

# SapIP-WMET Weather Station



The SapIP-WMET is a complete ETp (Evapotranspiration) weather station which included the SapIP logger and the MaxiMet 500 compact weather station kit. The system comes with all software for programming, data collection, and calculation of ETp. The SapIP-WMET is low-cost weather station ideal for research, commercial, or agricultural applications. The system comes ready to mount on a 2" rigid pipe, or tripod.

This automatic ET weather station includes features offered only by the leaders in weather instrument technology. We back all components with a two-year warranty.

1 in. x 3 ft long pole and 2 ft cross-arm give flexibility and is easy to mount on any 2" pipe or tower with pipe adapters and mounting hardware supplied by Dynamax.

Dynamax proprietary software records data from the innovative Gill MaxiMet™ GMX500 and a reliable radiation sensor for plant or crop weather applications. The station internally calculates ETo evapotranspiration from the most advanced solution prepared by the Texas A&M University research staff to enhance the accuracy of prior ET computations, (Lascano, Van Bavel – A.S.A. 2006).

## MaxiMet™



MaxiMet is an advanced compact weather station designed and manufactured by Gill Instruments using proven technology to measure meteorological and environmental parameters to international standards. MaxiMet incorporates all the measurement parameters that meet the requirements of users in demanding applications where cost, quality and performance are essential.



## Features

- SapIP network for Agrisensors
- AgriSensors.NET data graphics
- MaxiMet 500 Compact weather station, with Solar PAR and rain gage
- Wind Speed & Direction Measurement
- Air Temperature Measurement
- Relative Humidity Measurement
- Barometric Pressure Measurement
- Dew Point Measurement
- No moving parts
- Digital sensor package, with SDI channel inputs
- Upto 10 IR Temp sensors
- High accuracy and high resolution



# Specifications

SapIP Logger	
Data Memory	40,000 Records- 3 mB (300 days @15 min)
8 Inputs-Differential	±2.5 V to ±100 uV in 7 ranges
Analog/ Digital Conv.	22 Bit accuracy (±0.4 uV)
Pulse Inputs	1 Switched 150 Hz max, 1- Magnetic Low voltage
Heater Power	1.5 A-from 1.5 V to 9.0 - Remote Setting
Excitation Voltage	150 mA at 5.0 Volts
Interval-Logging/ Transmit	10 minute to 1 hour (6 ranges), typical 15 minutes
Wireless Transmission	Range 350 m urban, 500 m Rural (50 mW power)
Antenna	7 dB Provided - out door, with surge protection
Size/ weight	7 x 30 cm/ 600g
Environmental	Sealed IP 67, waterproof, rain proof, -20 to 50 C

Wind Speed	
Range	0.1 m/s to 60 m/s
Accuracy	± 3% to 40 m/s, ± 5% to 60 m/s
Resolution	0.01 m/s (0.02 mph)
Wind Direction	
Range	0 to 359°
Accuracy	± 3° to 40 m/s, ± 5° to 60 m/s
Resolution	1°
Barometric Pressure	
Range	300 to 1100
Accuracy	± 0.5 hPa @ 25°C
Resolution	0.1 hPa
Air Temperature	
Range	-40°C to +70°C
Accuracy	± 0.3°C @ 20°C
Resolution	0.1 °C (0.1 °F)
Relative Humidity	
Range	0-100% RH
Accuracy	± 2% @ 20°C (10%-90% RH)
Resolution	1% RH

Dew Point	
Range	-40°C to +70°C
Resolution	0.1 °C (0.1 °F)
Accuracy	± 0.3°C @ 20°C
PAR Solar Radiation	
Absolute Accuracy	± 5%
Spectral Range	380 to 1120 nanometers
Operating Temperature	-40 to 60 °C
Rain Gage - RG-100	
Sensor Type	Tipping spoon, 0.01" per tip for US versions, 0.2 mm for metric versions, 33.2 in2 (214 cm²) collection area
Rainfall Accuracy	±5% for rain rates up to 10"/hr (250 mm/hr)
Resolution	0.01" or 0.1 mm (user-selectable)
Environmental	
Protection class	IP66
Operating Temperature	-40°C to +70°C

## Ordering Information

**SPIP-WMET** Agrisensors SPIP Met Station, Digital Sensors, Expandable SDI, ET Software on Agrisensors, needs Cellular plan SPIP-CEL-SIM, SPIP-WSL & Solar Panel

**SPIP-CEL-SIM** Cellular Service 1yr for LTE (Verizon) or GSM (T-Mobile)

**SPIP-WSL** Weather, soil sensor data viewer -graphics and logging on Agrisensors Software license 1 yr

**MSX-30R** 30W Solar Panel & Mounts

Optional:

**SPIP-IRT-SDI** IRT Sensor - with SDI-12 Output

**TE525** Tipping Bucket Raingage

**SM150T** Soil Moisture Sensor