

EXALUS

EXALUS TR7

Spółka z ograniczoną odpowiedzialnością sp.k.
Kuchary 24F
63-322 Gołuchów
www.exalus.pl

EXALUS HOME control system

USER'S MANUAL OF
WSZF-BIDI
WIND SENSOR



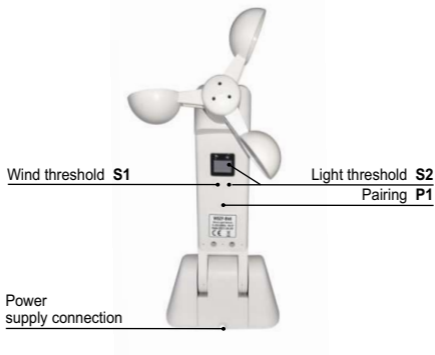
Transmission power: ERP<25 mW



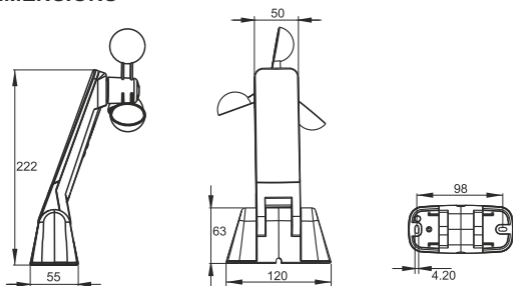
1. POWER SUPPLY

- 12V DC power supply of minimum capacity of 100mA.
- Power consumption: ~17mA during regular work and ~23mA in the test mode.
- Connection: red "+", brown "-".

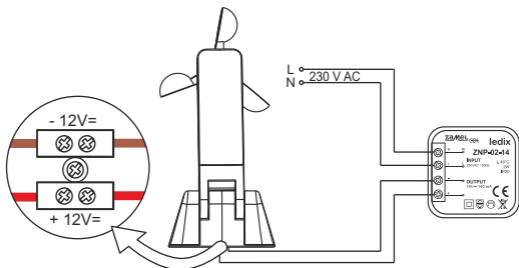
2. APPEARANCE



3. DIMENSIONS



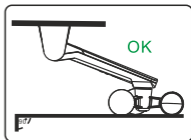
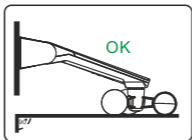
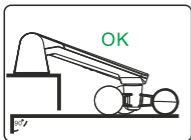
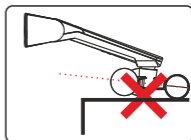
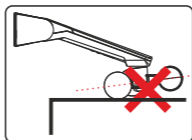
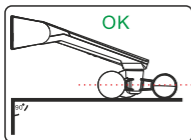
4. CONNECTION SCHEME



5. INSTALLATION

The system will work correctly only if the sensor is installed in a location allowing for proper conversion of such stimuli as light intensity and wind speed.

1. Only the materials included in the packaging shall be used to assembly and fix the product in the right location.
2. The wind sensor should be installed parallelly to the surface (see the pictures below). Any different installation manner will have an adverse impact on the wind speed reading.



6. PAIRING A WSZF-BIDI SENSOR WITH A VB-BIDI CONTROLLER

a. Adding a sensor via the **PROG** button on the shutter controller:

- I. Press the **PROG** button on the controller and wait until blue LED light starts flashing. Next, release the button (the diode will slowly blink blue).
- II. Press the **P1** button on the wind sensor - correct sensor pairing will be confirmed with a short UP/DOWN (shutter) movement.
- III. Analogically, the sensor pairing can be deleted from the settings.

b. Adding a sensor via a remote control:

- I. Press the **P2** button twice on the programmed remote control.
- II. Then, press the **P1** button on the wind sensor - correct sensor pairing will be confirmed with a short UP/DOWN (shutter) movement.
- III. Analogically, the sensor pairing can be deleted from the settings.

c. Adding the sensor using the application:

- I. Log into the **TR7** application and go to the **DEVICE CONFIGURATION** tab.
- II. Select the **NEW** tab and click "Search" - after a few seconds, available devices will be displayed on the list.
- III. To add a selected device to the application, drop down the menu of a given device and next press + button to pair it with the **TR7** control unit.

