

# Ashby Lightbox LED Tech Specs



## Feature & Benefits

- Optimised lens for backlighting surfaces or letters with few modules. Depth range from 60 to 150mm.
- Flexible chains with 50 or 30 modules - cuttable anywhere
- New 160° IRISLENS achieves superior light distribution like you haven't seen before. Allows unparalleled uniformity
- IP67 rated for outdoor applications
- Durability: Robust body made with Innovative thermally conductive plastic and PC lens, both UV rated
- Up to 107 lm/W efficiency brings your customer high energy savings
- DC 12V.
- All modules are equipped with regulation component (11-14V) to ensure that any fluctuation of the output voltage from the converter would not affect the lumen output, increase of temperature or life time of the module.
- 3M VHB 4950 adhesive-tape and screw-hole for mechanical fixation
- 100% aging test
- Wide operating temperature from -30° to +70°C

## Lifetime & Warranty

- Lifetime: 70,000 hours
- Warranty: 7 Years

## Technical Data

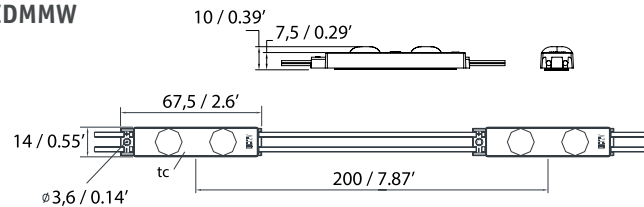
| Product | Colour         | Colour Temp /Wavelength | Wattage Per Module | Voltage |
|---------|----------------|-------------------------|--------------------|---------|
| ALEDMMW | White Daylight | 6000-6500K              | 0.66 watt          | 12v     |
| ALEDMLW | White Daylight | 6000-6500K              | 0.95 watt          | 12v     |

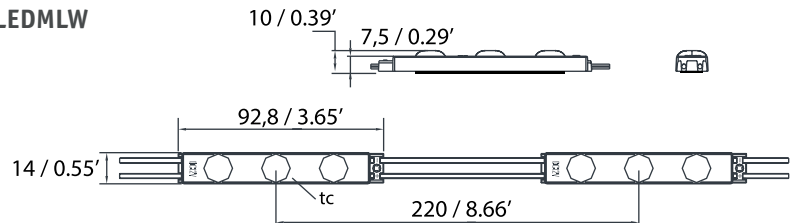
| Product | Lumen Output (lm/mod) | Efficiency (lm/W) | Modules Max in Series | Modules Distance |
|---------|-----------------------|-------------------|-----------------------|------------------|
| ALEDMMW | 69                    | 104               | 50                    | 200±5 / 7,87'    |
| ALEDMLW | 101                   | 107               | 30                    | 220±5 / 8,77'    |

## Dimensions

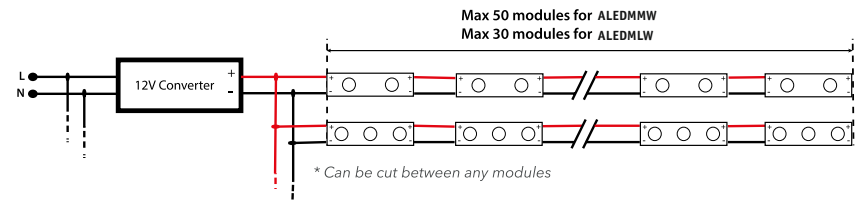
### ALEDMMW



### ALEDMLW



## Wiring Diagram



## Ingress Protection IP67

- Module is an “inbuilt LED module” designed to be used Indoors and Outdoors applications
- The specified environmental protection of the LED module enclosure means that it is totally protected against dust, and protected against the effect of water immersion up to 1 mtr. The certification requires products to pass a test 30 minutes long at 1 mtr. below the surface of water. After 30 minutes of submersion product could start to be affected or damaged.
- Make sure the application (sign, box, etc.) where the LED modules are installed into, has proper holes for water to exit so that LED modules and any other electronic components are not submerged exceeding the IP67 certification limits.

## Installation

- Always connect the LED modules to the power supply while it is OFF. Only then you can connect the power supply to electricity and turn it ON.
- Respect the maximum number of modules in a row.
- Check compatibility between LED and driver voltage.
- Install LED on a clean work station connected to the earth. all LEDs are sensitive to static electricity (ESD).
- Limit the cable length between LED and power supply (voltage drop).
- Do not make direct pressure on LED chip, this could damage the internal connection.
- Secure LED module lines with mechanical fixation (screws, glue ...) in addition to the adhesive tape.

## Thermal Behaviour

The temperature limits indicated below are expressed in °C, at full load, after 3 hours of operation conditions, with natural convection:

- Operation temperature Ta -30° to +70°C
- Storage temperature Ts -30° to +80°C
- Max. temperature tc point Tc +80°C

The life of the module will decrease when the maximum temperature limits are exceeded. If LEDs are operated for a continuous extended time at temperatures that exceed the maximum limits, the modules can fail. Our Warranty will be void when LED modules are operated exceeding the maximum values indicated.

## Led spacing depending on return

| Product | Return (mm) | Module Spacing (Centre to Centre) |
|---------|-------------|-----------------------------------|
| ALEDMMW | 60mm        | 120mm x 120mm                     |
|         | 70mm        | 150mm x 150mm                     |
|         | 80mm        | 150mm x 150mm                     |
|         | 90mm        | 200mm x 200mm                     |
|         | 100mm       | 200mm x 200mm                     |
|         | 110mm       | 200mm x 250mm                     |
|         | 120mm       | 200mm x 250mm                     |
| ALEDMLW | 120mm       | 220mm x 300mm                     |
|         | 130mm       | 220mm x 300mm                     |
|         | 140mm       | 220mm x 300mm                     |
|         | 150mm       | 220mm x 300mm                     |

