# Ecowitt – new WH31/32-EP sensors



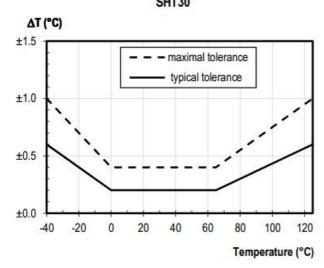
The new Ecowitt sensors with SHT35 high accuracy external probe are designed to meet the needs of the most advanced enthusiasts this version has an external, water-resistant sensor, separated from the main wh sensor by cable.

## Main advantages

- small probe better interfacing with most solar radiation shields
- compatibility with almost all professional solar radiation shields
- better performance in detecting temperature and humidity in terms of precision and accuracy
- improvement of airflow inside the solar radiation shield thanks to the reduction in size

## Performance in comparison

## Temperature Sensor Performance Graphs



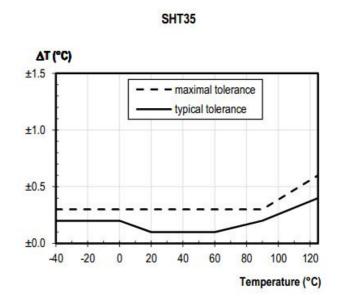
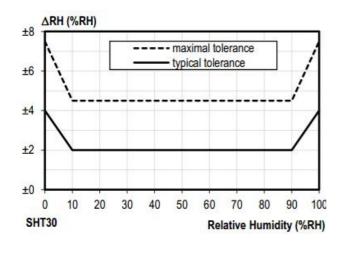


Figure 8 Temperature accuracy of the SHT30 sensor.

Figure 10 Temperature accuracy of the SHT35 sensor.

#### **Humidity Sensor Performance Graphs**



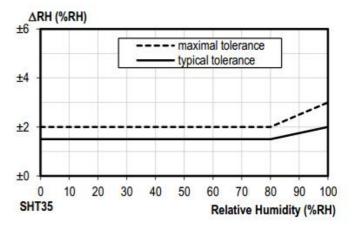


Figure 4 Tolerance of RH at 25°C for SHT35.

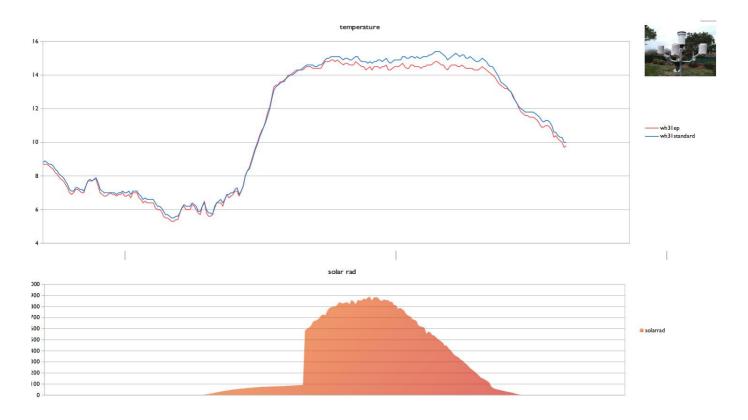
## Reactivity and time constant

The small size of the probe allows a clear reduction in the time constant of the sensor + screen complex system, thus allowing greater reactivity to the minimum variations in temperature and humidity

## Practical comparison

Below is a comparison chart where you can see the difference in terms of reactivity that the new versions allow.

The test was carried out by comparing two identical professional Barani Meteoshield Pro screens, an original wh31 sensor, and a wh31-EP sensor with an external probe. Shielding with the same exposure, 1.8 m from the ground on grassy ground



The best performance of the shielding in the central hours of the day is evident thanks to the smaller probe dimension and therefore to the better use of natural ventilation and the improvements about airflow inside the solar radiation shield

## Codes and ordering methods

The available versions are both wh31 and wh32. The correct codes are WH31-EP and WH32-EP

It is important, as always, to specify the operating frequency

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