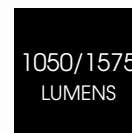
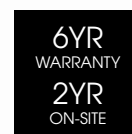
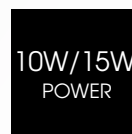


VEX BULKHEAD

VEX-10/15-300NW/MS

QVIS[®]

LIGHTING & SECURITY



merrytek

Sensor Driver

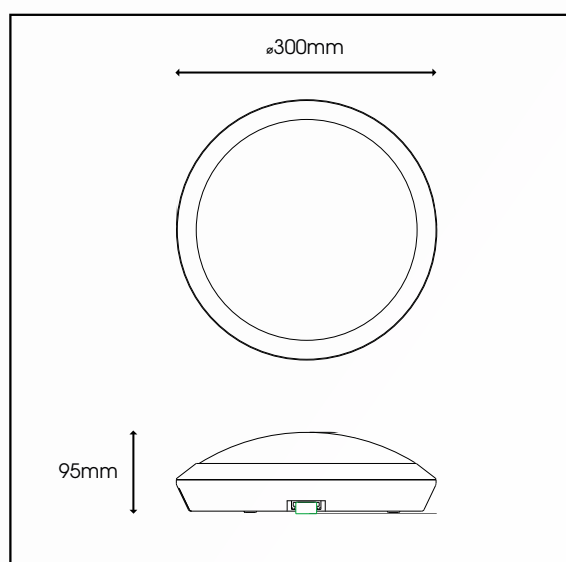
EPISTAR

LED's inside

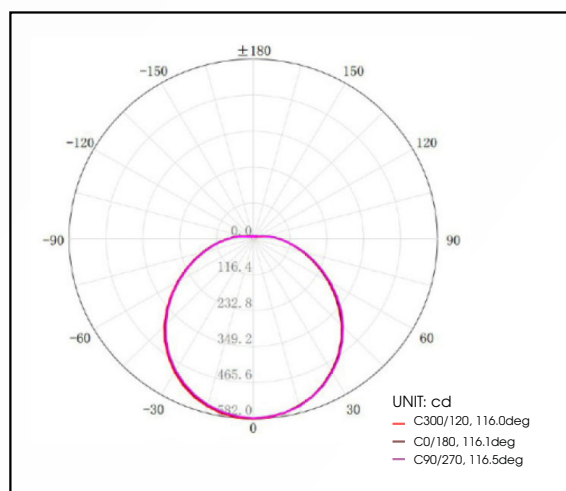
| Specification | VEX |
|-----------------------------|--|
| System Power | 10W/15W |
| Sensor Driver | Merrytek |
| LED Chipset | Epistar |
| Colour Rendering Index | >80 |
| Lumen Output | 1050Lm/1575Lm |
| LED Efficacy | 105 Lm/cW |
| Dimmable | All types available |
| IK Rating | IK10 |
| IP Rating | IP66 |
| Power Factor | 0.997 |
| Fire Rating | TP(α) |
| Housing & Diffuser Material | Polycarbonate |
| Beam Spread | 120 ° |
| Colour Temperature | 4000K |
| Operating Temperature | -20 to 30 °C |
| Weight | 0.6kg |
| Dimensions | ø300mm x 95mm |
| MacAdam Step | <3 |
| Lifetime | 50,000 hours, L70-B10 (Ta 25 °C) |
| CE Standards | EN60598-1, EN62493, EN55015, EN61547, EN61000-3-2, EN61000-3-3, EN62722-1, EN62722-2-1 and EN50581 |
| CE Directives | LVD, EMC, ERP & RoHS |

* Warranty terms and conditions apply

TECHNICAL DRAWINGS



LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



SURFACE & SUSPENDED RANGE



Introduction

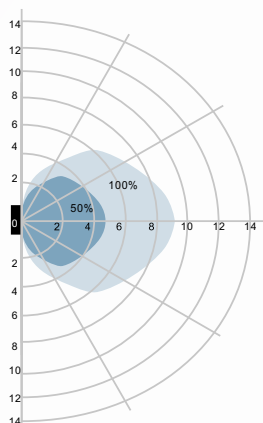
- Stand-by power < 0.5W.
- Stand-by dimming level is optional, 10% / 25%.
- Integration of microwave motion sensor, daylight sensor and LED power supply.
- Automatic switching and dimming based on motion and light level.
- Constant current can be set via DIP switch.
- Compact size makes the drivers suitable to fix within most LED ceiling lights.
- Detection area, time delay and daylight threshold can be precisely set via DIP switch.

