## 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

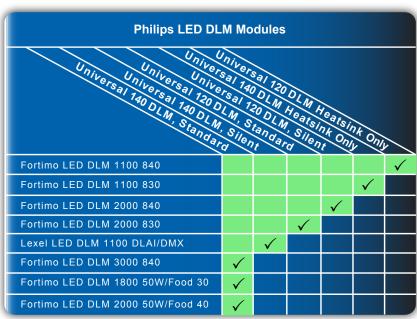


## **Nuventix SynJet Coolers and Heatsinks for Philips LED Modules**

#### Guide:

- $\checkmark$  is the optimal solution based on thermal requirements for this LED module at an ambient temperature of 35° C, unless otherwise indicated.
- · 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" or "Standard" 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° 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



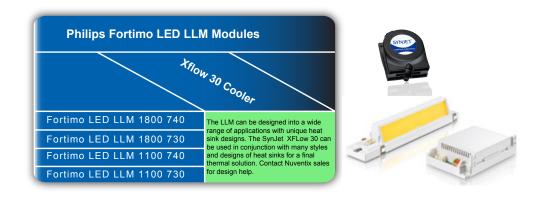
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Philips Fortimo LED SLM Modules  Spotight Spotight Cooler Spotight Cooler Spotight Cooler Spotight Cooler 31W Fooler 31W Standard Standard No. 100 Spotight Cooler 34W Standard No. 100 Spotight Coo									
Track and Recessed Applications									
Fortimo LED SLM 1100 840, Tamb = 35°C								$\checkmark$	
Fortimo LED SLM 1100 835, Tamb = 35°C								$\checkmark$	
Fortimo LED SLM 1100 830, Tamb = 35°C								$\checkmark$	
Fortimo LED SLM 2000 840, Tamb = 30°C						$\checkmark$			
Fortimo LED SLM 2000 835, Tamb = 30°C						$\checkmark$			
Fortimo LED SLM 2000 830, Tamb = 30°C						$\checkmark$			
Fortimo LED SLM 2000 840, Tamb = 35°C					$\checkmark$				
Fortimo LED SLM 2000 835, Tamb = 35°C					$\checkmark$				
Fortimo LED SLM 2000 830, Tamb = 35°C					$\checkmark$				



## **Nuventix SynJet Coolers and Heatsinks for Philips LED Modules**

Nuventix Part Number Guide								
	SynJet Cooler	Heatsink	Wire Harness					
Philips LED DLM Modules								
Universal 140 DLM, Standard	SSSLS-CM012-011	HSSLS-CALBL-003	N/A - Wires Included					
Universal 140 DLM, Silent	SSSLS-CM012-011	HSSLS-CALBL-003	N/A - Wires Included					
Universal 120 DLM, Standard	SSSLS-CM012-011	HSSLS-CALBL-005	N/A - Wires Included					
Universal 120 DLM, Silent	SSSLS-CM012-011	HSSLS-CALBL-005	N/A - Wires Included					
Universal 140 DLM Heatsink Only	SSSLS-CM012-011	HSSLS-CALBL-003	N/A - Wires Included					
Universal 120 DLM Heatsink Only	SSSLS-CM012-011	HSSLS-CALBL-005	N/A - Wires Included					
Philips Fortimo Twistable LED Modules								
CoolTwist Standard	SP30S-CM005-004	HP30S-CALBL-002	N/A - Wires Included					
CoolTwist Silent	SP30S-CM005-004	HP30S-CALBL-002	N/A - Wires Included					
CoolTwist Heatsink Only	SP30S-CM005-004	HP30S-CALBL-002	N/A - Wires Included					
Philips Fortimo LED SLM Module								
Spot Cooler 38 W Standard	SSLCS-CM012-002-D	HSLCS-CALBL-012	WALLS-C4600-001					
Spot Cooler 34 W High Performance	SSLCS-CM012-002-D	HSLCS-CALBL-001	WALLS-C4600-001					
Spot Cooler 34 W Mid Performance	SSLCS-CM012-002-D	HSLCS-CALBL-001	WALLS-C4600-001					
Spot Cooler 34 W Standard	SSLCS-CM012-002-D	HSLCS-CALBL-001	WALLS-C4600-001					
Spot Cooler 31 W High Performance	SSLCS-CM012-002-D	HSLCS-CALCL-001	WALLS-C4600-001					
Spot Cooler 31 W Mid Performance	SSLCS-CM012-002-D	HSLCS-CALCL-001	WALLS-C4600-001					
Spot Cooler 31 W Standard	SSLCS-CM012-002-D	HSLCS-CALCL-001	WALLS-C4600-001					
Spot Cooler 21 W Standard	SSSLS-CM012-013	HSSLS-CALCL-005	N/A - Wires Included					
Philips Fortimo LED LLM Module								
XFlow 30 Cooler	SSCCS-IM012-002-D	N/A	WALLS-C4600-001					

## **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.



