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# Technical Air Humidity Meter PCE-FWS 20-1

PCE-FWS 20-1 Anemometer and Meteorological Station with touch screen display has 5 sensors (for wind direction, wind speed, temperature, relative humidity and rainfall), mast, alarm, USB cable and Windows software

The PCE-FWS 20 Meteorological Station is a multi-functional device that will exceed your expectations. This meteorological station allows the accurate detection of wind direction, wind speed, temperature, relative humidity, and precipitation. This represents only a small part of the device functions. Furthermore, the meteorological station has different alarm functions for the available parameters. The meteorological data is sent by radio to the base unit from a distance up to 100 meters (328 feet). This device is equipped with the latest technology used in meteorological analysis. The touch screen allows to recall data onto the screen easily. The USB cable and the CD/ROM which is included, allows to transmit data from the device to a computer. Data can be date and time stamped to ensure that it can be analyzed effectively long after being collected. Windows software for analyzing data is included, which enables you to view and check meteorological fluctuations, presenting data in graphs and diagrams for measurements over prolonged periods of time. Everything is included with the device so it is ready to be used straight out of the box.

#### **Functions of the Weather Station**

- Indoor temperature in Celsius or Fahrenheit
- Outdoor temperature in Celsius or Fahrenheit
- Indoor relative humidity
- Outdoor relative humidity
- Atmospheric pressure is shown in inHG or hPa
- Relative / Absolute humidity selection
- Rainfall is shown in mm or inches
- Rainfall indication for 1 hour, 24 hours, 1 week, 1 month or from the last reset
- Selection of wind speed in mph, km/h, m/s, knots or Beaufort
- Indication of wind direction
- Wind chill temperature indicator
- Dew point indication
- Weather forecast
- Weather forecast trend
- Storm warning
- Indication of meteorological values.
- Programmable alarm functions for different meteorological values
- It can store maximum and minimum values
- LED with backlight display
- Radio clock
- Indication in 12 or 24 hours

- Calendar
- Set up of time zone
- Energy saving function
- Can be free-standing or wall-mounted
- Permanent adjustment of meteorological values and clock by means of a radio

### Set up of the alarm in the weather station

- Maximum indoor humidity alarm
- Maximum indoor temperature alarm
- Maximum outdoor humidity alarm
- Maximum outdoor temperature alarm
- Maximum wind chill alarm
- Maximum dew point alarm
- Maximum atmospheric pressure alarm
- Maximum wind speed alarm
- Maximum gust alarm
- Rainfall alarm, 1 hour
- Rainfall alarm, 24 hours
- Minimum indoor humidity alarm
- Minimum outdoor temperature alarm
- Minimum outdoor humidity alarm
- Minimum outdoor temperature alarm
- Minimum wind chill alarm
- Minimum dew point alarm
- Minimum atmospheric pressure alarm

#### Storable measurement values (with time and date)

- Maximum rainfall for 1 hour
- Maximum rainfall for 24 hours
- Maximum rainfall for one week
- Maximum rainfall for a month
- Minimum indoor humidity
- Minimum indoor temperature
- Minimum outdoor humidity
- Minimum outdoor temperature
- Minimum wind chill
- Minimum dew point
- Minimum atmospheric pressure
- Maximum indoor humidity
- Maximum indoor temperature
- Maximum humidity
- Maximum outdoor temperature
- Maximum wind chill
- Maximum dew point
- Maximum atmospheric pressure
- Maximum air velocity
- Wind direction
- Gust

### **Technical specifications**

## Indoor

Measurement ranges Operating temperature: 0 ... +60 °C (32 ... +140 °F)

Humidity: 1 ... 99 %

Atmospheric pressure: 919 ... 1,080 hPa

Resolution Air temperature: 0.1 °C

Humidity: 1 %

Atmospheric pressure: 0.1 / 1.5 hPa

Radio control data update 48 seconds
Alarm duration 120 seconds

Outdoor

Measurement range Operating temperature: -40 ... +65 °C (-40 ... +149 °F)

Humidity: 1 ... 99 %

Rain fall: 0 ... 9,999 mm (0 ... 394 inches) Wind speed: 0 ... 180 km/h (0 ... 112 mph)

Indication of the wind direction

Resolution Air temperature: 0.1 °C

Humidity: 1 %

Rainfall: 0.1mm (volume <1,000mm) / 1mm (volume

>1,000mm)

Radio transmission data updated 48 seconds

Radio transmission range up to 100m in the open air (328 feet)

Port USB

### **Delivery contents**

2 x main station with 2 touch screen displays (3 x 1.5v batteries)

1 x temperature sensor with a support

1 x solar unit (2 x 1.5v rechargeable batteries)

1 x humidity sensor with a support

1 x rainfall sensor with a support

1 x air velocity sensor with a support

1 x wind direction sensor with a support

1 x vertical mast

1 x USB cable

1 x analysis software (N.B. Windows operating systems only)

Display unit dimensions 230mm x 150mm

External Sensors dimensions 660mm x 540mm