

## **LuxaLight Modular LED Fixtures Infosheet**

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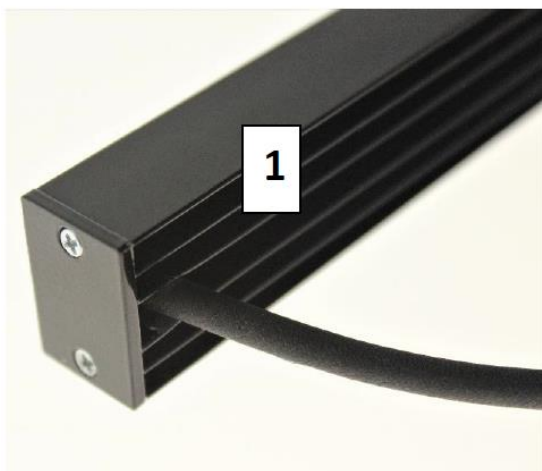
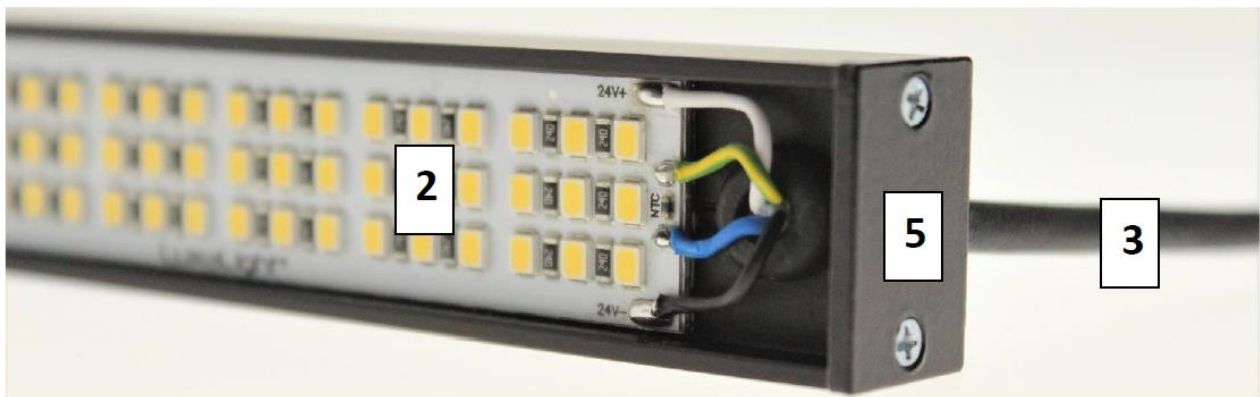
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This infosheet is made to clarify the possibilities of custom made Industrial LED fixtures.

## What is an Industrial LED Fixture?

Industrial LED Fixtures are assemblies that are assembled (custom) specifically for each application. An LED fixture is an assembly of individual parts consisting of:

1. Heatsink / LED Profile
2. LED Module(s)
3. Cable(s)
4. Mould or lens cap
5. Endcaps



Opal Lens Cover 4A

Clear Lens Cover 4B

Moulded Fixture 4C

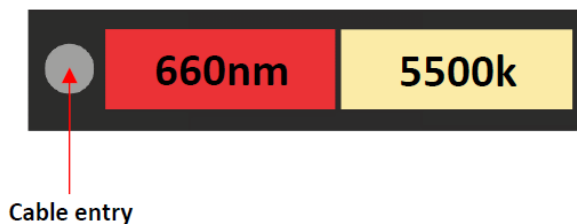
## How is an Industrial LED Fixture designed?

An application has technical specifications that the LED Fixture must fulfil. These specifications can be:

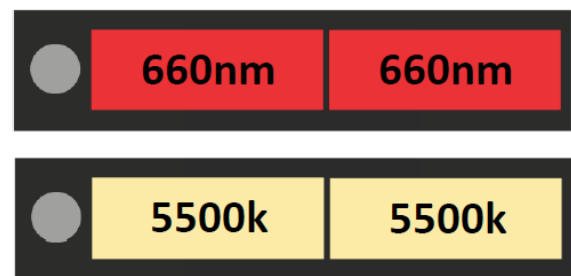
### - Wavelength(s)

- Luxalight offers a large assortment of LED Modules of different wavelengths. All LED modules can be assembled into Industrial LED Fixtures.
- When multiple wavelengths are required, there are two possible solutions:

