



Unlock new opportunities in LED lighting

Nuventix SynJet® thermal solutions
for Philips® 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
- 100K 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

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 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.



Philips LED DLM Modules						
	Universal 120 DLM Heatsink Only	Universal 140 DLM Heatsink Only	Universal 120 DLM, Standard	Universal 140 DLM, Standard	Universal 120 DLM, Silent	Universal 140 DLM, Silent
Fortimo LED DLM 1100 840						X
Fortimo LED DLM 1100 830					X	
Fortimo LED DLM 2000 840			X			
Fortimo LED DLM 2000 830		X				
Lexel LED DLM 1100 DLAI/DMX		X				
Fortimo LED DLM 2000 50W/Food 40	X					
Fortimo LED DLM 1800 50W/Food 30	X					

Philips Fortimo Twistable LED Modules			
	CoolTwist Standard	CoolTwist Silent	CoolTwist Heatsink Only
Fortimo Twistable 1100 840 - 25khrs L70 ¹			X
Fortimo Twistable 1100 830 - 25khrs L70 ¹			X
Fortimo Twistable 1100 827 - 25khrs L70 ¹			X
Fortimo Twistable 1100 840 - 50khrs L70 ²	X		
Fortimo Twistable 1100 830 - 50khrs L70 ²	X		
Fortimo Twistable 1100 827 - 50khrs L70 ²	X		



1 - The TDLM case temperature is kept at less than 65° C for a Lumen Maintenance of 70% at 25k hours
 2 - The TDLM case temperature is kept at less than 55° C for a Lumen Maintenance of 70% at 50k hours

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Philips Fortimo LED SLM Modules			
	Spot Cooler 21 W Standard	Spot Cooler 33 W Standard	Spot Cooler 33 W Silent
Track & Recessed Applications ¹			
Fortimo LED SLM module 1100 840			X
Fortimo LED SLM module 1100 835			X
Fortimo LED SLM module 1100 830			X
Fortimo LED SLM module 2000 840	X		
Fortimo LED SLM module 2000 835	X		
Fortimo LED SLM module 2000 830	X		

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

Philips Fortimo LED LLM Modules	
	Xflow 30
Fortimo LED LLM 1800 740	The LLM can be designed into a wide range of applications with unique heat sink designs. The SynJet XFLow 30 can be used in conjunction with many styles and designs of heat sinks for a final thermal solution. Contact Nuventix sales for design help.
Fortimo LED LLM 1800 730	
Fortimo LED LLM 1100 740	
Fortimo LED LLM 1100 730	



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.