

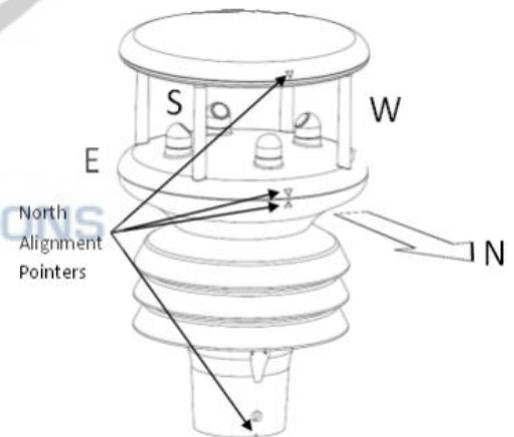
# WEATHER MONITORING SYSTEM

## T-AWMS\_300

### Product Features:

SERTEL's Compact weather stations combine a number of standard meteorological sensors including Temperature, Humidity, Pressure, precipitation and radiation into a single, easy to use, package.

- Building and Industrial Controls
- Transport
- Safety
- Coastal
- Agricultural
- Educational
- Energy



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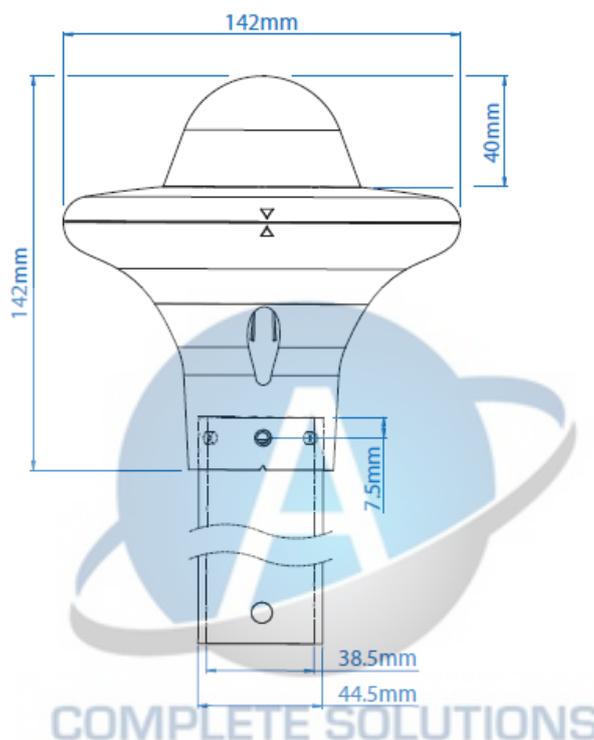
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## 1. FEATURES

An integrated optical rain gauge that automatically senses water hitting, it's outside surface and provides tip measurement. The optical rain gauge has no moving parts associated with tipping bucket gauges. Output and power to the product is via a 20m cable(included) that the user can cut the length.



- ◆ Measurement type : Optical RG
- ◆ Range : 0 to > 300mm/hr
- ◆ Precipitation Resolution : 0.08 mm(Selectable)
- ◆ Repeatability : 3%
- ◆ Sampling Rate : 1 Hz
- ◆ Heating : N/A
- ◆ Output : Contact closure via 20m cable to GMX
- ◆ Power Supply : 12Vdc via above 20m cable to GMX

### 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.

- ◆ Air Pressure / Temperature
- ◆ Relative / Absolute humidity
- ◆ Naturally aspirated UV stable Radiation shield
- ◆ Protection against wind-blown precipitation/dust

### Solar radiation:

An integrated solar radiation sensor/pyranometer. This highly accurate instrument uses a thermal sensor mounted at its base and protected by a single glass dome to record the amount of light in watts per metre<sup>2</sup>. It is widely used in agro-meteorological applications and for monitoring the performance of solar panels.

- ◆ Output in watts per metre<sup>2</sup>
- ◆ 180° hemispherical field of view
- ◆ Records sunshine hours
- ◆ Integrated Hukseflux LP02 pyranometer
- ◆ Glass dome

### 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.

- ◆ Wind speed & direction
- ◆ Apparent and true wind (with GPS)
- ◆ WMO wind averages and gust
- ◆ Compass

### Precipitation:

The optical rain gauge supplied provides excellent performance in a low maintenance package. The optical RG connects via a 20m cable (include).

- ◆ 0.08mm tip optical rain gauge(selectable)
- ◆ 20m Cable

## Technical Specifications :

<b>Wind Speed</b>	
Range	0.01 to 60m/s
Accuracy	3% rms 0.01m/s to 40m/s 5% rms above 40 and up to 60m/s
Resolution	0.01m/s
Threshold	0.01m/s
Units of Measure	Metres/Sec, Knots, Miles/Hour, Kilometres/Hour, Feet/minute

<b>Wind Direction</b>	
Range	0-359 degrees – No dead band
Accuracy	$\pm 3^\circ$ 0.01m/s to 40m/s $\pm 5^\circ$ above 40 and up to 60m/s
Resolution	1°

<b>Air Temperature</b>	
Range	-40°C to +70°C
Accuracy	$\pm 0.3^\circ\text{C}$ @ 20°C
Resolution	0.1°C
Units of Measure	°C or °F or °K

<b>Relative Humidity</b>	
Range	0-100%
Accuracy	$\pm 2\%$ @ 20°C (10% to 90% Relative Humidity)
Resolution	1%
Units of Measure	% RH

<b>Dewpoint</b>	
Range	-40°C to +70°C C34
Resolution	0.1
Accuracy	$\pm 0.3^\circ\text{C}$ @ 20°C
Units	°C, °F, °K
Sampling Rate	1 Hz