Multiple wavelengths in one fixture:

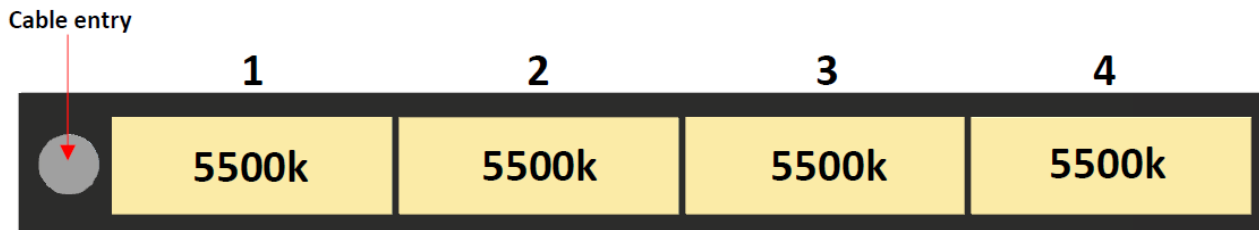


Multiple wavelengths in multiple fixtures:



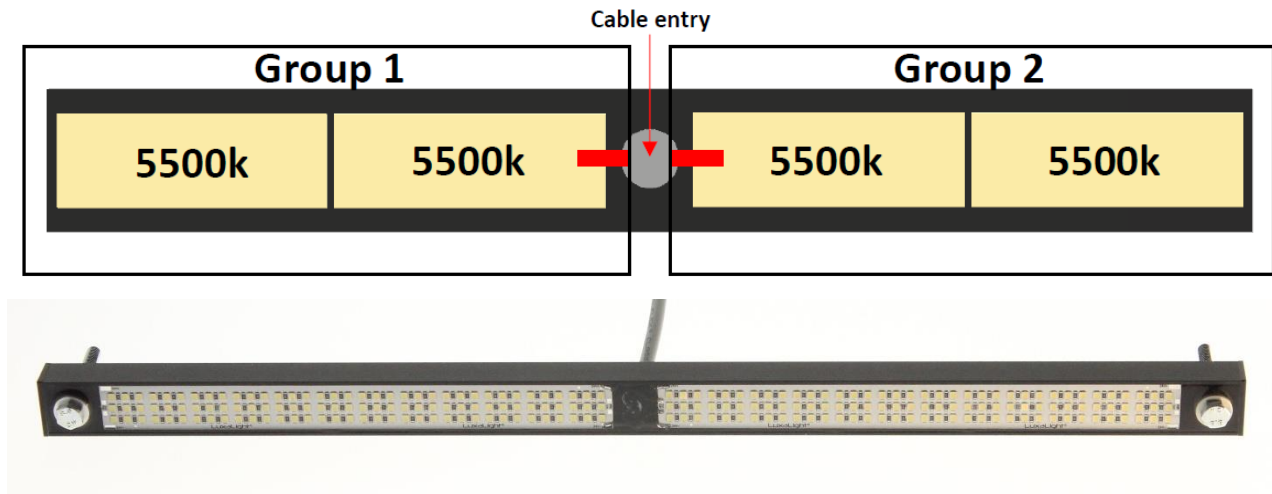
### - Radiance / Irradiance / PPFD

- LuxaLight LED modules are used in Industrial LED Fixtures. When one LED module is not enough for the application, more modules can be added to the fixture, making it longer. This can go up to 14 modules per fixture.



## - LED Controlling

- We advise using the MaNima Pollux Industry in combination with the Industrial LED Fixtures, for example the following reasons:
  - LED monitoring with embedded temperature sensors on the LuxaLight LED modules
  - Pulse Control
  - System Integration
- For more information about the MaNima Pollux Industry visit: [MaNima Pollux Industry pulse control 10µs \(luxalight.eu\)](http://MaNimaPolluxIndustrypulsecontrol10µs(luxalight.eu))
- Controlling individual groups in one fixture is also possible, by using multiple LED modules in one fixture that are individually connected to a MaNima Pollux Industry. For example:



- This is just one example of the possibilities. More groups, of different wavelengths are also possible.

## - Heat Management

In order to keep the LED Fixture below max. working temperature, heat management is required. Heat management solutions include, but not limited to:

- Active cooling (with MaNima Pollux Industrial fan handler)
- Pulse control (if applicable), with the MaNima Pollux Industrial pulse mode.

