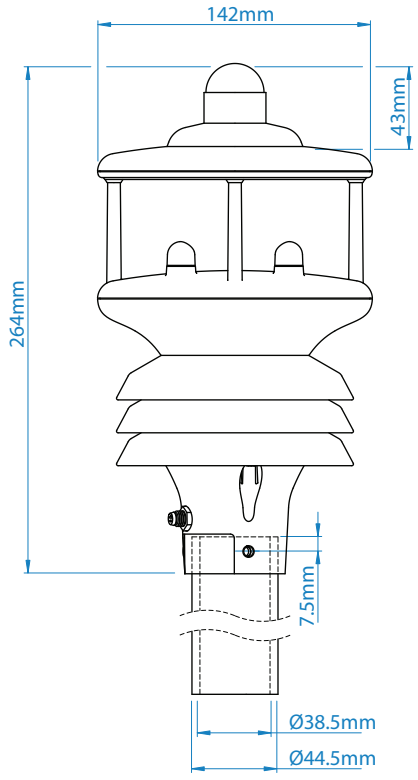
- Height above sea level *m*
- Sunrise/sunset
- Position of the sun
- Twilight
- MSL pressure

PRECIPITATION (INPUT)

- Ready for customer supplied 0-9.998 mm tipping bucket rain gauge via connector

PARAMETERS

- Solar radiation *w/m^2*
- Sunshine hours *hrs*
- Solar Noon
- Temperature *°C / °F / °K*
- Relative humidity *% Rh*
- Barometric pressure *hPa, mbar, mm Hg, In Hg*
- Wet bulb temperature *°C / °F / °K*
- Absolute humidity *g/m^3*
- Air density *kg/m^3*
- Precipitation *mm/hr, mm/total, in/hr, in/total*
- Wind speed *m/s, km/hr, mph, kts, ft/min*
- Wind direction °
- Wind chill *°C / °F / °K*
- True/apparent wind
- Angle of Tilt
- Outputs *RS232, 422, 485 (ASCII), SDI-12, NMEA, MODBUS, Analogue (option)*



* Please see the manual for a full list of derived parameters

All MaxiMet Models Feature

- Quality Measurements
- Lightweight and Robust
- Low Power Mode
- Free of Charge Software
- Gill Proven Reliability
- Compact Integrated Design
- Real Time Output
- Easy Installation
- Gill Customer Support
- 2 Year Warranty

Applications

- Building and Industrial Controls
- Authorities
- Transport
- Coastal
- Agricultural
- Safety
- Educational
- Commercial
- Energy

WIND SPEED	
Range	0.01 m/s to 60 m/s
Accuracy	± 3% to 40 m/s, ± 5% to 60 m/s
Resolution m/s	0.01
Starting Threshold	0.01 m/s
Sampling Rate	1 Hz
Units	m/s, km/hr, mph, kts, ft/min

WIND DIRECTION	
Range	0-359°
Accuracy	± 3° to 40 m/s ± 5° to 60 m/s
Resolution	1°
Starting Threshold	0.05 m/s
Sampling Rate	1 Hz
Units	Degrees

TEMPERATURE	
Range	-40°C to +70°C
Resolution	0.1
Accuracy	± 0.3°C @ 20°C
Sampling Rate	1 Hz
Units	°C, °F, °K

HUMIDITY	
Range	0-100%
Resolution	1%
Accuracy	± 2% @ 20°C (10%-90% RH)
Sampling Rate	1 Hz
Units	% Rh, g/m^3

DEW POINT	
Range	-40°C to +70°C
Resolution	0.1
Accuracy	± 0.3°C @ 20°C
Units	°C, °F, °K
Sampling Rate	1 Hz

PRESSURE	
Range	300 to 1100 hpa
Resolution	0.1 hPa
Accuracy	± 0.5 hPa @ 25°C
Sampling Rate	1 Hz
Units	hPa, mbar, mmHg, inHg

