



# Measure Rapid Fluctuations in Atmospheric Water Vapor

#### Overview

The KH20 is a highly sensitive hygrometer designed for measurement of rapid fluctuations in atmospheric water vapor,

not absolute concentrations. It is typically used together with a CSAT3B in eddy-covariance systems.

### **Benefits and Features**

- **)** Compatible with most Campbell Scientific data loggers
- ➤ High frequency response suitable for eddy-covariance applications
- > Well-suited for long-term, unattended applications

## **Detailed Description**

The KH20 is typically used with a CSAT3B Sonic Anemometer in eddy-covariance systems for measuring water vapor flux. This highly sensitive hygrometer measures rapid fluctuations in atmospheric water vapor. It does not measure absolute concentrations. The KH20 is compatible with most of our data loggers.

Routine maintenance is required to keep source windows free of scale. You can use the water vapor absorption coefficient for scaled window from the data report if the window will be allowed to scale during measurements.

## **Specifications**

Range	1.7 to 19.5 g/m <sup>3</sup> (nominal)
Туре	Ultraviolet krypton hygrometer
Input Voltage Range	10 V to 16 Vdc
Current Consumption	20 mA max (at 12 Vdc)
Power Consumption	0.24 W

Output Signal Range	0 to 5 Vdc
Cable Length	7.62 m (25 ft)
Mounting Pipe Length	50 cm (20 in.)
Dimensions	29 x 18 x 6.5 cm (11.5 x 7 x 2.5 in.) for rain shield with mount

64 x 38 x 18 cm (25 x 15 x 7 in.) for carrying case
29 x 23 x 3 cm (11.5 x 9 x 1.25 in.) for sensor head

19 x 13 x 5 cm (7.5 x 5 x 2 in.) for electronics box
Weight
6.8 kg (15 lb)