Sensor DIM LED drivers, originally pioneered by Merrytek, are innovative products integrated with HF motion detector, daylight sensor and LED power supply.

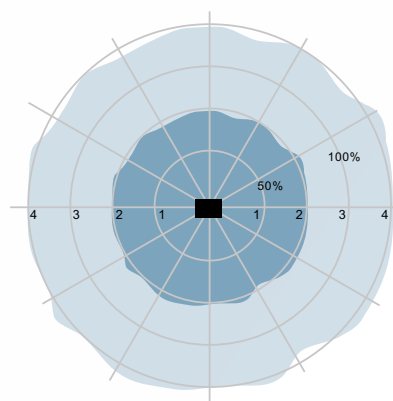
The products supply a simple energy-saving solution for LED ceiling lights. As all control parts are integrated in a same housing, it is very easy to assemble and save labor cost.

Compact size makes the drivers easy to be installed in luminaires and get more simple lighting structure.

As updated version adopts advanced sensor driver circuit, stand-by power is less than 0.5W, more energy saving. In addition, optional stand-by dim level is friendlier for actual use.



Wall mounting pattern (Unit: m)
Installation height: 1.5m



Ceiling mounting pattern (Unit: m)
Installation height: 3m

ON-OFF Function

The products provide ON-OFF and steps dimming function for LED lighting, users can select the right function according to different applications.



With sufficient ambient light, the sensor does not switch on the lamp.

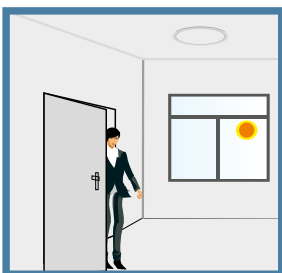


With insufficient ambient light, the sensor switches on the lamp when motion is detected.

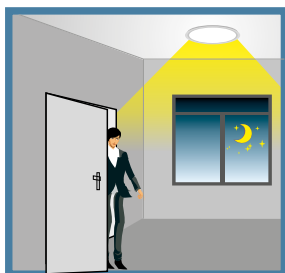


After hold time, the lamp gradually dims down if no motion is detected.

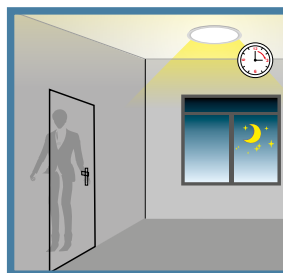
3-step dimming function



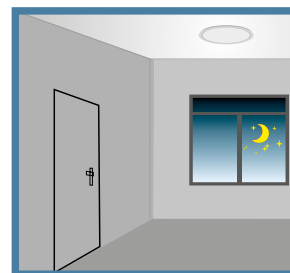
With sufficient ambient light, the sensor does not switch on the lamp.



With insufficient ambient light, the sensor switches on the lamp when motion is detected.

