# <u>MaxiMet</u>

# 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<sup>2</sup>. It is widely used in agro-meteorological applications and for monitoring the performance of solar panels.



TEMP, HUMIDITY & PRESSURE	SOLAR RADIATION	PARAMETERS
<ul> <li>Air Pressure / Temperature</li> </ul>	Complies with ISO 9060 and WMO Guidelines	• Solar radiation <i>w/m</i> <sup>2</sup>
<ul> <li>Relative / Absolute humidity</li> </ul>	<ul> <li>Output in watts per metre<sup>2</sup></li> </ul>	Sunshine hours hrs
<ul> <li>Naturally aspirated UV stable radiation shield</li> </ul>	<ul> <li>180° hemispherical field of view</li> </ul>	<ul> <li>Solar Noon</li> </ul>
<ul> <li>Protection against wind-blown precipitation/dust</li> </ul>	<ul> <li>Records sunshine hours</li> </ul>	■ Temperature °C/°F/°K
	<ul> <li>Integrated Hukseflux LP02 pyranometer</li> </ul>	Relative humidity % Rh
	<ul> <li>Glass dome</li> </ul>	Barometric pressure hPa, mbar, mm Hg, In Hg

- Wet bulb temperature °C/°F/°K
- Absolute humidity g/m<sup>3</sup>
- Air density kg/m3
- Angle of Tilt
- Outputs
   RS232, 422, 485 (ASCII), SDI-12, NMEA,
   MODBUS, Analogue (option)

Real Time Output

Gill Customer Support

Easy Installation

2 Year Warranty

#### 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
- With the second second

142mm

## MaxiMet

#### **Applications**

TEMPERATURE

Range Resolution

Accuracy Sampling Rate

Units

- Building and Industrial Controls
- Authorities
- Transport

- Coastal
- Agricultural
- Safety

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

HUMIDITY	
Range	0-100%
Resolution	1%
Accuracy	$\pm2\%$ @ 20°C (10%-90% RH)
Sampling Rate	1 Hz
Units	% Rh, g/m³

-40°C to +70°C

± 0.3°C @ 20°C

0.1

1 Hz

°C, °F, °K

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

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

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

- Educational
- Commercial
- Energy

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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