# Fortimo LED High Brightness Module (HBMt)

PHILIPS FORTIMO LED HIGH BRIGHTNESS MODULE (HBMt) SYSTEM SPEC SHEET









### PHILIPS FORTIMO HBMT 6000LM MODULE

The Fortimo LED HBMt is a high efficacy, easy to design-in, future-proof solution for OEMs looking to incorporate LEDs into their outdoor, high bay or industrial luminaire portfolios. With a compact rectangular light engine¹ and non-integrated driver, the Fortimo LED HBMt system allows for creation of different light distributions using a metal reflector, similar to HID lamps. OEMs with experience in traditional luminaire design can easily leverage that expertise in developing a LED-based luminaire. The Fortimo LED HBMt offers outstanding efficacy with a range of 118-128lm/w at the module level. The energy savings can also be extended with dimming capabilities. By lowering the light levels during off peak hours, both energy usage and light pollution can be minimized.

### **Benefits:**

- LED "lamp" that provides high lumen output from a small area
- · Cost-effective LED light engine
- · Luminaire design based on traditional reflector optics
- Philips is committed to achieving Zhaga<sup>2</sup> compliance
- · Interchangeability of light engines from different manufacturers
- · Sustainability story with energy-efficiency and zero mercury

### **Features**

- Module efficiency of up to 127 lm/W
- Rated at Tc max 85°C³
- Fixed light emitting area, lumen package and mechanical interface
- Color rendering index at CRI 70 (minimum)

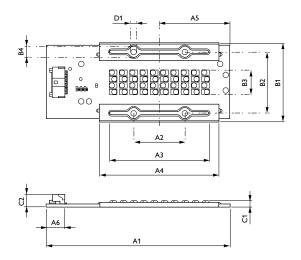
### **Applications**

- · Road or street lighting
- Flood and area lighting
- High bay or industrial lighting
- Tunnel lighting



## PHILIPS FORTIMO LED HIGH BRIGHTNESS MODULE (HBMt) SYSTEM SPEC SHEET

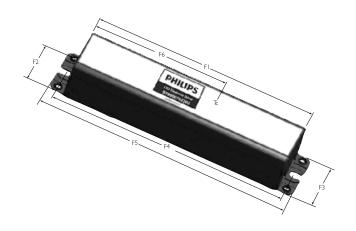
### Module Dimensions (typical data; ± 2 mm)



Fortimo LED HBMt	AI	A2	А3	A4	A5	A6	ВІ	B2	В3	B4	CI	C2	DI
inches	4.244	1.181	2.315	2.756	1.630	0.433	1.811	1.417	0.571	0.244	0.157	0.315	0.130
mm	107.8	30	58.8	70	41.4	11	46	36	14.5	6.2	4	8	3.3

### **Driver Dimensions (+- 2mm)**

LED Driver Type	FI	FI F2		F4	F5			
40W Programmable LED Driver								
inches	5.47	1.11	1.81	5.68	5.84			
mm	138.9	28.2	46.0	144.3	148.3			
75W & I50W Programmable LED Driver								
inches	8.31	1.50	2.33	8.91	9.47			
mm	211.1	38.1	59.2	226.3	240.5			
75W Dimmable Driver								
inches	5.44	1.50	2.33	6.03	6.59			
mm	138.2	38.1	59.2	153.2	167.4			
150W Dimmable Driver								
inches	8.31	1.58	2.33	8.91	9.47			
mm	211.1	40.I	59.2	226.3	240.5			



### **Technical note**

The I50W Xitanium Programmable LED driver will automatically deliver the optimal output current for any combination of Fortimo LED HBMt modules. No programming interface or software are necessary, simply connect the modules to the driver according to the instructions in the design-in guide. The driver is factory set to provide I-I0V dimming. Dimmable drivers will provide a nominal 530mA to the module.

## PHILIPS FORTIMO LED HIGH BRIGHTNESS MODULE (HBMt) SYSTEM SPEC SHEET

### **LED Modules**

Description	Color Temperature (K)	Module Power Nominal (W)	Module Efficacy Typical (lm/W)	Light Output Nominal (lm)	Color Rendering Index (min. Ra)	Rated Average Life (Hours) T Case 85°C	Thermal Load Typical (W)	Color Consistency (SDCM)
Fortimo LED HBMt 6000 49W/740	4000	49	124	6000	70	50K	30.0	<7
Fortimo LED HBMt 6000 49W/757	5700	49	127	6000	70	50K	29.0	<7
Fortimo LED HBMt 6000 51W/840	4000	51	118	6000	80	50K	32.0	<7

### **Ordering data**

Туре	Order Quantity Multiple	Ordering Code
Fortimo LED HBMt 6000 49W/740	10	9290 008 82706
Fortimo LED HBMt 6000 49W/757	10	9290 008 82506
Fortimo LED HBMt 6000 51W/840	10	9290 008 82306
Philips Advance Xitanium 75W Programmable Driver	10	9290 007 02302
Philips Advance Xitanium 150W Programmable Driver	10	9290 007 02202
Philips Advance Xitanium 75W Dimmable Driver	10	XI075C053V140CNY1
Philips Advance Xitanium 150W Dimmable Driver	10	LEDINTA0530C280DO
Cable Fortimo 7 pins to wire – 600mm	10	9290 008 03903

<sup>1</sup> Light engine = LED module+driver

 $<sup>{\</sup>it 2}\ {\it For more information about the Zhaga consortium and LED module standardization, please visit} \\ {\it www.zhagastandard.org}$ 

<sup>3</sup> For luminaire released for ambient termperature of 25° C. For higher luminaire ambients, Tc max = 85  $^{\circ}$  C.

## PHILIPS FORTIMO LED HIGH BRIGHTNESS MODULE (HBMt) SYSTEM SPEC SHEET



© 2013 Koninklijke Philips N.V. All rights reserved. Specifications are subject to change without notice.