

GMX552 Compact Weather Station

High quality, easy-to-use, integrated weather station for heat stress monitoring

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

- Construction sites and other harsh working conditions.
- Sports events.
- Control systems for manufacturing, agriculture and industry.
- Reporting systems for transport and safety.
- Low power/solar powered deployments and IoT applications.

MaxiMet GMX552 key features

- Six measured parameters:
 - **Black globe temperature, wind speed & direction, temperature, humidity, pressure, optional GPS function.**
- Outputs WBGT in accordance with ISO 7243:2017 (up to 70°C).
- Multiple additional derived parameters.
- Wet bulb sensor can be added for increased accuracy.
- 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.

Benefits

- Early identification of dangerous working conditions increases worker welfare, reduces risk of sickness and supports long-term productivity.
- 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 GMX552 measures 6 parameters.



Heat stress monitoring in extreme environmental conditions is essential for worker safety and operational efficiency.

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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
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

BLACK GLOBE TEMPERATURE SENSOR	
Range	-35°C to +70°C
Accuracy	±0.5°C
Resolution	0.1°C
Units	°C (default), °F, K

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

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 @ 12 VDC	26 mA continuous mode (std unit) +9 mA with GPS option 1.3 mA eco-power mode (no GPS, 1/hr)

MECHANICAL	
Construction	UV stabilized thermoplastic
Fittings	Fit to 44.45 mm (1.75 in) pole or mast
Weight	1.29 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	

OPTIONS	
GPS	Available as an option. Enables reporting of location, height, real time clock, true wind (for vehicle mounting applications)
Wet bulb sensor	Available as an accessory to offer increased WBGT output accuracy.

