METSENS600


# Measures 6 Common Meteorological Parameters 

IEC 61724－1 Compliant

## Overview

The MetSENS600 compact weather sensor measures wind speed and direction via an ultrasonic sensor，as well as air temperature，relative humidity，and barometric pressure，in a single，combined instrument mounted inside three double－ louvered，naturally aspirated radiation shields with no moving parts．An optical precipitation sensing element senses fine amounts of water．An integrated electronic compass allows the MetSENS500 to provide accurate，relative wind direction measurements without being oriented in a particular way，
making installation easier．WMO average wind speed and direction and gust，temperature，relative humidity，barometric pressure，absolute humidity，air density，wet bulb temperature， rainfall total，and rainfall intensity data are provided．The MetSENS600is available as part of a measurement station that employs the MeteoPV Solar Resource Platform and any other Campbell Scientific data logger using SDI－12，RS－485， ModbusRS－485，or RS－232．

## Benefits and Features

\Quality measurements
）Fast and simple to install
\Compact，integrated design
\Lightweight and robust

## Specifications

| Measurements Made | Air temperature，barometric pressure，precipitation，relative humidity，wind direction，and wind speed． |  | 》Where applicable，all individual parameters meet or exceed specifications of IEC 61724－1 （2017，2021）． |
| :---: | :---: | :---: | :---: |
| Sampling Rate | 1 Hz | Operating Temperature Range | $-40^{\circ}$ to $+70^{\circ} \mathrm{C}$ |
| Digital Communication | Serial RS－232，RS－485，SDI－12， NMEA，Modbus，ASCII |  |  |
| Modes |  | Operating Voltage | 5 to 30 Vdc |
| IP Rating | 66 | Typical Current Drain＠ 12 Vdc | ```> 0.7 mA (eco-power mode; 1 hour polled) > 25 mA (continuous high mode)``` |
| Compliance | ＞CE，RoHS |  |  |


| Weight | $0.8 \mathrm{~kg}(1.8 \mathrm{lb})$ |
| :--- | :--- |
| Air Temperature Measurement |  |
| Measurement Range | $-40^{\circ}$ to $+70^{\circ} \mathrm{C}$ |
| Resolution | $0.1^{\circ} \mathrm{C}$ |
| Accuracy | $\pm 0.3^{\circ} \mathrm{C}\left(@ 20^{\circ} \mathrm{C}\right)$ |
| Relative Humidity Measurement |  |
| Measurement Range | 0 to $100 \%$ |
| Resolution | 0.1 |
| Accuracy | $\pm 2 \%$ @ $20^{\circ} \mathrm{C}(10$ to $90 \% \mathrm{RH})$ |
| Barometric Pressure Measurement |  |
| Measurement Range | 300 to 1100 hPa |
| Resolution | 0.1 hPa |
| Accuracy | $\pm 0.5 \mathrm{hPa}\left(@ 25^{\circ} \mathrm{C}\right)$ |
| Wind Speed Measurement |  |
| Measurement Range | 0.01 to $60 \mathrm{~m} \mathrm{~s}^{-1}$ |
| Accuracy | $\pm 3 \%\left(\right.$ up to $\left.40 \mathrm{~m} \mathrm{~s}^{-1}\right)$ |


| Resolution | $0.01 \mathrm{~m} \mathrm{~s}^{-1}$ |
| :--- | :--- |
| Starting Threshold | $0.01 \mathrm{~m} \mathrm{~s}^{-1}$ |


| Wind Direction Measurement |  |
| :--- | :--- |
| Measurement Range | $0^{\circ}$ to $359^{\circ}$ |
| Accuracy | $\pm 3^{\circ}\left(\right.$ up to $\left.60 \mathrm{~m} \mathrm{~s}^{-1}\right)$ |
| Resolution | $1^{\circ}$ |

## Precipitation Measurement

| Measurement Type | Optical |
| :--- | :--- |
| Measurement Range | 0 to $>300 \mathrm{~mm} \mathrm{~h}^{-1}$ |
| Precipitation Resolution | 0.08 mm |
| Repeatability | $3 \%$ |


| Compass |  |
| :--- | :--- |
| Measurement Range | 0 to $359^{\circ}$ |
| Resolution | $1^{\circ}$ |
| Units of Measure | Degrees |
| Accuracy | $\pm 3^{\circ}$ |

