

# PRODUCT DATASHEET CS16511\_HB-IP-2X6-G2-W

# HB-IP-2X6-G2-W

~60° wide beam

### **TECHNICAL SPECIFICATIONS:**

Dimensions	172.0 x 71.0 mm
Height	8.2 mm
Fastening	pin, screw
Ingress protection classes	IP67
ROHS compliant	yes 🛈



### MATERIAL SPECIFICATIONS:

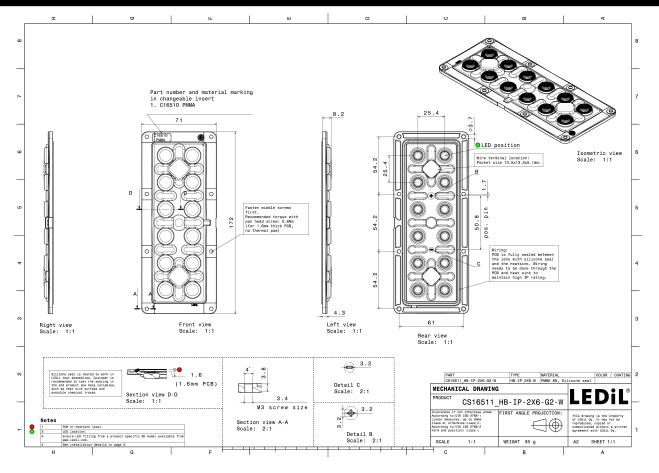
Component	Туре	Material	Colour	Finish
HB-IP-2X6-G2-W	Multi-lens	PMMA	clear	
SEAL-IP-2X6-G2	Seal	Silicone	white	

### **ORDERING INFORMATION:**

Component		Qty in box	MOQ	MPQ	Box weight (kg)
CS16511_HB-IP-2X6-G2-W	Multi-lens	132	44	44	5.8
» Box size: 476 x 273 x 247 mm					



# PRODUCT DATASHEET CS16511\_HB-IP-2X6-G2-W



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



### **PHOTOMETRIC DATA (MEASURED):**

	XP-L2	95*
FWHM / FWTM	66.0° / 89.0°	37
Efficiency	94 %	
Peak intensity	0.8 cd/lm	
LEDs/each optic	1	
Light colour	White	g. de la companya de
Required compone	ents:	
		20 <sup>4</sup> 12 <sup>4</sup> 0 <sup>60</sup> 12 <sup>4</sup> 3 <sup>5</sup>
UMIL	.EDS	90° 90°
LED	LUXEON 5050 Round LES	
FWHM / FWTM	63.0 + 64.0° / 80.0 + 81.0°	20
Efficiency	97 %	
Peak intensity	0.9 cd/lm	
LEDs/each optic	1	
Light colour	White	g. at
Required compone	ents:	
		12 <sup>2</sup> 0 <sup>4</sup> 12 <sup>2</sup>
ØNICHI∕		50°
LED	NVSW519A	75
FWHM / FWTM	68.0° / 84.0°	
Efficiency	98 %	
Peak intensity	0.8 cd/lm	
LEDs/each optic	1	
Light colour	White	a
Required compone	ents:	
		30"
SCIO	LUX	20 <sup>1</sup> 0 <sup>1</sup> 20 <sup>2</sup>
LED	ROY-S26XPL2 (XP-L2)	
FWHM / FWTM	66.0° / 89.0°	75
Efficiency	94 %	
Peak intensity	0.8 cd/lm	
LEDs/each optic	1	
Light colour	White	gr Andrew Andr
Required compone		
	5110.	
		30° 20° 30° 30°



