

# HB-2X2MXS-M

~30° wide beam

# **TECHNICAL SPECIFICATIONS:**

Dimensions	90.0 x 90.0 mm
Height	18 mm
Fastening	screw
Ingress protection classes	IP67
ROHS compliant	yes 🛈



# MATERIAL SPECIFICATIONS:

Component	Туре	Material	Colour	Finish
HB-2X2MXS-M	Multi-lens	Silicone	clear	
STRADA-2X2MXS-FRAME	Holder	PA66	black	

### **ORDERING INFORMATION:**

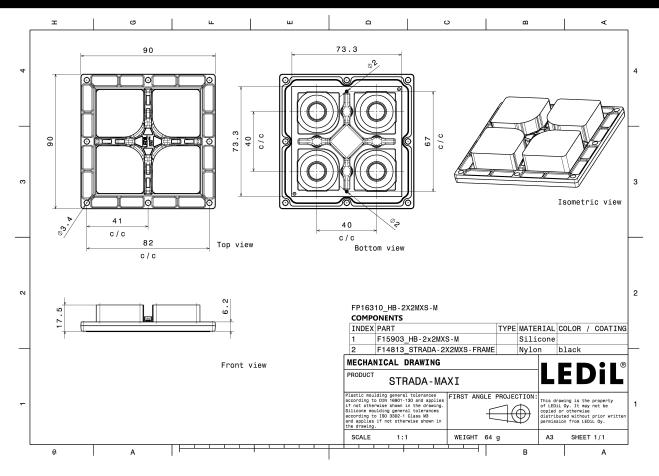
Component		Qty in box	MOQ	MPQ	Box weight (kg)
FP16310_HB-2X2MXS-M	Multi-lens	156	24	12	10.5
» Box size: 398 x 298 x 265 mm					

# Last update: 20/10/2022Subject to change without prior noticePublished: 15/11/2018LEDiL is a registered trademark of LEDiL Oy in the European Union, USA, and certain other countries.1/8

# PRODUCT DATASHEET FP16310\_HB-2X2MXS-M

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See also our general installation guide: <u>www.ledil.com/installation\_guide</u>



# **PHOTOMETRIC DATA (MEASURED):**

	.EDS	90°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON M/MX 34.0° / 72.0° 91 % 1.7 cd/lm 1 White ents:	
	.EDS	91 <sup>4</sup> 97
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON XR-7070 (L224-xxxx004MLU010) 33.0° / 72.0° 90 % 1.7 cd/lm 1 White ents:	
ØNICHI/		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	NV4x144A 34.0° / 71.0° 90 % 1.7 cd/lm 1 White	
SAMS LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	HiLOM SC16 (LH181B) 32.0° / 72.0° 89 % 1.7 cd/lm 1 White	



# **PHOTOMETRIC DATA (MEASURED):**

SEOUL		55'
LED	WICOP 5050	73
FWHM / FWTM	33.0° / 72.0°	
Efficiency	90 %	
Peak intensity	1.7 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required compone	ents:	30 <sup>-</sup> 15 <sup>-</sup> 15 <sup>-</sup> 15 <sup>-</sup>



# PHOTOMETRIC DATA (SIMULATED):

OTTITI		7
CITIZEN		90* 90*
LED	CLU700/701/702/703	75"
FWHM / FWTM	29.0° / 61.0°	
Efficiency	88 %	60° 60°
Peak intensity	2.2 cd/lm	
LEDs/each optic	1	
Light colour	White	67° 68°
Required components:		1630
Bender Wirth: 434 Ty	p 2x2MX HV	
		30° 200 10° 30°
		15% 0% 15%
		90* 90*
LED	MHB-A/B	75°
FWHM / FWTM	24.0° / 57.0°	
Efficiency	90 %	60 <sup>4</sup> 60 <sup>4</sup>
Peak intensity	2.7 cd/lm	
LEDs/each optic	1	5 <sup>2</sup> 1000 62 <sup>4</sup>
Light colour	White	
Required components:		
		30° 110 00 110 30°
LED	XHP35 HI	
LED FWHM / FWTM	20.0° / 46.0°	90°
LED FWHM / FWTM Efficiency	20.0° / 46.0° 86 %	90°
LED FWHM / FWTM Efficiency Peak intensity	20.0° / 46.0° 86 % 3.4 cd/lm	90°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	20.0° / 46.0° 86 % 3.4 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	20.0° / 46.0° 86 % 3.4 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	20.0° / 46.0° 86 % 3.4 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	20.0° / 46.0° 86 % 3.4 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	20.0° / 46.0° 86 % 3.4 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	20.0° / 46.0° 86 % 3.4 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	20.0° / 46.0° 86 % 3.4 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	20.0° / 46.0° 86 % 3.4 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	20.0° / 46.0° 86 % 3.4 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	20.0° / 46.0° 86 % 3.4 cd/lm 1 White XHP50 26.4° / 61.7°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	20.0° / 46.0° 86 % 3.4 cd/lm 1 White XHP50 26.4° / 61.7° 92 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	20.0° / 46.0° 86 % 3.4 cd/lm 1 White XHP50 26.4° / 61.7°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	20.0° / 46.0° 86 % 3.4 cd/lm 1 White XHP50 26.4° / 61.7° 92 % 2.4 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: CREE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	20.0° / 46.0° 86 % 3.4 cd/lm 1 White XHP50 26.4° / 61.7° 92 % 2.4 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	20.0° / 46.0° 86 % 3.4 cd/lm 1 White XHP50 26.4° / 61.7° 92 % 2.4 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: CREE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	20.0° / 46.0° 86 % 3.4 cd/lm 1 White XHP50 26.4° / 61.7° 92 % 2.4 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: CREE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	20.0° / 46.0° 86 % 3.4 cd/lm 1 White XHP50 26.4° / 61.7° 92 % 2.4 cd/lm 1	