PRECIPITATION (Input)	
Measurement input type	TBRG
Range	0-1000 mm/hr
Precipitation Resolution	0-9.998 mm Software selectable
Units	mm/hr, mm/total, mm/24 hr, in/hr, in/total, in/24 hr
Input to GMX	Contact closure via an M8 male 4-Pin connector Optional 20m cable or mating female connector required

GLOBAL SOLAR RADIATION	
Wavelength Sensitivity	300 to 3000 nm
Output Range	0 to 1600 W/m^2
Resolution	1 W/m^2
DIN Standard	ISO 9060 Second Class
Sampling Rate	1 Hz
Units	W/m^2

OUTPUTS	
Output rate	1/s, 1/min, 1/hr
Digital Comms Modes	Serial RS232, RS422, RS485, SDI-12, NMEA, MODBUS, ASCII
Analogue Outputs	Available via separate optional device

POWER	
Power Supply	5 to 30 Vdc
Power (Nominal) 12 Vdc	25 mA continuous high mode. 0.7 mA eco-power mode (1 hour polled)

ENVIRONMENTAL CONDITIONS	
IP Rating	66
Operational Temperature Range:	-40°C to +70°C
EMC Standard:	BS EN 61326-2-1:2013 FCC, CFR Title 47, Part 15, Subpart B, Class A digital device
CE Marking	YES
RoHS compliant	YES
Weight	0.8 Kg
Origin	UK

Specifications may be subject to change without prior notice

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1957-013 Iss 6

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MaxiMet

GMX600 Compact Weather Station

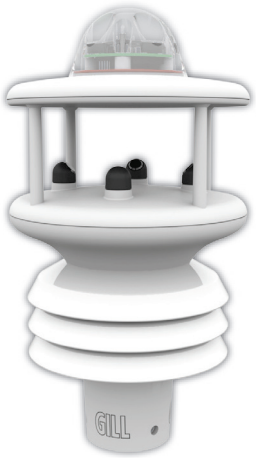
The MaxiMet range of compact weather stations is designed and manufactured by Gill Instruments. MaxiMet products use reliable, high quality instruments to provide accurate meteorological information in a wide variety of applications.

GMX600 Features

Temperature, humidity, pressure. A combined instrument mounted inside three double louvered, naturally aspirated radiation shields with no moving parts. The results are high performance across each measurement over long periods of time.

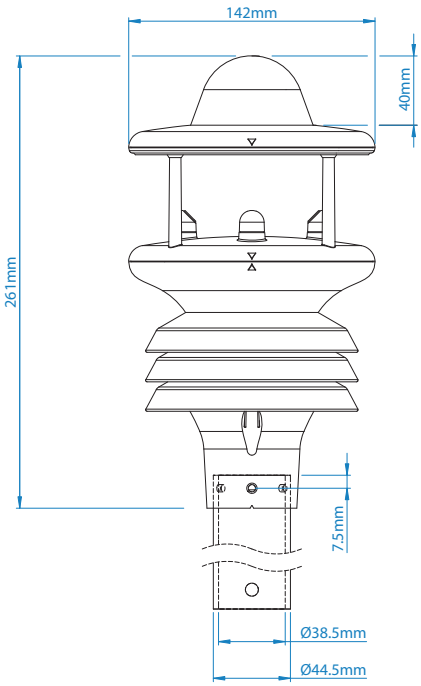
Wind. Wind speed and direction measurements are provided via an ultrasonic sensor and the addition of an electronic compass provides apparent wind measurements. Average speed and direction together with WMO averages and gust data is also provided. Add GPS (optional) to provide true wind and other features.

Precipitation. An integrated optical rain gauge that automatically senses water hitting its outside surface and provides measurements based on the size and number of drops. Algorithms interpret this data and simulate the output of a tipping bucket rain gauge in a serial format. The optical rain gauge has no moving parts associated with tipping bucket gauges.



