



GMX500 Compact Weather Station

High quality, easy-to-use, integrated weather station

MaxiMet compact weather stations are designed to be 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 their needs.

Typical applications

- Control systems including smart buildings, agriculture and industry.
- Solar farms.
- Road and rail.
- Ports and harbours.
- Reporting systems for transport and safety.
- Low power/solar powered deployments and IoT applications.

MaxiMet GMX500 key features

Five measured parameters:

Wind speed & direction, temperature, humidity, pressure, optional heating, optional GPS function.

- Multiple additional derived parameters based on combining measured parameters, such as gust, average wind speed and dew point.
- High quality, accurate, solid state sensors.
- 2-axis compass.
- Optional integrated GPS capability available to provide location, GPS timestamp and a calculation of true wind if the platform is moving.
- 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 required.
- 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 GMX500 measures 5 parameters.



MaxiMet compact weather stations are integrated into systems monitoring gas and particulate concentrations in the air.







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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
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	1% RH
Units of measurement	% RH, g/m³

BAROMETRIC PRESSURE		E
	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

WARRANTY	
Warranty	24 months

OUTPUTS	
Digital comms modes	RS232, RS422 RS485, SDI-12, NMEA 0183, MODBUS
Protocols	ASCII, SDI-12 v1.3, 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)
Current spec @ 12 VDC	25 mA continuous mode (std unit) 400 mA total with heating +10 mA with GPS option 0.7 mA eco-power mode

MECHANICAL	
Construction	UV stabilized thermoplastic
Fittings	Fit to 30mm to 58mm pole or mast
Weight	0.7 kg
Connector type	9-way clipper 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

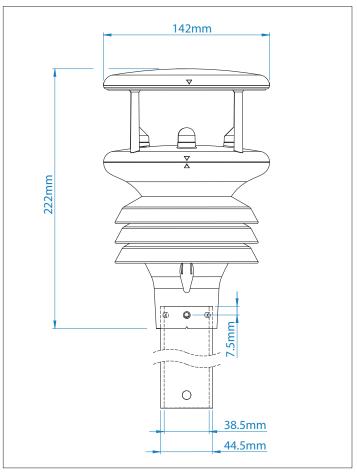






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EXAMPLE DERIVED PARAMETERS FOR MAXIMET RANGE A full list of derived parameters is available in the User Manual which can be downloaded from gillinstruments.com					
Average wind speed	Sunrise				
Average wind direction	Solar noon				
Corrected wind 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				

ACCESSORIES	Compact Weather Stations Reliable, Figh quality compact, Princyaled weath MadMet weather stations are supposed by a range of a These excessors can be used to connectional and in these programmes of MadMet policyclassification to not term performance of MadMet policyclassification to not	coessories.
A list of the accessories available to support MaxiMet is provided on the MaxiMet Accessories Datasheet, which can be downloaded from gillinstruments.com	ACTION CONTROL	over and obte with pins port on a rit can be a rit can b

OTHER MAXIMET MODELS									
	Wind	Temperature, humidity, pressure	Rain	Solar	Compass, GPS	Low power heating			
GMX200	Υ				Y, as option				
GMX240	Υ		Integrated optical rain sensor		Y, as option				
GMX300		Y							
GMX301		Y		Υ					
GMX400		Y	Integrated optical rain sensor						
GMX501	Υ	Y		Υ	Y, as option	Y, as option			
GMX550	Υ	Y	Tipping bucket connector		Y, as option	Y, as option			
GMX551	Υ	Y	Tipping bucket connector	Υ	Y, as option	Y, as option			
GMX560	Υ	Y			Y, as option	Y, as option			
GMX600	Υ	Y	Integrated optical rain sensor		Y, as option	Y, as option			

For more information about MaxiMet®, please contact Gill Instruments.

Designed and manufactured in the UK by Gill Instruments Limited.

gillinstruments.com

