



MAXIMET GMX603

High quality integrated weather station with high accuracy optical precipitation sensor.

PRODUCT OVERVIEW

MaxiMet compact weather stations are simple to install, use and maintain. In addition to providing measured parameters, the products derive additional parameters and data is output as a single string and available on a range of communications protocols.

MaxiMet weather stations benefit from the same technology used in Gill's scientific product range, ensuring measurement accuracy, low maintenance and continuous status reporting.

The MaxiMet family includes a range of sensor configurations allowing customers to select the model most appropriate to your needs.

KEY FEATURES

- 01** Six measured parameters:
Wind speed & direction, temperature, humidity, pressure, rainfall.
- 02** Includes integrated high accuracy optical precipitation sensor with no moving parts requiring minimal maintenance.
[See TruMet PW100 datasheet for more specific information.](#)
- 03** Multiple additional derived parameters based on combining measured parameters, such as gust, average wind speed and dew point.
- 04** High quality, accurate, solid state sensors.
- 05** 2-axis compass.
- 06** Optional integrated GPS capability available to provide location, GPS timestamp and a calculation of true wind if the platform is moving.
- 07** Optional low power heating.

BENEFITS

- High quality measurement data due to careful sensor selection and extensive design testing and verification.
- Easy to set-up and integrate using comprehensive software to select the reported and derived parameters and measurement units.
- Easy to install and long operational life, due to a compact, robust design and the selection of low maintenance sensors.
- Suitable for use with battery or solar systems in low power mode.

MaxiMet GMX603 measures liquid precipitation using high accuracy optic technology.



MAXIMet GMX603

High quality integrated weather station with high accuracy optical precipitation sensor.

TYPICAL APPLICATIONS

- Control systems including smart buildings, agriculture and industry
- Environmental monitoring
- Solar farms
- Reporting systems for transport and safety
- Low power/solar powered deployments and IoT applications

TECHNICAL SPECIFICATION

WIND SPEED	
Range	0-60 m/s
Accuracy	0-10 m/s 0.3 m/s RMSE 10-40 m/s 3% RMSE 40-60 m/s 5% RMSE
Resolution	0.01 m/s
Starting threshold	0.01 m/s
Units of measurement	m/s, km/h, mph, kts, ft/min

WIND DIRECTION	
Range	0-360°
Accuracy	0.5 m/s-40 m/s ±3° 40-60 m/s ±5°
Resolution	1°
Units of measurement	degrees

AIR TEMPERATURE	
Range	-40°C to +70°C with heating
Accuracy	±0.3°C
Resolution	0.1°C
Units of measurement	°C, °F, K

RELATIVE HUMIDITY	
Range	0-100% RH
Accuracy	typically ±2% RH across full range
Resolution	0.1% RH
Units of measurement	% RH, g/m ³

BAROMETRIC PRESSURE	
Range	300-1250 hPa
Accuracy 900-1100 hPa, 25-40°C	Absolute (typically) ±0.4 hPa Relative (typically) ±0.08 hPa
Resolution	0.1 hPa
Units of measurement	hPa, mbar, mmHg, inHg

PRECIPITATION	
Measurement type	Optical
Intensity range	0 to 200 mm/hr
Accuracy	≤ 5%
Tip size	0.1 mm
Units of measurement	mm/hr, mm total, in/hr, in total
Precipitation types	Liquid precipitation

OUTPUTS	
Digital comms modes	RS232, RS422 RS485, SDI-12
Protocols	ASCII, SDI-12 v1.3, NMEA 0183 MODBUS (RTU and ASCII)
Data outputs rates	1/s, 1/min, 1/hour, or polled

POWER SUPPLY	
Input voltage	5-30 VDC (10-30 VDC for heated models)
Average current consumption @ 12 VDC	50 mA continuous mode (std unit) 400 mA total with heating option +9 mA with GPS option

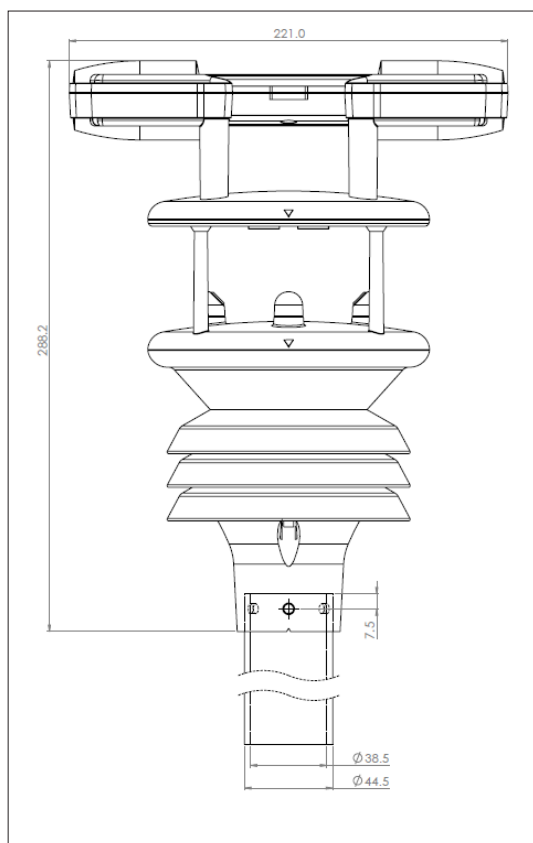
MECHANICAL	
Construction	UV stabilized thermoplastic
Fittings	Fit to 44.45 mm (1.75 in) pole or mast
Weight	1.1 kg
Connector type	8-way M12 connector