# PHOTOMETRIC DATA (MEASURED):

seoul SEMICONDUCTOR LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	2x6 5050 module - SMJD-3625012F-XX 68.0° / 85.0° 94 % 0.9 cd/lm 1 White ents:	90* 75* 65*
seoul SEMICONDUCTOR LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Z5M3 63.0° / 76.0° 94 % 1 cd/lm 1 White ents:	3%+ 52+ 30+



bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Bridgelux SMD 5050 62.0° / 81.0° 94 % 1 cd/lm 1 White	39 <sup>1</sup> 39
CREE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	J Series 5050 Round LES 62.0° / 79.0° 95 % 1 cd/lm 1 White	99° 99° 99° 99° 99° 90° 400 400 400 400 400 400 400 400 400 4
CREE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	MHB-A/B 65.6° / 90.3° 94 % 0.9 cd/lm 1 White	59* 59* 50 60* 60* 60* 60* 60* 60* 60* 60
CREE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	XP-G2 63.0° / 77.0° 94 % 1.1 cd/lm 1 White	5° 00 0° 6° 0° 6° 0° 6° 0° 6° 0° 8° 0° 8° 0°



CREE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	XP-G2 HE 66.0° / 84.0° 94 % 0.9 cd/lm 1 White	59* 50° 75° 200 72° 64* 00° 57° 66° 00° 58° 66° 00° 58° 66° 00°
CREE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	XP-G3 62.4° / 78.1° 92 % 1 cd/lm 1 White	
ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	NFMW48xA 62.4° / 82.8° 94 % 1 cd/lm 1 White	50° 50° 60° 60° 60° 60° 60° 60° 60° 60° 60° 6
ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	NV4WB35AM 68.0° / 86.0° 95 % 1 cd/lm 1 White	200 200 200 200 200 200 200 200



r		
OSRAM Opto Semiconductors		50°
LED	Duris S8	
FWHM / FWTM	58.3° / 77.5°	75*
Efficiency	94 %	
Peak intensity	1.1 cd/lm	60°
LEDs/each optic	1	
Light colour	' White	45*
Required components:	White	
Required components.		
		30° 15° 0° 35°
OSRAM Opto Semiconductors		90° 90°
Opto Semiconductors	OSCONIQ P 3030	
FWHM / FWTM	58.0° / 66.0°	25*
Efficiency	95 %	
Peak intensity	1.3 cd/lm	60 <sup>4</sup>
LEDs/each optic	1	
Light colour	White	g*
Required components:	White	
		30° 2200 36° 36° 15°
OSRAM		90°
Opto Semiconductors	OSCONIO P 3737 (2W version)	9494
Opto Semiconductors	OSCONIQ P 3737 (2W version) 62 0° / 78 0°	97 75 75
Opto Semiconductors LED FWHM / FWTM	62.0° / 78.0°	99 <sup>4</sup> 99 <sup>4</sup>
opto Semiconductors LED FWHM / FWTM Efficiency	62.0° / 78.0° 94 %	99 <sup>4</sup> 99 <sup>4</sup> 25 26 20 400
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity	62.0° / 78.0° 94 % 1.1 cd/lm	60 61 22 24 24 24 24 24 24 24 24 24 24 24 24
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	62.0° / 78.0° 94 % 1.1 cd/lm 1	57 - 57 59
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	62.0° / 78.0° 94 % 1.1 cd/lm	5 <sup>1</sup> 5 <sup>1</sup> 5 <sup>1</sup> 5 <sup>1</sup> 5 <sup>1</sup> 5 <sup>1</sup> 5 <sup>1</sup> 5 <sup>1</sup>
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	62.0° / 78.0° 94 % 1.1 cd/lm 1	59 <sup>4</sup> 59 <sup>4</sup> 75 <sup>5</sup> 75 <sup>7</sup> 69 <sup>4</sup> 400 69 <sup>4</sup> 67 <sup>4</sup> 60 <sup>4</sup>
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	62.0° / 78.0° 94 % 1.1 cd/lm 1	99 <sup>4</sup> 99 <sup>4</sup> 75 <sup>5</sup> 75 <sup>7</sup> 60 <sup>4</sup> 60 <sup>4</sup> 67 80
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	62.0° / 78.0° 94 % 1.1 cd/lm 1	99 <sup>4</sup> 75 <sup>7</sup> 66 <sup>4</sup> 67 800 800
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	62.0° / 78.0° 94 % 1.1 cd/lm 1 White	99 <sup>4</sup> 99 <sup>4</sup> 9
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	62.0° / 78.0° 94 % 1.1 cd/lm 1 White	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	62.0° / 78.0° 94 % 1.1 cd/lm 1 White	9 <sup>1</sup> 9 <sup>1</sup> 9 <sup>1</sup> 9 <sup>1</sup> 9 <sup>1</sup> 9 <sup>1</sup> 9 <sup>1</sup> 9 <sup>1</sup>
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	62.0° / 78.0° 94 % 1.1 cd/lm 1 White	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: <b>SANNSUN</b> LED FWHM / FWTM	62.0° / 78.0° 94 % 1.1 cd/lm 1 White G LH351B 65.0° / 82.0°	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: <b>SAMSUN</b> LED FWHM / FWTM Efficiency	62.0° / 78.0° 94 % 1.1 cd/lm 1 White LH351B 65.0° / 82.0° 94 %	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: <b>SAMNSUN</b> LED FWHM / FWTM Efficiency Peak intensity	62.0° / 78.0° 94 % 1.1 cd/lm 1 White LH351B 65.0° / 82.0° 94 % 0.9 cd/lm	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: <b>SAMSUN</b> LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	62.0° / 78.0° 94 % 1.1 cd/lm 1 White LH351B 65.0° / 82.0° 94 % 0.9 cd/lm 1	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: <b>SAMSUN</b> LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	62.0° / 78.0° 94 % 1.1 cd/lm 1 White LH351B 65.0° / 82.0° 94 % 0.9 cd/lm	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: <b>SAMSUN</b> LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	62.0° / 78.0° 94 % 1.1 cd/lm 1 White LH351B 65.0° / 82.0° 94 % 0.9 cd/lm 1	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: <b>SAMSUN</b> LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	62.0° / 78.0° 94 % 1.1 cd/lm 1 White LH351B 65.0° / 82.0° 94 % 0.9 cd/lm 1	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: <b>SAMSUN</b> LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	62.0° / 78.0° 94 % 1.1 cd/lm 1 White LH351B 65.0° / 82.0° 94 % 0.9 cd/lm 1	
Joho Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: <b>SAMSSUN</b> LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	62.0° / 78.0° 94 % 1.1 cd/lm 1 White LH351B 65.0° / 82.0° 94 % 0.9 cd/lm 1	



