



# LUMAWISE LED HOLDERS

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# TE Products for Lighting Applications

...and more



# **Indoor Lighting**





## **Applications**











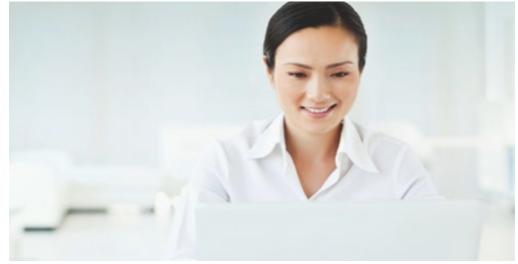






## **Enabling our Lighting Customers / Customer Benefits**





#### SMARTER.

- HUB for Electrical + Thermal+ Optical connection
- Ecosystem designed for CoB LEDs

#### **FASTER.**

- Engineered solution
- Eliminates soldering
- Snap-in LED feature

#### BETTER.

- Simple to use
- Saves money
- Secure thermal force



## **HUB for Electrical + Thermal + Optical connections**

The LED holder is where the LED, heat sink and optic interconnect:

- The LED-holder provides solderless electrical connections: to the solder pads on the LED and "poke-in" connectors for the wires
- The holder is screwed onto the heatsink, providing the required even pressure across the LED substrate
- The LED-holder has an Optical Contact Area (OCA) for perfect optical alignment. Mechanical attach features are available on some optics



## **Ecosystem**

The LED on its own is just a component. The sum of components to make the lighting system work, and they form the Ecosystem around the LED.

The Ecosystem is as strong as its weakest link - consisting of:

LED + thermal conductive material + heat-sink + an LED driver + optics.

- The TE connectivity LED-holder is designed with the Ecosystem in focus.
- It is tailored to fit to the LED dimensions and firmly hold the it in place.
- It is engineered so that the optics can be aligned perfectly. It is even possible to mechanically attach
  some optics to the holder for a more robustness and easier assembly on the production lines at the
  luminaire manufacturer.

The Ecosystem enabled by the TE connectivity LUMAWISE LED holder.



## **Engineered Solution**

The LED holder is engineered around each specific LED for optimal performance. You benefit from the TE connectivity experience in material science, connectivity knowledge and knowledge of molding and plating.

- The product includes 'hidden' features: clamping the LED into the holder before mounting it on a heatsink
   easing assembly.
- The design provides a reliable electrical contact with the LED once mounted in a luminary.
- The design eliminates the impact of plastic deformation on the electrical and thermal connections at high temperatures
- It has unique thermal paste overflow feature to optimize the thermal transfer from the LED to the heat sink
- Key material selection: strong and rigid over a wide temperature range, whilst being >85% reflective.
- Attachment features for a leading optical manufacturers
- Clean and appealing aesthetic design without brand marking. Supporting the clean design of the luminaire whilst being technically strong



## Eliminates soldering

- Faster than manual-soldering, the holder reduces the labor cost to connect the CoB LED.
- A reliable and consistent connection is made to the LED.
- The LED-holder provides solderless electrical connections to the pads on the LED and "poke-in" connectors for the wires
- Accepts a wide range of wire types and sizes.
- Avoids heating and cooling the CoB LEDs for hand soldering and eliminates solder flux spatters on the Light emitting surface.



#### Click-in LED feature

The TE connectivity LED-holder is tailored around the LED dimensions and firmly grips the LED.

- Once the LED is clicked into the holder it becomes easy to handle.
- You can cleanly deposit thermal paste onto the LED whilst gripping the holder
- Enabling you to place the holder with the LED directly onto the heatsink as a module



## Simple to use

The LED holder's simplicity is its appeal:

- Clicking the LED into the holder to create a module
- Apply the thermal paste cleanly on the back of the LED substrate
- The LED does not fall out, so handling and assembly becomes child-play.
- Use M3 screws to mount it onto the heatsink
- Push stripped wire into the poke-in connectors, clearly marked + & -



## Saves money

- Faster than the hand-soldering process
- The quality of connection is consistent and reliable
- You not get solder flux spatter on the LED light emitting surface that effect the optical performance
- You not need specialized equipment or highly skilled personnel to mount CoB LEDs into the luminaire.

#### The choice is obvious!



#### Secure thermal force

The LED holder is designed so it holds the LED before assembly and once attached to a heat sink the thermal force is secured by:

- 1. The material selection enabling the holder to withstand high temperatures and eliminate the effect of plastic deformation.
- 2. An integrated high-quality contact spring that contributes to the down force on the LED and is positioned directly under the screws that secure the holder to the heat sink.