ENVIRONMENTAL	
Protection class	IP66
Operating temp.	-35°C to +70°C -40°C to +70°C with heating option
Storage temp	-40°C to +70°C

STANDARD EQUIPMENT (supplied with product)	
MaxiMet product	
Mating connector	
MetSet software*, to set-up and configure MaxiMet (comms mode, measurement units, reporting intervals, derived parameters, etc.)	
MetView software*, to view reported parameters	
MaxiMet User Manual*	
* downloadable from Gill Instruments website	

OPTIONS	
GPS	Available as an option. Enables reporting of location, height, real-time clock, true wind (for vehicle mounting applications)
Heating	Available as an option for operation in extremely low temperatures

WARRANTY	
Warranty	24 months



Designed and manufactured in the UK by
Gill Instruments Limited.

EXAMPLE DERIVED PARAMETERS FOR MAXIMET RANGE

(model dependent) A full list of derived parameters is available in the User Manual, downloadable from gillinstruments.com

Average wind speed*	Sunrise
Average wind direction*	Solar noon
Corrected wind speed	Twilight
Corrected wind direction	Sunset
Gust wind speed & direction*	Position of sun
Dew point	Angle of tilt
Wind chill	Pressure at sea level
Absolute humidity	Heat index

* WMO compliant

ACCESSORIES

A list of the accessories available to support MaxiMet is provided on the MaxiMet Accessories Datasheet, which can be downloaded from gillinstruments.com

MaxiMet

Compact Weather Stations

Reliable, high quality compact integrated weather stations

MaxiMet weather stations are supported by a range of accessories. These accessories can be used to extend, upgrade and enhance the weather station. The accessories have been designed, or selected, to ensure the long term performance of MaxiMet products.

Accessories	Part Number
MaxiMet weather station with integrated rain gauge	10000000
MaxiMet weather station with integrated rain gauge and wind sensor	10000001
MaxiMet weather station with integrated rain gauge and wind sensor and solar radiation sensor	10000002
MaxiMet weather station with integrated rain gauge and wind sensor and solar radiation sensor and solar radiation sensor	10000003
MaxiMet weather station with integrated rain gauge and wind sensor and solar radiation sensor and solar radiation sensor and solar radiation sensor	10000004
MaxiMet weather station with integrated rain gauge and wind sensor and solar radiation sensor and solar radiation sensor and solar radiation sensor and solar radiation sensor	10000005
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MaxiMet weather station with integrated rain gauge and wind sensor and solar radiation sensor and solar radiation sensor and solar radiation sensor and solar radiation sensor and solar radiation sensor and solar radiation sensor and solar radiation sensor and solar radiation sensor and solar radiation sensor	10000010

Accessory Descriptions

- Connector (1405PR-000)**
A replacement connector is available if required. The connector is compatible with all MaxiMet models and is supplied with pins.
- Cables for operational use**
The standard cable can be used to connect MaxiMet to power and communication. The cable can be supplied as a 10m cable with pins (part 1405PR-000), or as the meter (1405PR-001).
- Cable for setup/configuration (1952-10000)**
For cable use, the cable must be connected to a computer. Using MaxiMet, the setup of the weather unit can be configured to suit a particular requirement. The cable is 10m long and supplied with a MaxiMet connector on one end and a USB connector on the other end.

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Accessories Datasheet



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OTHER MAXIMET MODELS

	Wind	Temp, humidity, pressure	Rain	Solar	Compass, GPS	Low power heating
GMX200	Y				Y, as option	
GMX240	Y		Integrated rain indicator		Y, as option	
GMX260	Y				Y 6-axis, option	
GMX300		Y				
GMX301		Y		Y		
GMX400		Y	Integrated rain indicator			
GMX500	Y	Y			Y, as option	Option
GMX501	Y	Y		Y	Y, as option	Option
GMX550	Y	Y	Tipping bucket connector		Y, as option	Option
GMX551	Y	Y	Tipping bucket connector	Y	Y, as option	Option
GMX560	Y	Y			Y 6-axis, option	Option
GMX600	Y	Y	Integrated rain indicator		Y, as option	Option
GMX603	Y	Y	Integrated rain sensor		Y, as option	Option

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MORE INFO

For more information about Gill's optical rain gauges or weather stations, please email contact.gi@gill.group