

# LCN-WRL65

## Wind-, Rain-, Light Sensor

### Functional Specifications:

The weather station LCN-WRL65 consists of three different sensor types, which are also separately available.

The LCN wind sensor counts the pulses of the wind turbine. Here the turbine delivers 8 pulses per revolution which are sent via a cable to the bus module where the data is processed.

The LCN rain sensor calculates the resistance read between the two metal contacts of the sensor. When the resistance changes, a potential-free contact is closed and is sent in to the integrated bus module via key converter and processed.

The LCN light sensor calculates the actual brightness level with the help of photo element. The measured values are recorded in the LCN bus module and supplied with the corresponding control commands. Up to 5 different brightness levels can be evaluated and supplied with various commands.



### Description:

The LCN weather station consists of a light sensor, a rain sensor, a wind meter and all the associated connection cables, sensor inputs and bus modules needed to make up a complete weather station.

All components are put in two safe cases. Two cables are used for the connection of the wind and rain sensors. A fixture kit for wall and pylon assembly is included in delivery.

The sensitivity of the rain sensor is adjustable via a built-in potentiometer.

Setting the parameters is achieved using the system software LCN-P or LCN-PRO.

### Hardware equipment:

2 x LCN-UPP

1 x LCN-TU4R

1 x LCN-LS

1 x LCN-RS

1 x LCN-IW

1 x LCN-IV

### Field of application:

The LCN-WRL65 is a complete weather station for the control of all systems and functional procedures depending on the weather.

### Note:

The rain sensor is not maintenance-free. Regular cleaning of the contacts is recommended.

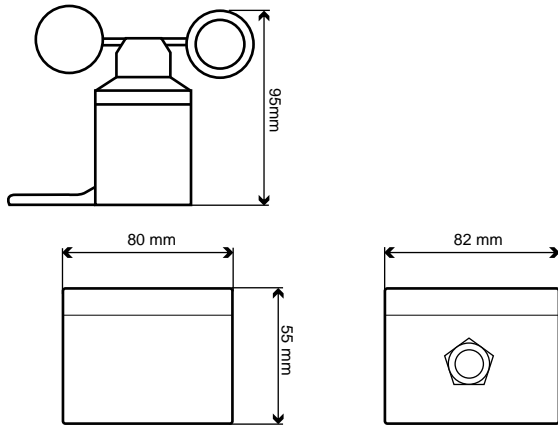
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### Measurements:

**Wind Sensor (L x W x H) :** 40mm x 40mm x 95mm,  
**Rotor (Ø):** 105mm

**Rain Sensor (L x B x H):** 80mm x 82mm x 55mm,  
**Exterior Case (L x B x H):** 120mm x 122mm x 55mm



**Assembly:** screw fixture

### Technical Data:

**Connection:**  
 Power supply: 230V~ ±15%, 50Hz  
 Power capacity: 3W  
 Connection power side: litz wires 0,75 mm<sup>2</sup>(with insulated pin terminals)

**Wind Sensor:**  
 Record range: 6 - 21m /s  
 Resolution: 8 pulses per revolution  
 Connection length: max. 100m

**Rain Sensor:**  
 Power supply: 230V~ ±15%, 50Hz  
 Current: 120mA, internal consumption 80mA  
 Connection power side: 3m rubber tube cable  
 Connection length: max. 100m

**Light Sensor:**  
 Record range: 10Lx to 100.000Lx  
 Resolution: 10 Bit  
 Connection length: max. 100m

**Ports:**  
 T-Port: available / already in use  
 I-Port: available / already in use  
 P-Port: not available

**General Details:**  
 Operating temperature: -10°C to +40°C  
 Humidity: max. 80% rel., no condensation

**Environmental conditions:** stationary installation according to VDE 632, VDE 637

**Safety classification:** IP 65

### Circuit Diagram

