



AWS

AUTOMATIC WEATHER STATION



PT Merapi Tani Instrumen

Sleman, DI Yogyakarta

MERTANI AUTOMATIC WEATHER STATION (AWS)

Tentang Automatic Weather Station (AWS)

MERTANI AWS merupakan perangkat untuk melakukan pemantauan cuaca secara online (dalam jaringan), *real-time* (terus-menerus), dan akurat.

Penerapan Automatic Weather Station (AWS)

- Meteorologi dan klimatologi
- Pertanian dan perkebunan
- Manajemen bencana
- Kehutanan dan lingkungan
- Konstruksi dan infrastruktur
- Penelitian dan pendidikan



Mertani Controller Box



Battery

- 10.000 mAh
- Solar panel 20-50 WP
- External power supply DC 4.1 V

Monitoring

- Realtime monitoring
- Data transmission interval (5 minutes, 10 minutes, 15 minutes, 30 minutes, 1 hour, 2 hours, and so on)

Specification

- Industrial grade Ultra-Low Power MCU based on Cortex M4+
- Input digital sensor RS485 (Modbus), I2C, RS232, Serial TTL, one wire. Under development: SDI12
- Main material ABS
- Dimension 25x25x15 cm
- Operates from 2.7 V up to 5.5V
- Operational temperature 0°C to +85°C
- Weight 591,5 g
- Internal memory 16 MB
- Extended industrial memory up to 256 MB
- Weather-resistant

Connectivity

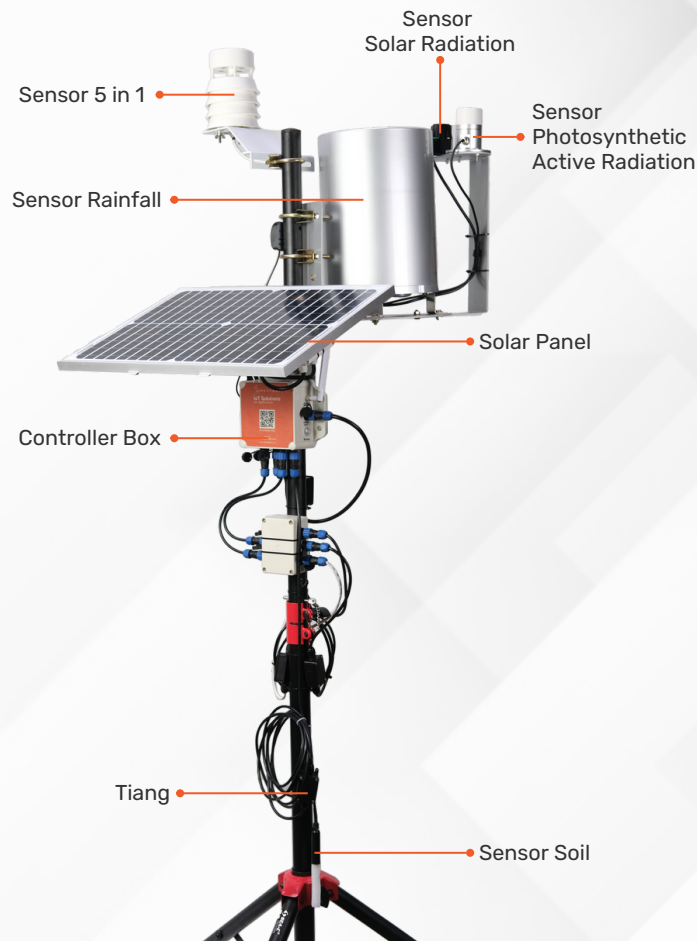
- GSM (2G, 3G, and 4G)
- WiFi and Bluetooth Low Energy (BLE)
- LoRa 920-923 MHz
- GPS/ GLONASS/ GALILEO

Number of Sensor Port

- 3 sensors (default)
- 10 sensors (extended)

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Mertani AWS



Spesifikasi Produk

Sensor Rainfall

- Measuring range
0~4mm/min; workable
8mm/min
- Accuracy $\pm 4\%$
($\leq 4\text{mm/min}$);
- Resolution 0.2mm
- Working temperature
-20~80°C
- Working humidity
0%~95%RH



Sensor Solar Radiation

- Range: 0~2000W/m²
- Accuracy 5%
- Resolution: 1W/m²



Sensor 5 in 1

- Wind Speed
- Wind Direction
- Air Temperature
- Air Humidity
- Air Pressure



Sensor Photosynthetic Active Radiation

- Measuring range
0~2500 $\mu\text{mol/m}^2\cdot\text{s}$
- Resolution
1 $\mu\text{mol/m}^2\cdot\text{s}$
- Degree $\pm 2\%$

