# FrigoDynamics ${ }^{\circledR}$ OC HPK-Fin ${ }^{\text {TM }} 210$ Hybrid Heat Exchanger for CoB LEDs $\leq 50 W^{3}$ <br> ECO <br> friendly 

The OC HPK-Fin ${ }^{\text {TM }}$ solution 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 $\mathrm{CO}_{2}$ 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 |
| :--- | :--- | :--- |
| Thermal Resistance (Tc) | $1.15^{\circ} \mathrm{C} / \mathrm{W}^{1,2}$ | Measured between LED Tc - ambient |
| Thermal Resistance (Hs) | $0.95^{\circ} \mathrm{C} / \mathrm{W}^{1}$ | Measured between LED mounting base and ambient |
| Design power | $50 \mathrm{~W}^{\mathbf{3}}$ | Electrical Load |
| Storage Temperature | $-40^{\circ} \mathrm{C}$ to $100^{\circ} \mathrm{C}$ | Air temperature surrounding the unit |
| Surface finish | Black | Anodized |
| Weight | $310 \mathrm{~g} \& 300 \mathrm{~g}$ | Complete unit: variation $1 \&$ variation 2 |
| Regulatory Compliance | RoHS | No further compliance necessary for passive devices |

[^0]
## Dimensions (~mm)




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

## Product Guide

| Part Number | Description | Specifics |
| :---: | :---: | :---: |
| OC 0800 HPK01-210AN | Blank Surface | Variation 1 |
| OC 0500 HPK01-210AN | Blank Surface | Variation 2 |
| OC 0801 HPK01-210AN | Philips/Tridonic ${ }^{\circledR}$ pattern | Variation 1 for Fortimo DLM/ STARK DLE |
| OC 0502 HPK01-210AN | Xicato pattern | Variation 2 for XLM ${ }^{\text {M }}$ |
| OC 0503 HPK01-210AN | Bridgelux ${ }^{\text {® }}$ pattern | Variation 2 for all BXRA, VERO ${ }^{\text {TM }} 13,18,29$ |
| OC 0505 HPK01-210AN | Zhaga (Osram/Philips/Tridonic/VS) | Variation 2 for Soleriq/SLM/SLE/WU-M |
| OC 0506 HPK01-210AN | Xicato ${ }^{\circledR}$ pattern | Variation 2 for XSM ${ }^{\text {m }}$ |
| OC 0508 HPK01-210AN | Citizen ${ }^{\circledR}$ pattern | Variation 2 for CLLO32, CLL042, CLL052 |

Please contact us, should you have specific requirements not covered in this data sheet.

[^1]
[^0]:    ${ }^{1}$ Thermal resistance is measured in free air without airflow obstructions and in a horizontal orientation.
    ${ }^{2}$ This value is impacted by the thermal interface material used, especially with smaller heat sources.
    ${ }^{3}$ Design power is based on $50^{\circ} \mathrm{C}$ temperature difference $(\Delta T)$ between maximum Tc point on LED module to ambient temperature.

[^1]:    Disclaimer
    Information given by FrigoDynamics ${ }^{\circledR}$ is believed to be accurate and reliable. However, since every potential application and the environment our solutions in cannot be anticipated, FrigoDynamics ${ }^{\circledR}$ does not guarantee suitability in all circumstances. Thermal performance may vary depending on the enclosure, the operating orientation and natural airflow. FrigoDynamics ${ }^{\circledR}$ shall not be liable for incidental or consequential damages of any kind.

