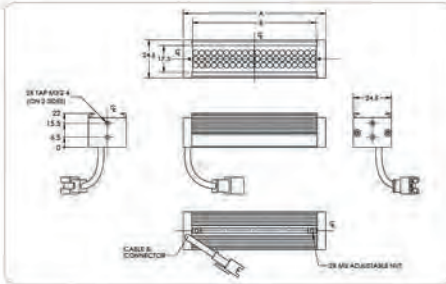
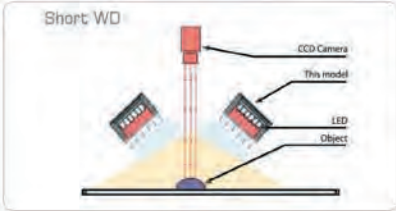


Direct Illumination

LBRX 3 ROWS SERIES – Direct, Rectangular SMD Illumination (for short working distance)

3 rows of SMD LEDs with lens arrays are arranged in a rectangular array to provide rectangular illumination, which can be mounted with different angle to provide differences in illumination reflection for image processing.

Applications: General Illumination, Label Inspection, Character Inspection, Code Recognition



Technical Specification:

- Color Red, Green, Blue and White
- 24V DC Input Power
- Continuous and Strobe Applications
- Compact Size
- Lighting Cable 500mm

Customize Lighting:

- Customize Sizes, Mounting Requirements
- Color and Voltage Available
- Consult Technical Sales for More Information

Model	Dimensions (MM)		Color	Voltage / Watt	Current	RGB Color	Voltage / Watt	Current	Weight (g)
	A	B							
LBRX-00-040-3-X	52.0	40.0	● ● ●	24V / 0.79W	33mA	● ● ●	24V / 1.80W	75mA	50
			● ● ●	24V / 1.01W	42mA	● ● ●	24V / 1.80W	75mA	
			● ● ●	24V / 1.08W	45mA	● ● ●	24V / 1.80W	75mA	
LBRX-00-080-3-X	92.0	80.0	● ● ●	24V / 1.58W	66mA	● ● ●	24V / 3.60W	150mA	70
			● ● ●	24V / 2.02W	84mA	● ● ●	24V / 3.60W	150mA	
			● ● ●	24V / 2.16W	90mA	● ● ●	24V / 3.60W	150mA	
LBRX-00-120-3-X	132.0	120.0	● ● ●	24V / 2.38W	99mA	● ● ●	24V / 5.40W	225mA	95
			● ● ●	24V / 3.02W	125mA	● ● ●	24V / 5.40W	225mA	
			● ● ●	24V / 3.24W	135mA	● ● ●	24V / 5.40W	225mA	
LBRX-00-160-3-X	172.0	160.0	● ● ●	24V / 3.17W	132mA	● ● ●	24V / 7.20W	300mA	115
			● ● ●	24V / 4.03W	168mA	● ● ●	24V / 7.20W	300mA	
			● ● ●	24V / 4.32W	180mA	● ● ●	24V / 7.20W	300mA	
LBRX-00-200-3-X	212.0	200.0	● ● ●	24V / 3.96W	165mA	● ● ●	24V / 9.00W	375mA	140
			● ● ●	24V / 5.04W	210mA	● ● ●	24V / 9.00W	375mA	
			● ● ●	24V / 5.40W	225mA	● ● ●	24V / 9.00W	375mA	

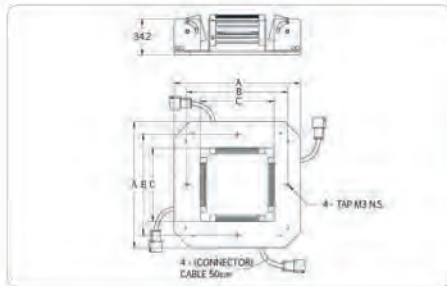
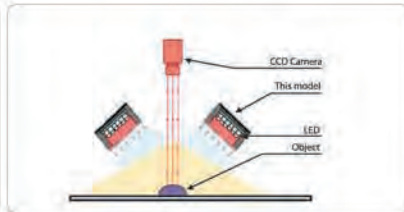
Remarks: LBRX 3 rows series can be obscured (single colour / RGB) up to maximum length of 980mm

Direct Illumination

LBRQ 3 ROWS SERIES – Direct, Multiple Rectangular Illumination (for short working distance)

LBRQ 3 rows series consists of a combination of 4 LBRX LED arrays. Each array's angle can be adjusted for different height applications.

