

# FrigoDynamics® LC HPK-Fin™ 310 Hybrid

## Heat Exchanger for CoB LEDs $\leq 80W$ <sup>3</sup>



The LC HPK-Fin™ cooler is a 2-phase heat exchanger allowing high levels of power dissipation with zero power consumption. It has a particularly low profile horizontally which enables it to fit in areas with restricted space in vertical. Typical applications for this form factor are recessed down lights.

- Passive, no CO<sub>2</sub> emissions
- Light weight
- Slim horizontal profile
- Zero noise levels
- No operating cost
- No lifetime issues
- Easy installation



Please Note:  
Registered German  
Utility Model  
DBGM protected  
PCT Patent Application

## Specifications

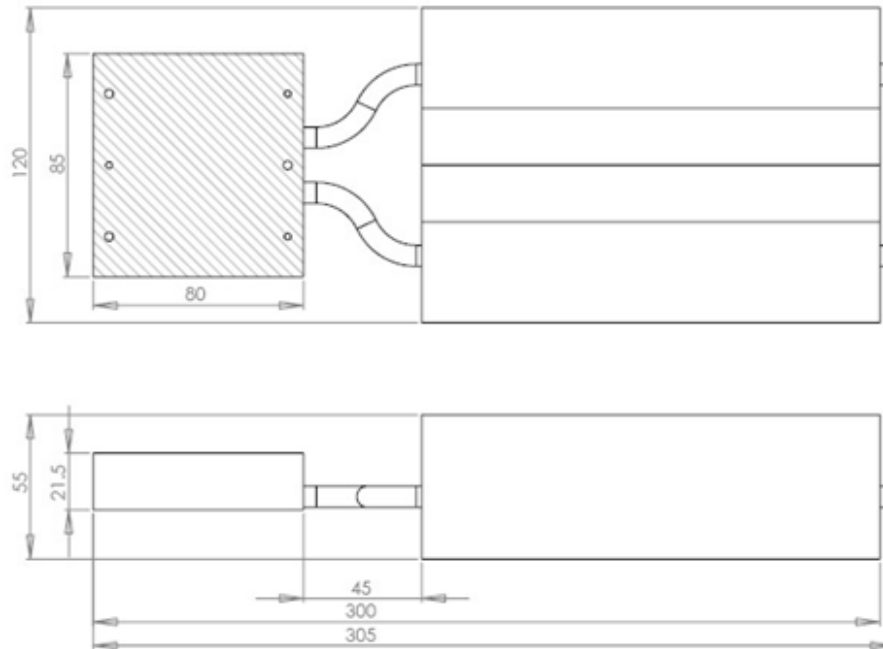
	Value	Conditions
<b>Thermal Resistance (Tc)</b>	0.75 °C/W <sup>1,2</sup>	Measured between LED Tc - ambient
<b>Thermal Resistance (Hs)</b>	0.55 °C/W <sup>1</sup>	Measured between LED mounting base and ambient
<b>Design power</b>	80W <sup>3</sup>	Electrical Load
<b>Storage Temperature</b>	-40°C to 100°C	Air temperature surrounding the unit
<b>Surface finish</b>	Black	Anodized
<b>Weight</b>	425g	Complete unit (excluding LED Light Engine)
<b>Regulatory Compliance</b>	RoHS	No further compliance necessary for passive devices

<sup>1</sup> Thermal resistance is measured in free air without airflow obstructions and in a horizontal orientation.

<sup>2</sup> This value is impacted by the thermal interface material used, especially with smaller heat sources.

<sup>3</sup> Design power is based on 50 °C temperature difference ( $\Delta T$ ) between maximum Tc point on LED module to ambient temperature.

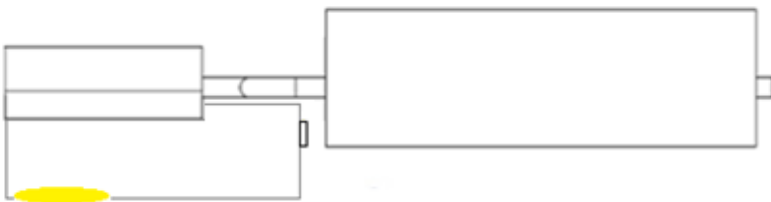
## Dimensions (~mm)



3D envelope CAD file available upon request  
and endorsement of FrigoDynamics NDA

## Product Guide

Part Number	Description	Specifics
<b>LC 0800</b> HPK01-310AN	Blank Surface	
<b>LC 0801</b> HPK01-310AN	Philips Fortimo DLM mounting holes	Accommodates DLM and Lexel form factor



Please [contact](#) us, should you have specific requirements not covered in this data sheet.

### Disclaimer

Information given by FrigoDynamics® is believed to be accurate and reliable. However, since every potential application and the environment our products operate in cannot be anticipated, FrigoDynamics® does not guarantee suitability in all circumstances. Thermal performance may vary depending on the enclosure, the operating orientation and natural airflow. FrigoDynamics® shall not be liable for incidental or consequential damages of any kind.