# PHOTOMETRIC DATA (SIMULATED):

XHP70.3 HD 32.0° / 72.0° 93 % 1.8 cd/lm 1 White	55 55 500 500
	2010 2010 201 201
	90° 90°
XHP70.3 HI 27.0° / 62.0° 93 % 2.5 cd/lm 1	57° 60°
White	gr 300 67
	30 <sup>6</sup> 30 <sup>7</sup> 30 <sup>4</sup> 30 <sup>4</sup>
	90* 90*
SFT-40-WCS 14.0° / 54.0° 95 % 4.3 cd/lm 1 White	57 57 57 57 57 57 57 57
	345 0r 339 367
JS	50* 90*
SFT-70X-WCS 20.0° / 56.0° 95 % 3.3 cd/lm 1 White	
	32.0° / 72.0° 93 % 1.8 cd/m 1 White XHP70.3 HI 27.0° / 62.0° 93 % 2.5 cd/m 1 White JS SFT-40-WCS 14.0° / 54.0° 95 % 4.3 cd/m 1 White JS SFT-70X-WCS 20.0° / 56.0° 95 % 3.3 cd/m 1



# PHOTOMETRIC DATA (SIMULATED):

<b>Μ</b> ΝΙCΗΙΛ		50°
LED	NFMW48xA	
FWHM / FWTM	24.0° / 54.0°	$\wedge \wedge \uparrow$
Efficiency	90 %	60 <sup>5</sup>
Peak intensity	2.8 cd/lm	
LEDs/each optic	1	
Light colour	White	e <sup>re</sup> (250)
Required components:		200
<b>ΜΝΙCΗΙΛ</b>		90 <sup>4</sup>
LED	NV4WB35AM	
FWHM / FWTM	24.0° / 60.0°	25°
Efficiency	95 %	
Peak intensity	2.8 cd/lm	
LEDs/each optic	1	
Light colour	White	45° - 1630
Required components:		202 202 202 202
OSRAM Opto Semiconductors		90*
LED	OSCONIQ C 2424	
FWHM / FWTM	28.0° / 64.0°	
Efficiency	94 %	60 <sup>5</sup> 000 66
Peak intensity	2.4 cd/lm	
LEDs/each optic	4	
Light colour	White	47*
Required components:		200 200 200 200 200 200 200 200 200 200



#### **GENERAL INFORMATION:**

NOTE: The typical beam angle will be changed by different color, chip size and chip position tolerance. The typical total beam angle is the full angle measured where the luminous intensity is half of the peak value.

Due to use of high power COB's with this product, special attention to proper thermal design is highly recommended. LEDiL has no liability for direct, indirect or consecutive damages arising from the LEDiL products being used outside of the recommended temperature range.

#### **MATERIALS:**

As part of our continuous research and improvement processes, and to ensure the best possible quality and availability of our products, LEDiL reserves the right to change material grades without notice.

# PRODUCT DATA USER AGREEMENT AND DISCLAIMER:

The measured data in the provided downloadable LEDiL Product Datasheets and Mechanical 2D-Drawings is rounded and provided as reference for planning. LEDiL Oy's optical specifications have been verified by conducting performance testing of the products in accordance with the company's quality system. The reported data are averaged results of multiple measurements with typical variation. LEDiL Oy reserves the right to without prior notification make changes and improvements to its products.

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# **Shipping locations**

Salo, Finland Hong Kong, China

#### Distribution Partners www.ledil.com/

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