Applications: Lead Inspection, Character Inspection, Code Recognition



Technical Specification:

- Color Red, Green, Blue and White
- 24V DC Input Power
- Continuous and Strobe Applications
- Compact Size
- Lighting Cable 500mm

Customize Lighting:

- Customize Sizes, Mounting Requirements
- Color and Voltage Available
- Consult Technical Sales for More Information

Model	Dimensions (MM)			Color	Voltage / Watt	Current	RGB Color	Voltage / Watt	Current	Weight (g)
	A	B	C							
LBRQ-00-040-3-X	120.0	95.8	70.0	IR B50	24V / 3.17W	132mA	● 24V / 7.20W ● 24V / 7.20W ● 24V / 7.20W	300mA	300mA	385
					24V / 4.03W	168mA				
					24V / 4.32W	180mA				
LBRQ-00-080-3-X	160.0	135.8	110.0	IR B50	24V / 6.34W	264mA	● 24V / 14.40W ● 24V / 14.40W ● 24V / 14.40W	600mA	600mA	510
					24V / 8.06W	336mA				
					24V / 8.64W	360mA				
LBRQ-00-120-3-X	200.0	175.8	150.0	IR B50	24V / 9.50W	396mA	● 24V / 21.60W ● 24V / 21.60W ● 24V / 21.60W	900mA	900mA	595
					24V / 12.10W	504mA				
					24V / 12.96W	540mA				
LBRQ-00-160-3-X	240.0	215.8	190.0	IR B50	24V / 12.67W	528mA	● 24V / 28.80W ● 24V / 28.80W ● 24V / 28.80W	1200mA	1200mA	740
					24V / 16.13W	672mA				
					24V / 17.28W	720mA				
LBRQ-00-200-3-X	280.0	255.8	230.0	IR B50	24V / 15.84W	660mA	● 24V / 36.00W ● 24V / 36.00W ● 24V / 36.00W	1500mA	1500mA	900
					24V / 20.16W	840mA				
					24V / 21.60W	900mA				

Remarks: LBRQ 3 rows series can be cascaded (single colour / RGB) up to maximum length of 480mm.

LBRX 6 ROWS SERIES – Direct, Rectangular Illumination

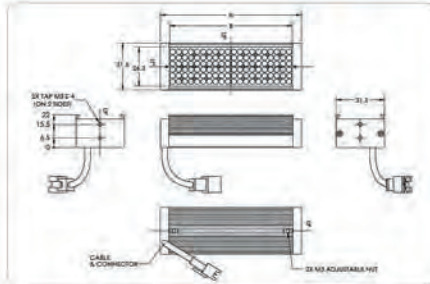
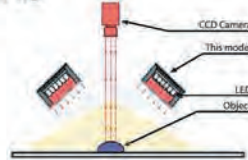
(for short working distance)

6 rows of SMD LEDs with lens arrays are arranged in a rectangular array to provide rectangular illumination, which can be mounted with different angle to provide differences in illumination reflection for image processing.

Applications: General Illumination, Label Inspection, Character Inspection, Code Recognition



Short WD



Technical Specification:

- Color Red, Green, Blue and White
- 24V DC Input Power
- Continuous and Strobe Applications
- Compact Size
- Lighting Cable 500mm

Customize Lighting:

- Customize Sizes, Mounting Requirements
- Color and Voltage Available
- Consult Technical Sales for More Information

Model	Dimensions (MM)		Color	Voltage / Watt		Current	RGB Color	Voltage / Watt		Current	Weight (g)
	A	B									
LBRX-00-040-6-X	52.0	40.0	IR 850	24V / 1.97W	79mA	70	● ● ● ●	24V / 2.40W	100mA		
				24V / 1.73W	72mA			24V / 1.92W	80mA		
				24V / 1.73W	72mA			24V / 2.16W	90mA		
LBRX-00-080-6-X	92.0	80.0	IR 850	24V / 3.74W	156mA	100	● ● ● ●	24V / 4.80W	200mA		
				24V / 3.46W	144mA			24V / 3.84W	160mA		
				24V / 3.46W	144mA			24V / 4.32W	180mA		
LBRX-00-120-6-X	132.0	120.0	IR 850	24V / 5.62W	234mA	130	● ● ● ●	24V / 7.20W	300mA		
				24V / 5.18W	216mA			24V / 5.76W	240mA		
				24V / 5.18W	216mA			24V / 6.48W	270mA		
LBRX-00-160-6-X	172.0	160.0	IR 850	24V / 7.49W	312mA	170	● ● ● ●	24V / 9.60W	400mA		
				24V / 6.91W	288mA			24V / 7.68W	320mA		
				24V / 6.91W	288mA			24V / 8.64W	360mA		
LBRX-00-200-6-X	212.0	200.0	IR 850	24V / 9.36W	390mA	210	● ● ● ●	24V / 12.0W	500mA		
				24V / 8.64W	360mA			24V / 9.60W	400mA		
				24V / 8.64W	360mA			24V / 10.8W	450mA		

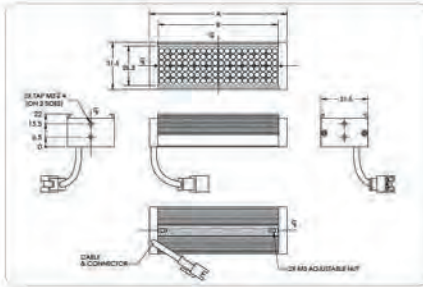
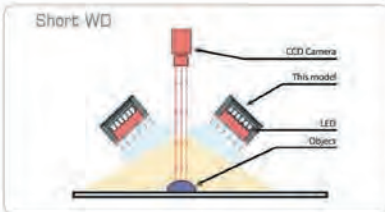
Remarks: LBRX 6 rows series can be cascaded [single colour / RGB] up to maximum length of 760mm.