Parameter name	Value
Enable pulsemode	<input checked="" type="checkbox"/>
Delaytime port 1	10 us
Pulse length port 1	5 ms
Delaytime port 2	10 us

- Temperature sensors combined with the MaNima Pollux Industrial PWM control function

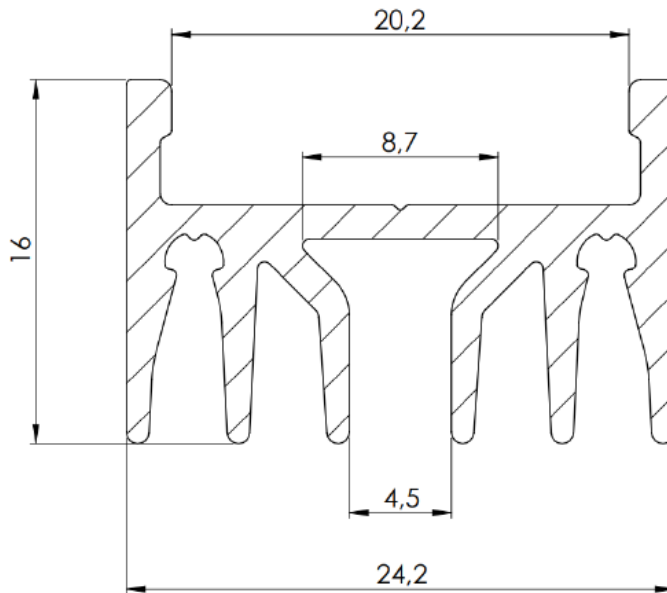
Configurable settings:

Parameter name	Value
Mode NTC/LDR 6	NTC
NTC/LDR 6 Dim	1.0
NTC6Temp	24.38 deg C
NTC6Outmax	100 %
NTC6Outmed	10 %
NTC6Outmin	0 %
NTC6Inmax	70.0 deg C
NTC6Inmed	60.0 deg C
NTC6Inmin	50.0 deg C

Heat management is crucial, for questions or advice don't hesitate to contact us.

- **Mechanical Dimensions**

- Length of the fixture is determined by the technical specification required for the application. Height can change depending on using a lens cap (17mm) or a moulded fixture (16mm). Width stays 24,2mm.

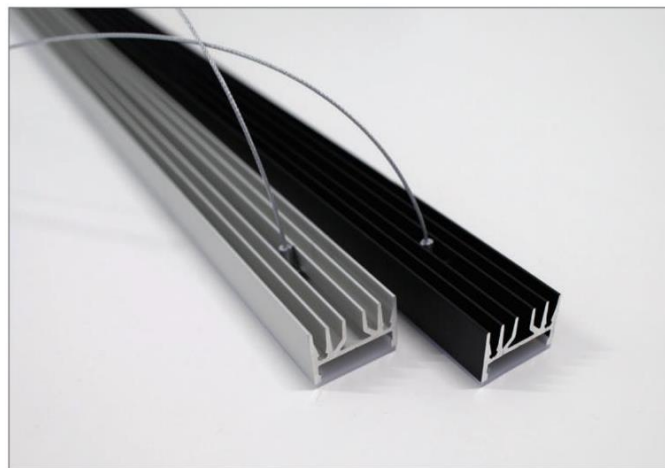


- **Mounting options / methods**

- 1. Mounting endcap



- 2. Mounting steels



- 3. Through hole (>M3 to M6)



- 4. M3 Bolt on backside

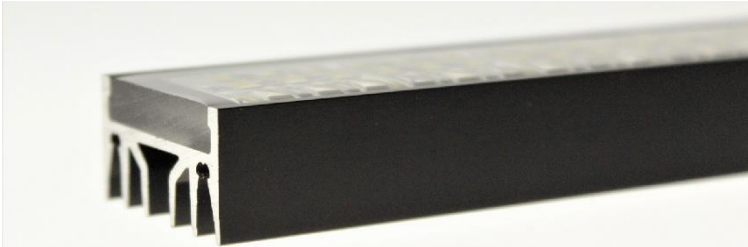


For questions, advice or custom solutions don't hesitate to contact us.

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- **Moulding options**

- Moulding is used to create an UV-resisting transparant layer to protect the LED modules.



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