

# FrigoDynamics® SC HPK-Fin™ 110 Hybrid Heat Exchanger for CoB LEDs ≤ 50W <sup>3</sup>



The SC HPK-Fin™ solution is a Hybrid heat exchanger allowing high levels of power dissipation with zero power consumption. The unit has a unique, patented design utilizing the chimney effect thus maximizing performance. Ideal for track/spot light and high-bay installations.

- Passive, no CO<sub>2</sub> emissions
- Light weight
- Compact
- Zero noise levels
- No lifetime issues
- No operating cost
- Works in any orientation
- Easy installation



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

## Specifications

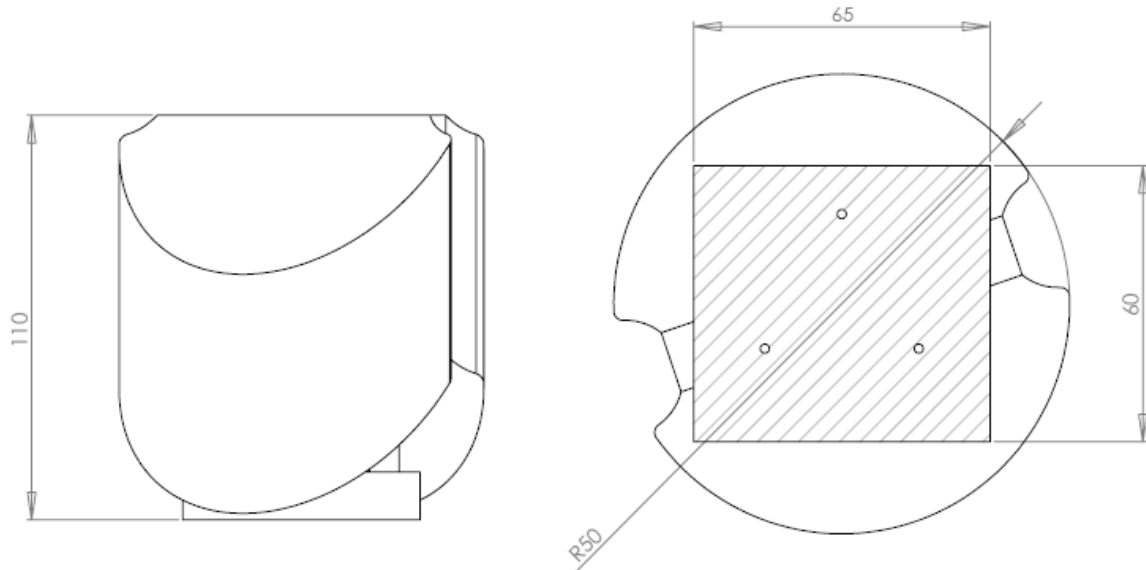
	Value	Conditions
<b>Thermal Resistance (Tc)</b>	1.35 °C/W <sup>1,2</sup>	Measured between LED Tc/Ts - ambient
<b>Thermal Resistance (Hs)</b>	1.15 °C/W <sup>1</sup>	Measured between LED mounting base and ambient
<b>Design power</b>	50W <sup>3</sup>	Electrical Load (assuming 72% Pth)
<b>Storage Temperature</b>	-40°C to 100°C	Air temperature surrounding the unit
<b>Surface finish</b>	Black	Anodized
<b>Weight</b>	~220g	Complete unit
<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 vertical 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 (ΔT) between Tc (Ts) 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
SC 1100 HPK02-110AN	Blank Surface	no mounting holes
SC 1103 HPK02-110AN	Bridgelux® mounting holes, Zhaga pattern	for BXRA, VERO™ 13, 18, 29
SC 1104 HPK02-110AN	Zhaga pattern	for Luxeon CoB, WU-M Spot, Soleric
SC 1106 HPK02-110AN	Xicato mounting holes	for XSM
SC 1107 HPK02-110AN	Citizen mounting holes	for CLL032, CLL042, CLL052
SC 1109 HPK02-110AN	Tridonic mounting holes	Spot P3xx

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 solutions 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.