- If the software update is available, a window will pop up asking you to confirm the update process - click **UPDATE** (during the entire update process, do not switch off the application);
- After successful completion of the software update, the status will change to: the update has been successfully installed. Next, click the **CLOSE** button.

- IV. Click the **CONFIGURE** button. A configuration window will pop up, therein you can name the device in the item Name of the controlled object. You can add the device to a group by selecting its name from the drop-down menu or by adding a new group. The **ADD NEW GROUP** button shall be pressed then.

7. BUTTONS FUNCTIONALITIES

Button	Function	Display	Notes
S1 or S2	Displays the setting thresholds for approx. 3 sec.	Setting thresholds in accordance with point 5	Left digit - wind Right digit - light
4 x S1	Current wind speed reading	Wind speed in [km/h]	The dot displayed on the left screen means that the display reading concerns wind. If you press the S2 button for a short while, you will exit the wind reading.
4 x S2	Current light intensity reading	Light intensity in lux/1000	The dot displayed on the right screen means that the display reading concerns light intensity. If you press the S1 button for a short while, you will exit the light intensity reading.
S1 (2s)	Setting the wind reporting threshold	The threshold that is currently set blinks on the left screen (in accordance with point 5).	By pressing the S2 button, you can navigate through subsequent wind report thresholds. By pressing the S1 button for a short while, you can save the current setting.

Button	Function	Display	Notes
S2 (2s)	Setting the light intensity reporting threshold	The threshold that is currently set blinks on the right screen (in accordance with point 5).	By pressing the S1 button, you can navigate through subsequent light intensity reporting thresholds. By pressing the S2 button for a short while, you can save the current setting.
P1	Sensor pairing / unpairing	-	By pressing the P1 button for a short while, you will send a radio signal transmitting information necessary for the controllers to carry out the sensor pairing / unpairing procedure.
P1 (5s)	Reset to default settings	Top and bottom segments show the function selection, middle ones confirm the reset.	If pressed for more than 5s, both digits (of top and bottom segments) start flashing indicating that you have selected the reset function. Then, the user has 2s for releasing and pressing the P1 button for a short while again. The reset is confirmed with both digits flashing (concerns middle segments)

8. WIND AND LIGHT INTENSITY THRESHOLDS, WHICH IF EXCEEDED WILL BE REPORTED BY A SENSOR

Level	Wind speed [km/h]	Light intensity [lux]
0	No exceeded threshold reported	No exceeded threshold reported
1	15	2000
2	21	5000
3	28	10000
4	36	20000
5	45	40000
6	55	60000
7	66	70000
8	78	80000
9	91	90000

9. ADDITIONAL INFORMATION:

- The wind speed is constantly monitored - the reading is taken every 0.5s and the average value is calculated based on last four readings.
- If the set wind speed threshold is exceeded, the radio signal is transmitted informing thereabout. The shutter controllers paired with the sensor will lift the shutter.
- After lifting the shutter, the controller will block the downward movement of the shutter for 10 minutes - this function can be deactivated by pressing the DOWN button on the remote control for 6 times or holding the DOWN button controlling a given shutter for 7-10s (NOTE: blockade deactivation is not confirmed with any signal, you just need to press a given button for a set time and to release it).
- Once the sensor has identified that the set wind speed threshold has been exceeded, it reports every 2 minutes if the wind speed continues to exceed the threshold. Every next report of excessive wind speed resets the time for which the shutter remains blocked.
- If the sensor does not record the exceeded wind speed limit, it transmits a radio signal allowing the paired controllers to detect the sensor defects.
- If the controller does not receive any radio signal from the sensor for 10 minutes, the shutter will lift in the emergency mode.
- If the "0" reporting level is selected on the sensor, a relevant radio signal will be sent to the paired controllers that the reporting function of the wind sensor has been switched off - the receipt of such a signal is confirmed with a short up/down (shutter) movement.
- Even if the selected reporting level is "0", the sensor continues to take measurements on permanent basis and can provide information on current wind speed and light intensity level if asked by the controller.
- The controllers do not monitor the wind sensor operation if its functionalities are switched off.