

GMX301 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 GMX301 key features

- Four measured parameters:
Temperature, humidity, pressure, solar radiation.
- Multiple additional derived parameters based on combining measured parameters, such as dew point, pressure at sea level, heat index and sunshine hours.
- High quality, accurate, solid state sensors.

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 GMX301 measures 4 parameters including solar radiation.



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

For pricing or any further information, please contact Omni Instruments Ltd.

GMX301 Compact Weather Station

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

AIR TEMPERATURE	
Range	-35°C to +70°C
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

SOLAR RADIATION	
Wavelength sensitivity	300 - 3000 nm
Output range	0-1600 W/m ²
Resolution	1 W/m ²
DIN standard	ISO 9060 Class: spectrally flat Class C
Units of measurement	W/m ²

WARRANTY	
Warranty	24 months

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
Average current consumption @ 12VDC	6 mA continuous mode (std unit) 1.3 mA eco-power mode (1/hr)

MECHANICAL	
Construction	UV stabilized thermoplastic
Fittings	Fit to 44.45 mm (1.75 in) pole or mast
Weight	0.6 kg
Connector type	9-way clipper connector

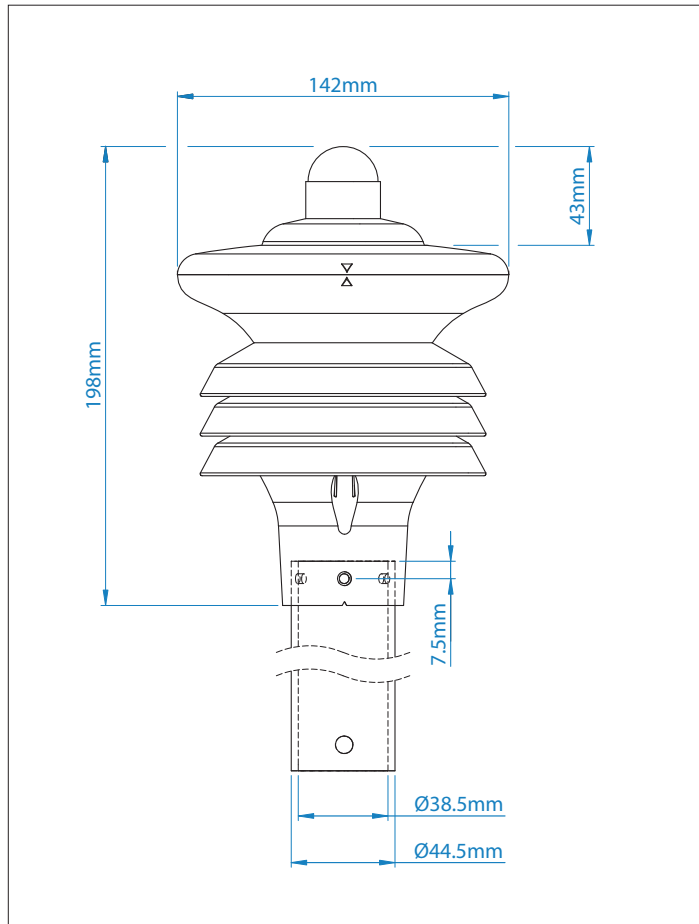
ENVIRONMENTAL	
Protection class	IP66
Operating temp.	-35°C to +70°C
Storage temp	-40°C to +70°C

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	

For pricing or any further information, please contact Omni Instruments Ltd.

GMX301 Compact Weather Station

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



EXAMPLE DERIVED PARAMETERS FOR MAXIMET RANGE

(model dependent) A full list of derived parameters is available in the User Manual

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



Compact Weather Stations
Available high quality compact integrated weather stations

MaxiMet weather stations are supported by a range of accessories. These accessories can be used to connect, install and maintain MaxiMet. The accessories have been designed to protect and enhance the long term performance of MaxiMet products.

Accessories	Part Number
1. MaxiMet weather station mounting bracket	1000001
2. MaxiMet weather station mounting bracket	1000002
3. MaxiMet weather station mounting bracket	1000003
4. MaxiMet weather station mounting bracket	1000004
5. MaxiMet weather station mounting bracket	1000005
6. MaxiMet weather station mounting bracket	1000006
7. MaxiMet weather station mounting bracket	1000007
8. MaxiMet weather station mounting bracket	1000008
9. MaxiMet weather station mounting bracket	1000009
10. MaxiMet weather station mounting bracket	1000010

Accessory Descriptions

- Connector (1000001-1000010)**
A weather station connector is available for each MaxiMet model and is supplied with pins.
- Cables for operational use**
The 4-pin cable can be used to connect MaxiMet to power and communication. The cable can be supplied as a 1m cable with pins fitted (1000011-1000015), or by the metre (1000016-1000020).
- Cable for setup configuration (1000021-1000025)**
The cable can be used to connect a MaxiMet to a USB port on a computer. Using MaxiMet, the setup of the MaxiMet can be configured to suit particular requirements. The cable is 1.5m long and includes a USB connector on one end and a USB connector on the other end.

OTHER MAXIMET MODELS

	Wind	Temperature, humidity, pressure	Rain	Solar	Compass, GPS	Low power heating
GMX200	Y				Y, as option	
GMX240	Y		Integrated optical rain sensor		Y, as option	
GMX260	Y				Y 6-axis, option	
GMX300		Y				
GMX400		Y	Integrated optical rain sensor			
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 optical rain sensor		Y, as option	Option

For pricing or any further information, please contact Omni Instruments Ltd.