WiNG-AIR Quick Start Guide

Thank you for purchasing a WiNG-AIR wireless sensor. Before you install your device, consult rletech.com to ensure you're working with the most recent version of documentation available. If you need further assistance, please contact RLE Technologies at support@rletech.com.

Falcon

v10.19

RLE Technologies

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Supplies for Installation

Included with the WiNG Sensor

WiNG-AIR transmitter
Air velocity sensor

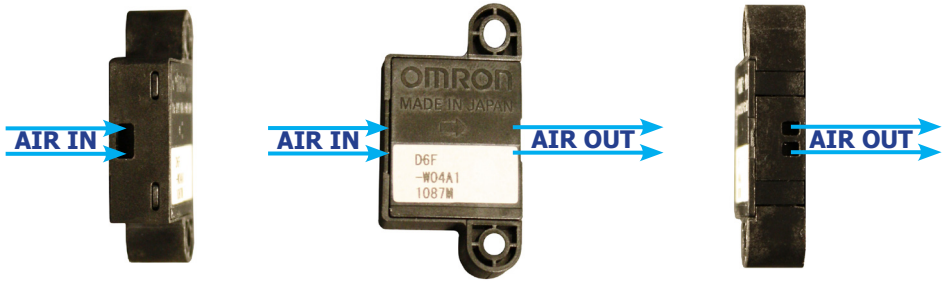
Installation Instructions

1. WiNG-AIR sensors can only be seen by an RLE controller - either a WiNG-MGR running firmware version 3.3.2 or newer or a BMS-WiNG. If your WiNG-MGR firmware is older than version 3.3.2, download the latest firmware from the RLE website (rletech.com) and update your WiNG-MGR.
2. Remove the lid from the sensor enclosure. The lid has one large tab at the top and two small tabs at the bottom that secure it to the sensor base. Squeeze the top of the lid to release the large tab. Pivot the top of lid out from the base and gently separate the two bottom tabs from the base.

   NOTE: The serial number is printed on a white label on the outside of the sensor lid. The serial number is unique to each sensor and you will need to refer to this number throughout the life span of the device.
3. Remove the circuit board from the base to expose the mounting holes. Before you take it apart examine how the board fits into the base. You'll have to put it back into the base so make sure you have a clear understanding of how it was assembled before you remove it.
4. To remove the board pull the circuit board clip out to relieve the tension that holds the board in place. Angle the board up and then pull it to the right to remove it from the base. Move the board slowly and gently to get it out of the base without damaging any circuitry.
5. Secure the base in the desired location. Select a location for the transmitter, keeping the following in mind:
   - You will connect the airflow sensor to the transmitter. The sensor has a leader cable. Make sure your transmitter location is compatible with the site where you will need to place the sensor.
   - For best reception, mount the enclosure base as high off the floor as you can with the most direct/clear line of sight to the controller.
   - Do not mount the transmitter behind metal objects.
6. Put the circuit board back into the enclosure. Angle the board in under the lip of the L brackets and as far down as it will go against the plastic pegs at the bottom of the enclosure. Guide the board so it is parallel with the base. Pull the circuit board clip out and push the board down until the board clip securely snaps into place. The board is a very tight fit in the enclosure. Work slowly and gently so the board isn't damaged.
7. Remove the clear pull tab to engage the battery. Verify the LED is blinking blue. The LED blinks at random intervals of 10-20 seconds.
8. Check the WiNG-MGR web interface or BMS and verify the sensor appears in the list of sensors connected to it. You may need to click the Sensor Discovery button in the WiNG-MGR web interface to allow the unit to find this new sensor.
9. Connect the included airflow sensor to the transmitter. The sensor's leader cable clips directly into the terminal block on the transmitter's circuit board.

   All DIP switches should be factory configured for the appropriate sensor input. Verify the DIP switch settings:
   - WING-AIR3: Attach a 3m/s sensor; verify DIP3 is OFF (down).
   - WiNG-AIR4: Attach a 4m/s sensor; verify DIP3 is ON (up).
   - WiNG-AIR10: Attach a 10m/s sensor; verify DIP3 is OFF (down).
10. Mount the airflow sensor. The sensor is directional so make sure the airflow input and output face the correct directions:

WiNG-AIR4 and WiNG-AIR10



11. Check the WiNG-MGR web interface or BMS to make sure the sensor status reports accurately.
12. Use DIP1 and DIP2 to set the read frequency for the sensor. The read frequency is the amount of time that passes between when each sensor reading is reported to the WiNG-MGR or BMS-WiNG. The shorter the read frequency, the more frequently the sensor data will be reported to and updated in the controller. The shorter the read frequency, the shorter the battery life of the sensor.

WiNG-AIR3 Sensors

DIP1	DIP2	Read Frequency	Battery Life
On (Up)	On (Up)	20-40 seconds (~30 seconds)	5.5 years
Off (Down)	On (Up)	40-80 seconds (~60 seconds)	8 years
On (Up)	Off (Down)	60-120 seconds (~90 seconds)	9.5 years
Off (Down)	Off (Down)	80-160 seconds (~120 seconds)*	11 years*

WiNG-AIR4 and WiNG-AIR10 Sensors

DIP1	DIP2	Read Frequency	Battery Life
On (Up)	On (Up)	40-80 seconds (~60 seconds)	2.25 years
Off (Down)	On (Up)	80-160 seconds (~120 seconds)	4 years
On (Up)	Off (Down)	120-240 seconds (~180 seconds)	5 years
Off (Down)	Off (Down)	160-320 seconds (~240 seconds)*	7 years*

*Default setting

13. Replace the lid, ensuring that the antenna is held in place by the antenna guides and feeds out the vent hole in the side of the enclosure. Do not pinch the antenna between the lid and the case.