

# WIND SPEED ALARM CONTROLLER

PCE-WSAC 50W+ 24



- » **robust plastic housing**
- » **units: km/h, mph, m/s**
- » **4 ... 20 mA analogue output**
- » **128 x 64 pixel LC display**
- » **alarm relay**
- » **measurement range up to 180 km/h**
- » **durable stainless steel ball bearings**
- » **ambient temperature -20 ... +70 °C**
- » **radio transmission**
- » **data logger for 30000 data records**

The wind speed alarm controller is primarily used to measure and monitor the wind load on cranes or wind turbines. Furthermore, the wind situation can be measured and analysed before commissioning a wind turbine.

Thanks to the wind speed alarm controller's high measurement range of up to 50 m/s, even stormy gusts can be monitored. The radio range of the wind speed alarm controller is up to 750 m in the open field in the free frequency band of 2.4 GHz. When installing the display of the wind speed alarm controller indoors, a range of up to 60 m to the wind sensor can be achieved. Thanks to the integrated 4 ... 20 mA analogue output of the wind warning system display, the measurement data can also be transferred to other control systems for evaluation.

If the wind speed values are higher than the preset values, a pre-alarm is switched on before the alarm is issued. Both alarms are signalled visually and acoustically on the wind speed alarm controller with data logger. If the pre-alarm is activated, a yellow LED will flash on the front of the device and a beeper will emit a periodic warning sound. If the normal alarm needs to be activated, the red LED will flash and the device will beep continuously.

In general, the anemometer is used wherever wind monitoring is required. This is often the case in factories, mines, wind turbines and the like. In addition to the low wind speeds, the wind speed alarm controller is characterised by its high reliability and high accuracy.

## Specification

### Speed

Measurement range up to 1 ... 50 m/s

Resolution 0.1 m/s

Accuracy  $\pm 0.3$  m/s (1 ... 4 m/s) /  $\pm 3$  % of Rd (4 ... 50 m/s)

### Speed

Measurement range up to 4 ... 180 km/h

Resolution 1 km/h

Accuracy  $\pm 1$  km/h (4 ... 15 km/h) /  $\pm 3$  % of Rd (15 ... 180 km/h)

### Speed

Measurement range up to 2.5 ... 112 mph

Resolution 1 mph

Accuracy  $\pm 0.6$  mph (2.5 ... 9.3 mph) /  $\pm 3$  % of Rd (9.3 ... 112 mph)

### General technical data

Inputs 4 ... 20 mA, Pulse

Outputs 4 ... 20 mA, max. 250 V AC, 8 A, 15 V DC

Units m/s, km/h, mph

Display type LCD

Display size 3 Inch

Display resolution 128 x 64 pixels

Storage medium Micro SD card, Internal memory

Storage capacity 30000 Data records

Memory capacity (additional information) External memory: max. capacity 32 GB (8 GB SD card included)

Storage interval from 10 s

Storage interval to 1 h

Interface RS485

Data transfer IEEE 802.15.4 ISM 2.4 GHz

Alarm Acoustic, optical, Relay

Sensor supply 12 ... 24 V DC / max. 150 mA

Protection class (device) IP65

Power supply Display: 24 V DC  
Sensor: mono cell battery D 1.5 V

(Rechargeable) battery 1 x 1.5 V D battery, Alkali-manganese

Capacity 19760 mAh

Operating conditions -20 ... 70 °C, 0 ... 95 % RH

Storage conditions -35 ... 70 °C, 0 ... 95 % RH

Dimensions ( L x W x H ) 320 x 110 x 100 mm

Weight 680 g