TEMP, HUMIDITY & PRESSURE	PRECIPITATION	WIND	PARAMETERS
▪ Air Pressure / Temperature ▪ Relative / Absolute humidity ▪ Naturally aspirated UV stable Radiation shield ▪ Protection against wind-blown precipitation/dust	▪ Rainfall total ▪ Rainfall intensity ▪ Rainfall Y/N ▪ Emulated tipping bucket ▪ Integrated heater ▪ No moving parts ▪ 0.08 mm tip (customer select)	▪ Wind speed & direction ▪ Apparent and true wind (with GPS) ▪ WMO wind averages and gust ▪ Compass	▪ Temperature *°C / °F / °K* ▪ Relative humidity *% Rh* ▪ Barometric pressure *hPa, mbar, mm Hg, In Hg* ▪ Absolute humidity *g/m³* ▪ Air density *kg/m3* ▪ Precipitation *mm/hr, mm/total, in/hr, in/total* ▪ Wind speed *m/s, km/hr, mph, kts, ft/min* ▪ Wind direction ° ▪ True/apparent wind ▪ Wind chill *°C / °F / °K* ▪ Wet bulb temperature *°C / °F / °K* ▪ Angle of Tilt ▪ Outputs *RS232, 422, 485 (ASCII), SDI-12, NMEA, MODBUS, Analogue (option)*

GPS (OPTION)
▪ Height above sea level *m* ▪ Sunrise/sunset ▪ Position of the sun ▪ Twilight ▪ Solar Noon ▪ MSL pressure



All MaxiMet Models Feature

- Quality Measurements
- Lightweight and Robust
- Low Power Mode
- Free of Charge Software
- Gill Proven Reliability
- Compact Integrated Design
- Real Time Output
- Easy Installation
- Gill Customer Support
- 2 Year Warranty

Applications

- Building and Industrial Controls
- Authorities
- Transport
- Coastal
- Agricultural
- Safety
- Educational
- Commercial
- Energy

WIND SPEED	
Range	0.01 m/s to 60 m/s
Accuracy	± 3% to 40 m/s, ± 5% to 60 m/s
Resolution m/s	0.01
Starting Threshold	0.01 m/s
Sampling Rate	1 Hz
Units	m/s, km/hr, mph, kts, ft/min

WIND DIRECTION	
Range	0-359°
Accuracy	± 3° to 40 m/s ± 5° to 60 m/s
Resolution	1°
Starting Threshold	0.05 m/s
Sampling Rate	1 Hz
Units	Degrees

TEMPERATURE	
Range	-40°C to +70°C
Resolution	0.1
Accuracy	± 0.3°C @ 20°C
Sampling Rate	1 Hz
Units	°C, °F, °K

HUMIDITY	
Range	0-100%
Resolution	1%
Accuracy	± 2% @ 20°C (10%-90% RH)
Sampling Rate	1 Hz
Units	% Rh, g/m^3

DEW POINT	
Range	-40°C to +70°C
Resolution	0.1
Accuracy	± 0.3°C @ 20°C
Units	°C, °F, °K
Sampling Rate	1 Hz

PRESSURE	
Range	300 to 1100 hpa
Resolution	0.1 hPa
Accuracy	± 0.5 hPa @ 25°C
Sampling Rate	1 Hz
Units	hPa, mbar, mmHg, inHg

PRECIPITATION	
Measurement type	Optical
Range	0 to >300 mm/hr
Precipitation Resolution	0.08 mm (Customer selectable)
Repeatability	3%
Sampling Rate	1 Hz
Units	mm/hr, mm/total, in/hr, in/total
Heating	YES

OUTPUTS	
Output rate	1/s, 1/min, 1/hr
Digital Comms Modes	Serial RS232, RS422, RS485, SDI-12, NMEA, MODBUS, ASCII
Analogue Outputs	Available via separate optional device

POWER	
Power Supply	5 to 30 Vdc
Power (Nominal) 12 Vdc	64 mA continuous high mode. 0.7 mA eco-power mode (1 hour polled)

ENVIRONMENTAL CONDITIONS	
IP Rating	66
Operational Temperature Range:	-40°C to +70°C
EMC Standard:	BS EN 61326-2-1:2013 FCC, CFR Title 47, Part 15, Subpart B, Class A digital device
CE Marking	YES
RoHS compliant	YES
Weight	0.8 Kg
Origin	UK

Specifications may be subject to change without prior notice

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OBSERVATOR
instruments

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