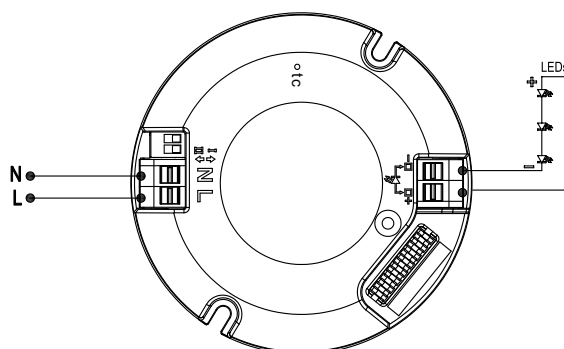


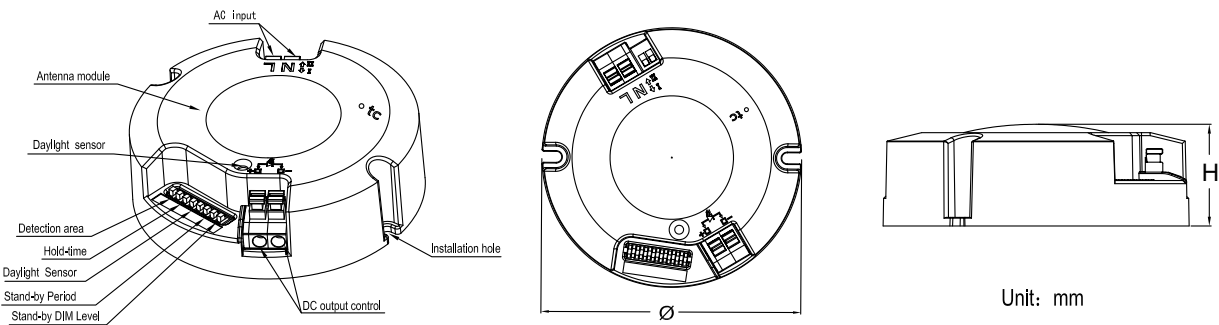
After hold time, the sensor dims the lamp at a low light level if no new motion trigger.



After stand-by period, the sensor switches off the lamp if no motion is detected in its detection zone.

Wiring scheme





SPECIFICATION VALUES

| | |
|--------------------------|---|
| Operating voltage | 220~240Vac,50/60Hz |
| Output constant current | 350mA |
| Output voltage | 28-52Vdc |
| Efficiency | ≥84% (@Full load) |
| Power factor | >0.9 (@Full load) |
| HF system | 5.8Ghz±75Mhz, ISM wave band |
| Transmitting power | <0.5mW |
| Power consumption | ≤0.5W (standby) |
| Detection range | 4m(@ 3m mounting height) |
| Detection area | 50%/ 100% |
| Hold time | 5s/ 90s/ 3min/ 10min |
| Stand-by period | 0s/ 30s/ 10min/ +∞ |
| Daylight sensor | 5lux/ 15lux/ 50lux/ Disable |
| Stand-by DIM level | 10%/ 25% |
| Mounting height | 6m Max. |
| Motion detection | 0.5~3m/s |
| Detection angle | 150° (Wall installation) 360° (Ceiling installation) |
| Working temperature (Ta) | -25℃ ~ 50℃ |
| Size (ø x H) | 68x28.5mm |
| IP rating | IP20 |

By selecting the combination on the DIP switch, sensor data can be precisely set for each specific application.

| | | | |
|---------|----|----|------|
| ON ↑ | | 1 | |
| | I | ON | 100% |
| | II | - | 50% |

Detection area

Detection area can be reduced by selecting the combination on the DIP switches to fit precisely each application.

| | | | | |
|---------|-----|----|----|-------|
| ON ↑ | | 2 | 3 | |
| | I | ON | ON | 5S |
| | II | - | ON | 90S |
| | III | ON | - | 3min |
| | IV | - | - | 10min |

Hold time

Refers to the time period the lamp remains at 100% illumination after no motion detected.

| | | | | |
|---------|-----|----|----|---------|
| ON ↑ | | 4 | 5 | |
| | I | ON | ON | Disable |
| | II | - | ON | 50Lux |
| | III | ON | - | 15Lux |
| | IV | - | - | 5Lux |

Daylight sensor

The sensor can be set to only allow the lamp to illuminate below a defined ambient brightness threshold.

When set to Disable mode, the daylight sensor will switch on the lamp when motion is detected regardless of ambient light level.
50lux: twilight operation, 15lux, 5lux: darkness operation only.

| | | | | |
|---------|-----|----|----|-------|
| ON ↑ | | 6 | 7 | |
| | I | ON | ON | 0S |
| | II | - | ON | 30S |
| | III | ON | - | 10min |
| | IV | - | - | +∞ |

Corridor function (Stand-by period)

Refers to the time period the lamp remains at a low light level before it completely switches off in the long absence of people.

When set to “+∞”, the low light is maintained until motion is detected.
When set to “0s”, the light will turn off after hold time.

| | | | |
|---------|----|----|-----|
| ON ↑ | | 8 | |
| | I | ON | 10% |
| | II | - | 25% |

Stand-by dimming level

The low light level you would like to have after the hold time in the long absence of people.