







# Unlock new opportunities in LED lighting

Nuventix SynJet<sup>®</sup> thermal solutions for Philips<sup>®</sup> LED Modules

## Features

- Enables higher lumen packages
- Up to 1/3 the size of passive cooling
- · Lighter weight than passive solutions
- Energy efficient
- Quiet operation
- I00K hours lifetime
- Thermally engineered and designed specifically for Philips LED Modules
- Philips LED drivers have a built in power connection for the SynJet for a Plug and Play solution

www.nuventix.com/led cooling

# **Benefits**

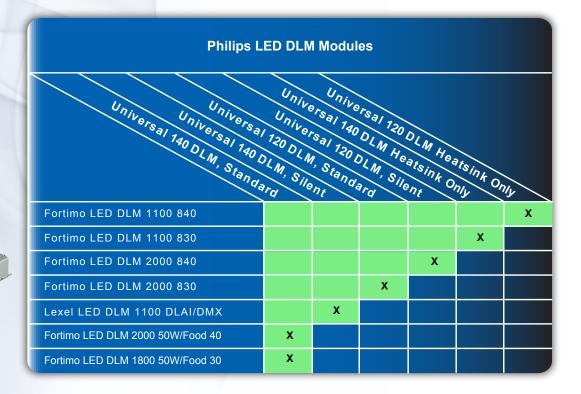
- Flexible design for smaller overall luminaires -Contemporary form or height limited areas
- Easy to design in for fastest time to market
- · Minimal additional power required for cooling
- Excellent in low noise requirement areas
- Cooling life is longer than the module or driver does not limit luminaire usable life
- One heat sink design can be used for higher and lower lumen offerings by coupling with a SynJet cooler, allowing higher lumen fixtures with the same form factor

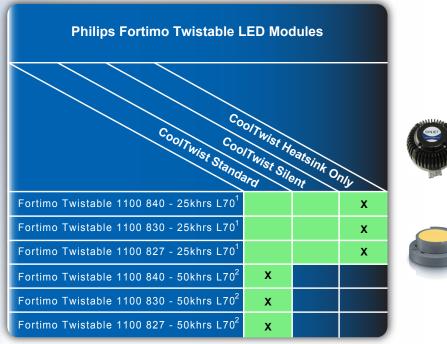
# NUVENTIX

# Nuventix SynJet Coolers and Heatsinks for Philips LED Modules

#### Guide:

- X is the optimal thermal solution based on thermal requirements for this LED module at an ambient temperature of 35° C, except for the SLM in which the Track Lighting is recommended to be tested at an ambient temperature of 25° C.
- Boxes highlighted in green are thermal solutions that meet cooling requirements as defined in the Philips Design-In Guide.
- All solutions in these tables are in accordance with recommended acoustic noise levels for lighting applications, for noise sensitive applications choose "Silent" cooling solutions.
- · For additional information go to www.nuventix.com/led\_cooling.
- · For part numbers see page 4 of this guide.



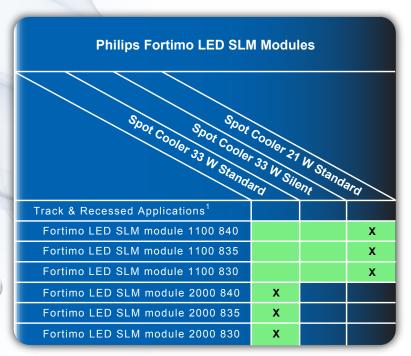


1 - The TDLM case temperature is kept at less than  $65^{\circ}$  C for a Lumen Maintenance of 70% at 25k hours 2 - The TDLM case temperature is kept at less than  $55^{\circ}$  C for a Lumen Maintenance of 70% at 50k hours

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1 - For Track Lighting applications in a properly ventilated housing as defined in the Nuventix Product Design Guide and at a Tambient of 25° C. For Recessed Lighting applications in open air as defined in the Nuventix Product Design Guide and at a Tambient of 35° C



# Nuventix SynJet Coolers and Heatsinks for Philips LED Modules

Nuventix Part Number Guide			
	SynJet Cooler	Heatsink	Wire Harness
Philips LED DLM Thermal Solutions			
SynJet Universal 140 DLM, Standard	SSSLS-CM012-011	HSSLS-CALBL-003	N/A - Wires Included
SynJet Universal 140 DLM, Silent	SSSLS-CM012-011	HSSLS-CALBL-003	N/A - Wires Included
SynJet Universal 120 DLM, Standard	SSSLS-CM012-011	HSSLS-CALBL-005	N/A - Wires Included
SynJet Universal 120 DLM, Silent	SSSLS-CM012-011	HSSLS-CALBL-005	N/A - Wires Included
Universal 140 DLM Heatsink Only	N/A	HSSLS-CALBL-003	N/A
Universal 120 DLM Heatsink Only	N/A	HSSLS-CALBL-005	N/A
Philips Fortimo Twistable Thermal Solutions			
SynJet CoolTwist Standard	SP30S-CM005-004	HP30S-CALBL-002	N/A - Wires Included
SynJet CoolTwist Silent	SP30S-CM005-004	HP30S-CALBL-002	N/A - Wires Included
CoolTwist Heatsink Only	N/A	HP30S-CALBL-002	N/A
Philips Fortimo LED SLM Thermal Solutions			
SynJet Spot Cooler 33 W Standard	SSLCS-CM012-002-D	HSLCS-CALCL-001	WALLS-C4150-001
SynJet Spot Cooler 33 W Silent	SSLCS-CM012-002-D	HSLCS-CALCL-001	WALLS-C4150-001
SynJet Spot Cooler 21 W Standard	SSSLS-CM012-013	HSSLS-CALCL-005	N/A - Wires Included
Philips Fortimo LED LLM Thermal Solutions			
SynJet XFlow 30	SSCCS-IM012-002	N/A	WALLS-C4150-001

## **About Nuventix**

Nuventix is revolutionizing active thermal management of consumer electronics, high power LED lighting, medical, telecommunications and automotive with patented, highly adaptable, quiet and reliable cooling devices that efficiently - and directly - dissipate heat from any surface. The patented SynJet active cooling technology enables the most reliable and flexible spot cooling solutions available today. More information can be found at www.nuventix.com.

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