

Weather Station Monitoring System



TESTINDO memiliki solusi Weather Station Monitoring System yang dapat memantau kondisi cuaca secara otomatis dan realtime, stasiun cuaca otomatis ini menggunakan instrument-instrument seperti Berikut:

Spesification Sensor

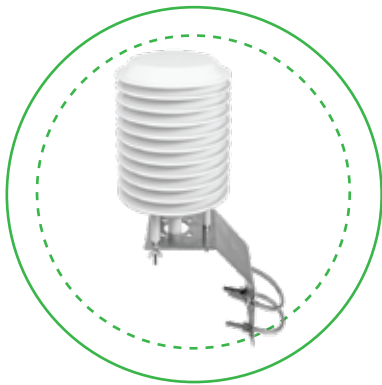
Wind Speed & Direction sensor

Spesification

Range: speed 0 - 70 m/s; direction 0-360°

Resolution: speed 0.1 m/s; direction 1°

Accuracy: speed $\pm 0.5\%$; direction $< \pm 3^\circ$



Atmospheric Temperature, Humidity & Pressure Sensor

Spesification

Range: Temperature -40~60°C; Humidity 0~100%RH; Pressure 100~1100hPa

Resolution: Temperature 0.1°C; Humidity 0.5%RH; Pressure 0.1hPa°

Accuracy: Temperature $\pm 0.5^\circ\text{C}$; Humidity $\pm 3\%\text{RH}$; Pressure $\pm 1\text{hPa}$

Radar Rainfall Sensor

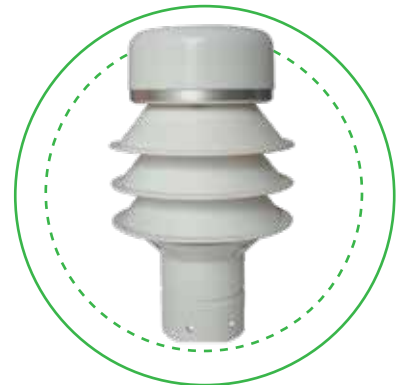
Spesification

Object measured: Rain drops, snow, hail

Rain intensity: 0~4mm/min

Resolution: 0.1mm

Accuracy: $\pm 4\%$



Solar Radiation Sensor

Spesification

Spectral Range: 300~1100nm

Range: 0~1500W/m²

Resolution: 1W/m²

Accuracy: $< \pm 0.3\%$

Rain Gauge Sensor

Spesification

Tipping Bucket Rain Gauge
Collector Dimension: Ø200mm, height 271mm
Resolution: 0.2mm
Rainfall intensity: 4mm/min max
Operating temperature: 0...60°C



Wind Sensor

Spesification

Ultrasonic Wind Speed and Direction Sensor
Measuring range: Speed 0...45 m/s; Direction 0...360°
Accuracy: Speed ±0.2m/s (≤10m/s), ±2% reading value (>10m/s)
Direction: ±3°
Resolution: Speed 0.01m/s; Direction 1°
Operating temperature: -30...+70°C

Spesification Data Logger & Software

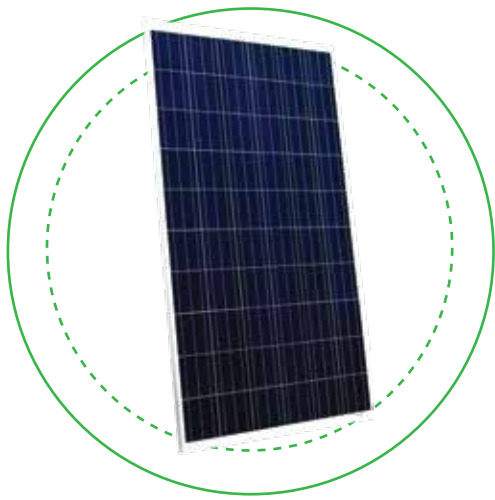
TMR EPC functions as an Embedded PC to run software, data loggers and send data to servers via Ethernet, Wi-Fi or Telecommunications Networks.

DATA LOGGER TMR EPC

Spesification

Intel Atom (1.75 GHz); DDR3L (8 GB), 2.5" SATA3-SSD (40 GB)
Host Serial port up to 4x COM port (2x RS-485 and 2x RS-232)
Programmable Digital I/O: 2 Dry Contact Input, 1 Relay Output
Host USB 2.0 port
Network port 1x Gigabit Ethernet
1 PCI Express Mini Card slot (LTE/3G/GPRS or Wi-Fi)
Windows® 10 IoT enterprise
1 PCI Express Mini Card slot (LTE/3G/GPRS or Wi-Fi)





SOLAR PANEL & BATTERY

Solar Panel & Battery is used to convert solar energy into electrical energy and this electrical energy is stored in batteries

Polycrystalline Solar Panel 120 WP

Panasonic VRLA Battery 12V 100Ah

PWM Solar charge Controller 10A

Panel Box Outdoor for Solar power system and instrumentation

SOFTWARE TMR Q SOFT

Spesification

Web App Live Monitoring & Control Software

Online and offline visualization: Historical Chart, XY-chart, Analog Display, Digital Display, Alphanumeric Display, Bar Graph, Status Indicator, Switch Control, Slide Control, Table/List, Classification Tables (1D/2D), Oscilloscope, FFT-Spectrum, Histogram

Math-function & Calculation: Aritmatic, Logics, trogonometry, Log, Exp, Accumulation, Integration, Differential, Numeric, Times, etc.

Analysis and Reporting of data files include with: email alert for Status, Over Limit, Threshold.



Layout Overview

