



goap®



FIBARO®
HOME INTELLIGENCE



Aeotec
BY AEON LABS

When looking for a dimmer, the first requirement can often be 'will it work without neutral'. In the case of Aeotec and Fibaro, the answer is yes, although there is a minimum wattage requirement. Unfortunately, Goap (Quibino) cannot do a 2 wire (no neutral) installation, all Goap dimmers require a 3 wire install (live, neutral and out). But let's have a closer look at these to make a more informed decision of which one is right for each application. All 3 dimmers are of a similar size with the Goap being the smallest.

Minimum Wattage Requirements

In order for a dimmer to work, it has to be able to draw over a certain wattage. The Fibaro, albeit the most highly featured, and the most expensive of the 3 has a minimum recommended wattage of 50w. This means that if you want a dimmer for 2x LED downlights, you either have to use another dimmer brand or purchase a Fibaro dimmer AND a dimmer bypass which will add ~\$25inc rrp to the solution. The Aeotec has a minimum wattage of 10w for 3 wire installs and 20w for 2 wire installs which is pretty reasonable. When it comes to 3 wire solutions, Goap takes this away with a 1w wattage minimum requirement.

Maximum Wattage

This is completely dependent of what type of lamps you are powering. Fibaro really shines with this rating as can be seen on the chart below. Aeotec is also very impressive, but only for resistive type bulbs e.g. halogen, incandescent etc, however, we failed to find any literature stating their capacitive limit which is of great importance as this determines their switch mode (buck) LED driving capability. Inductive loads, which are less commonly used e.g. for transformer step downs, are also outlined below.

Trailing/Leading edge capabilities

Fibaro and Aeotec have a parameter for leading/trailing edge switching, however, Goap are trailing edge only. LED and halogen/incandescent bulbs usually employ a trailing edge dimmer, whereas inductive type loading e.g. ferromagnetic transformer type low voltage lighting normally employs a leading edge dimmer which is fairly dated. Additionally, some LED lamps and tube lights are designed to work with leading edge style dimmers. Please note that dimmers are only suitable for dimmable tube lamps WITH ballasts or CFL's.

Parameters

The Fibaro has enough parameters to do very near anything. The parameters unique to it are the ability to not only start at a fixed brightness, but stay there for a fixed period to warm up a CFL/Halogen globe and configurable association parameters. The Aeotec and Goap have a reasonable set of parameters without the bells and whistles. The Aeotecs parameter strength, compared to the Goap is more configurable associations parameters whereas the Goaps strength is more configurable operation e.g. dimming ramp rates which the Aeotec, surprisingly, does not have.

| | Goap Dimmer | Fibaro Dimmer 2 | Aeotec Nano Dimmer |
|----------------------------|------------------------|-----------------|-------------------------|
| Additional Input Ports | <i>Temp input port</i> | <i>no</i> | <i>Touch panel port</i> |
| Parameters | <i>24</i> | <i>59</i> | <i>33</i> |
| Leading Edge | <i>no</i> | <i>yes</i> | <i>yes</i> |
| Trailing Edge | <i>yes</i> | <i>yes</i> | <i>yes</i> |
| Maximum Res-Cap Wattage | <i>30w</i> | <i>200w</i> | <i>not stated</i> |
| Maximum Res-Ind Wattage | <i>50w</i> | <i>220w</i> | <i>100w (3wire)</i> |
| Maximum Res Wattage | <i>140w</i> | <i>250w</i> | <i>276w</i> |
| Min 2 Wire Wattage | <i>NA</i> | <i>50w</i> | <i>20w</i> |
| Min 3 Wire Wattage | <i>1w</i> | <i>50w</i> | <i>10w</i> |
| No Neutral wiring (2 wire) | <i>No</i> | <i>Yes</i> | <i>Yes</i> |
| Size | <i>42x37x15</i> | <i>42x38x20</i> | <i>42x39x20</i> |
| RRP inc gst | <i>\$99</i> | <i>\$119</i> | <i>\$99</i> |



HELPFUL TIPS



When using a Fibaro dimmer on a Vera gateway, never try to get the Vera to force calibration onto the dimmer. The Fibaro dimmers auto calibrate, so there should be no requirement to force calibration in any case.



The power supplies in NSW and QLD have some 'issues'. Due to these, dimmers can occasionally get upset. Fibaro have crossed this bridge with the Dimmer2 and as such, have a certain amount of immunity; however, to the best of our knowledge, none are totally exempt.



We recommend never using momentary toggle switches with dimmers.