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

# 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**

MaxiMet

**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** WIND **GPS (OPTION)** PARAMETERS Air Pressure / Temperature Wind speed & direction • Height above sea level m ■ Temperature °C/°F/°K Relative / Absolute humidity Apparent and true wind (with GPS) Sunrise/sunset • Relative humidity % Rh Naturally aspirated UV stable WMO wind averages and gust Position of the sun Barometric pressure hPa, mbar, mm radiation shield Hg, In Hg Solar Noon Compass Protection against wind-blown ■ Wet bulb temperature °C/°F/°K Twilight precipitation/dust Absolute humidity q/m<sup>3</sup> MSL pressure Air density kg/m<sup>3</sup> Wind speed **PRECIPITATION (INPUT)** m/s, km/hr, mph, kts, ft/min 142mm Wind direction ° Ready for customer supplied ■ Wind chill °C/°F/°K custom tip rain gauge via connector 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) 222mm All MaxiMet Models Feature Quality Measurements Real Time Output Lightweight and Robust Easy Installation Low Power Mode Gill Customer Support Free of Charge Software 2 Year Warranty Gill Proven Reliability 0 Compact Integrated Design 38.5mm 44.5mm





## <u>MaxiMet</u>

### **Applications**

WIND SPEED

Resolution m/s

Sampling Rate

Starting Threshold

WIND DIRECTION

Range Accuracy

Units

Range

Accuracy

Resolution

Units

Range

Resolution

Sampling Rate

HUMIDITY

Accuracy

Units

Range Resolution

Accuracy Sampling Rate

Units

Starting Threshold

TEMPERATURE

Sampling Rate

Building and Industrial Controls

0.01 m/s to 60 m/s

m/s, km/hr, mph, kts, ft/min

± 3% to 40 m/s, ± 5% to 60 m/s

0.01

1 Hz

0-360° ± 3° to 40 m/s

1°

0.01 m/s

Degrees

-40°C to +70°C

± 0.3°C @ 20°C

1 Hz

0.1

1 Hz

°C, °F, °K

0-100%

1%

1 Hz

% Rh, g/m<sup>3</sup>

 $\pm$  5° to 60 m/s

0.01 m/s

- Authorities
- Transport

| <ul> <li>Coastal</li> </ul> |
|-----------------------------|
|-----------------------------|

- Agricultural
- Safety

| 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<br>input type   | TBRG  |  |
| Range                       | 0-1000 mm/hr  |  |
| Precipitation<br>Resolution | From 0.001 mm   |  |
| Units                       | mm/hr, mm/total, in/hr, in/<br>total  |  |
| Input to GMX                | Contact closure via an M8<br>male 4-Pin connector<br>Optional 20m cable or<br>mating female connector<br>required |  |
| Optional<br>Rain Gauge:     |   |  |
| 1957-PK-069                 | 10 · 2  |  |

- Educational
- Commercial
- Energy

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

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

| <b>ENVIRONMENTAL CONDITION</b> | S |
|--------------------------------|---|
|--------------------------------|---|

| IP Rating                         | 66  |
|-----------------------------------|---|
| Operational<br>Temperature Range: | -35°C to +70°C  |
| EMC Standard:                     | BS EN 61326-2-1:2013<br>FCC, CFR Title 47, Part<br>15, Subpart B, Class A<br>digital device |
| CE Marking                        | YES   |
| RoHS compliant                    | YES   |
| Weight                            | 0.7 Kg  |
| Origin                            | UK  |

Specifications may be subject to change without prior notice

 $\pm\,2\%\,@\,20^\circ\!C$  (10%-90% RH)



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