-		
SAMSUN LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LH502C 64.0° / 80.0° 95 % 0.9 cd/lm 1 White	90 <sup>4</sup> 90 <sup>4</sup> 9
SAMSUN	IG	25° 1850 15°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LH508A 60.9° / 80.0° 93 % 1.1 cd/lm 1 White	27'- 29'- 29'- 20'-
stoul seniconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Z5M1/Z5M2 63.0° / 76.0° 94 % 1 cd/lm 1 White	99 <sup>4</sup> 97 <sup>4</sup> 90 <sup>4</sup> 97 <sup>4</sup> 90 <sup>4</sup> 9
SEOUL SEMICONDUCTOR LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Z8Y22T 56.0° / 68.0° 94 % 1.2 cd/lm 1 White	20° 0° 12° 20° 0° 12° 20° 0° 12° 20° 0° 0° 20° 0°



# PRODUCT DATASHEET CS16511\_HB-IP-2X6-G2-W

#### **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.

#### 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.

LEDiL Oy assumes neither warranty, nor guarantee nor any other liability of any kind for the contents and correctness of the provided data. The provided data has been generated with highest diligence but the provided data may in reality not represent the complete possible variation range of all intrinsic parameters. Therefore, in certain cases a deviation from the provided data could occur.

LEDiL Oy reserves the right to undertake technical changes of its products without further notification which could lead to changes in the provided data. LEDiL Oy assumes no liability of any kind for the possible deviation from any provided data or any other damage resulting from the usage of the provided data.

The user agrees to this disclaimer and user agreement with the download or usage of the provided files.

#### LEDiL Oy

Joensuunkatu 13 FI-24240 SALO Finland

#### LEDiL Inc. 228 West Page Street Suite D Sycamore IL 60178 USA

Ledil Optics Technology (Shenzhen) Co., Ltd. # 405 , Block B Casic Motor Building Shenzhen 518057 P.R.CHINA

### Local sales and technical support www.ledil.com/ where\_to\_buy

Shipping locations Salo, Finland Hong Kong, China

#### Distribution Partners www.ledil.com/ where\_to\_buy