

Z-Weather user guide.

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Z-Weather.



Popp **Z-Weather** (<https://www.popp.eu/products/sensors/z-weather/>), was developed to indicate outdoor conditions and warn of strong winds. It is powered by **Popp Z-Wave** (<https://poppandco.com/>), technology.

Before purchasing make sure to contact your Z-Wave Gateway/Controller manufacturer to determine if this device is compatible, typically most Z-Wave gateways will be generically compatible to Sensor type devices. The **technical specifications of Z-Weather** (<https://aeotec.freshdesk.com/solution/articles/6000219444-z-weather-technical-specifications->) can be viewed at that link.

Familiarize yourself with your Z-Weather.



- Z-Wave Button
- LED Indicator
- Solar Panel

Quick start.

Getting your Z-Weather up and running is as simple as installing it and linking it to your Z-Wave network. The following instructions tell you how to add your Z-Weather to your Z-Wave network using an existing gateway.

Charge and installation of Z-Weather:

1. Fully charge your Z-Weather by placing this unit in direct sunlight (best to point the Solar Panel towards the sun if possible).
2. Wait 4-6 hours to fully charge Z-Weather. (This process can take up to 12 hours maximum).
3. Tap the Z-Wave Button and see if the LED blinks, this is to check if Z-Weather is sufficiently charged and operational

Pair Z-Weather using an existing gateway:

1. Set your Z-Wave gateway into pair/include mode. (Please refer to your Z-Wave gateway instruction manual).
2. Tap the Z-Wave Button on Z-Weather 3x times in 1 second.

Placement of Z-Weather:

Z-Weather is best placed in an area that is shadowed to keep direct sunlight from heating up the sensors providing inaccurate readings. Although this device is solar powered, placing this device in indirect sunlight will produce enough power even if it is in the shadows for a full day.

Product Usage.

Wireless Reports.

Z-Weather once paired to your Z-Wave network will start reporting various sensors reports as listed below via SENSOR_MULTILEVEL (command: Multilevel Sensor Report).

Measurement	Range	Accuracy
Air Temperature	-10.0 to +60.0 C	+/-0.4C
Luminance	0 to 100%	+/-7%
Relative humidity	1 to 100%	+/-3%
Wind speed	0 to 31 m/s	+/-1 m/s
Barometric pressure	600 to 1200 mBar	+/-1 mBar
Dew point	-56.4 to +60.0 C	+/-0.7 C

Advanced functions.

Communication to a Sleeping device (Wakeup).

This device is battery operated and turned into deep sleep state most of the time to save battery life time.

Communication with the device is limited. In order to communicate with the device, a Z-Wave controller is needed in the network.

This device will wakeup regularly and report a wakeup state by sending out a Wakeup Report. The controller can then empty the queued commands.

If the device was included by a Z-Wave controller, the controller will usually perform all necessary configurations. The wakeup interval is a trade off between maximal battery life time and the desired responses of the device.

Steps to wakeup Z-Weather:

- Tap the Z-Wave Button 3x times within 1.5 seconds.

Removing your Z-Weather from a Z-Wave network.

Z-Weather can be removed from your Z-Wave network at any time. You'll need to use a Z-Wave primary controller to do this and the following instructions which will tell you how to do this using your existing Z-Wave Network.

This method can be used with any Primary Z-Wave Controller even if it is not directly paired to Z-Weather.

Using an existing gateway:

1. Place your gateway or controller into Z-Wave unpair or exclusion mode. (Please refer to your controller/gateway manual on how to do this)
2. Tap the Z-Wave Button on Z-Weather 3x times within 1 second.
3. Your gateway should confirm if the Z-Weather is successfully excluded from your network.

Manually Factory Z-Weather.

This method is not fully advised unless your gateway has failed, and you do not yet have another gateway to perform a general unpair on Z-Weather.

- 1. Press and hold the Z-Wave Button for 1.5 seconds or longer then release. The LED will begin to blink longer as confirmation.

Association Groups.

Group Association is a specific function in Z-Wave that allows you to tell the Z-Weather who it can speak to. Some devices may only have 1 group association meant for the gateway, or multiple group associations that can be used for specific events. This type of function isn't used too often, but when it is available, you may be able to use it to directly communicate to Z-Wave devices instead of controlling a scene within a gateway which can have unforeseen delays.

Some gateways have the ability to set Group Associations to devices that have these special events and functions. Typically this is used to allow your gateway to update the status of Z-Weather instantly.

By default, your primary gateway should have been associated to the Z-Weather automatically during the pairing of your sensor. For any case you have a Secondary Z-Wave Controller, you'll need to associate it to your Z-Weather in order for your secondary controller to update its status.

Group Number	Maximum Nodes	Description
1	5	Lifeline.
2	5	Too windy If the threshold value for wind (Default value: 6m/s) is exceeded, the basic set is sent to all group members.
3	5	It is getting bright. Sends BASIC SET command in the morning when brightness reached trigger level (Default value: 37%)
4	5	It is getting dark. Sends BASIC SET command in the evening when brightness reached trigger level (Default value: 37%)

Configuration Parameters.

Parameter 1: Threshold for too much wind

Crossing this value on the rising edge, Z-Weather sends a basic set to the associated groups, serves the lifeline and sends a wake up notification.

Size: 1 Byte, Default Value: 6

Setting	Description
0 - 30	m/s

Parameter 2: Threshold for twilight

This parameter sets the trigger level for twilight to control devices in association group 3 and 4

Size: 1 Byte, Default Value: 37

Setting	Description
0 - 100	%

Other Solutions

Technical specifications of Z-Weather (<https://aeotec.freshdesk.com/solution/articles/6000219444-z-weather-technical-specifications->).

Z-Weather troubleshoot guide. (<https://aeotec.freshdesk.com/support/solutions/articles/6000219609-z-weather-troubleshoot-guide->).

German User guide (<https://manuals.zwave.eu/backend/make.php?lang=de&sku=pope005206&type=popp>).