Direct Illumination

LBRQ 6 ROWS SERIES – Direct, High Intensity, Multiple Rectangular Illumination (for short working distance)

LBRQ 6 rows series consists of a combination of 4 LBRX LED arrays fit into a rectangular structure. Each array's angle can be adjusted for different height application.

Applications: Lead Inspection, Character Inspection, Code Recognition



Technical Specification:

- Color Red, Green, Blue and White
- 24V DC Input Power
- Continuous and Strobe Applications
- Compact Size
- Lighting Cable 500mm

Customize Lighting:

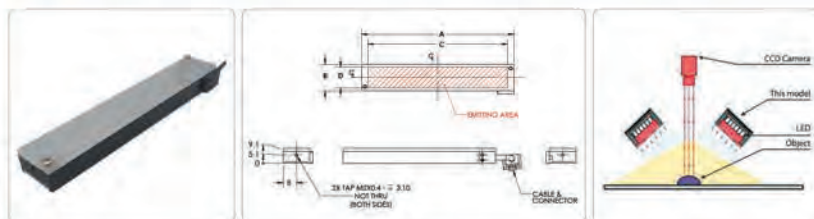
- Customize Sizes, Mounting Requirements
- Color and Voltage Available
- Consult Technical Sales for More Information

Model	Dimensions (MM)			Color	Voltage / Watt	Current	RGB Color	Voltage / Watt	Current	Weight (g)
	A	B	C							
LBRQ-00-040-6-X	1200	95.8	70.0	IR 850	24V / 7.49W	312mA	•	24V / 9.60W	400mA	355
					24V / 6.91W	288mA		24V / 7.65W	320mA	
					24V / 6.91W	288mA		24V / 8.64W	350mA	
LBRQ-00-080-6-X	1600	135.8	110.0	IR 850	24V / 14.98W	624mA	•	24V / 19.20W	800mA	500
					24V / 13.82W	576mA		24V / 15.36W	640mA	
					24V / 13.82W	576mA		24V / 17.28W	720mA	
LBRQ-00-120-6-X	2000	175.8	150.0	IR 850	24V / 22.46W	936mA	•	24V / 28.80W	1200mA	600
					24V / 20.74W	864mA		24V / 23.04W	960mA	
					24V / 20.74W	864mA		24V / 25.92W	1080mA	
LBRQ-00-160-6-X	2400	215.8	190.0	IR 850	24V / 29.95W	1248mA	•	24V / 38.40W	1600mA	800
					24V / 27.65W	1152mA		24V / 30.72W	1280mA	
					24V / 27.65W	1152mA		24V / 34.56W	1440mA	
LBRQ-00-200-6-X	2800	255.8	230.0	IR 850	24V / 37.44W	1560mA	•	24V / 48.00W	2000mA	900
					24V / 34.56W	1440mA		24V / 38.40W	1600mA	
					24V / 34.56W	1440mA		24V / 43.20W	1800mA	

Remarks: LBRQ 6 rows series can be cascaded (single colour / RGB) up to maximum length of 480mm.

LBM SERIES – Compact Rectangular Illumination

LBM Series is a compact rectangular illumination which is suitable for small or narrow inspection.

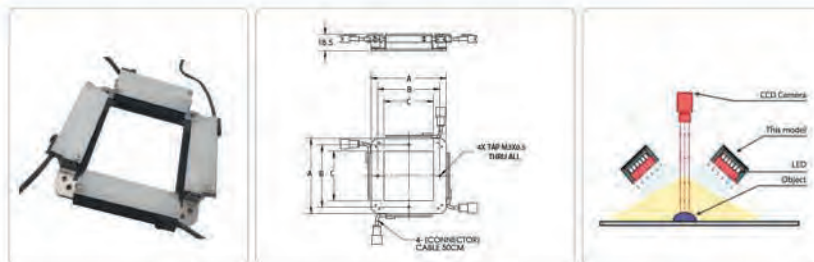


Model	Dimensions (MM)				Color	Voltage / Watt	Current	Weight (g)
	A	B	C	D				
LBM-00-040-1-X-24V	50	9	42	5.6	●○ ●○	24V / 0.31W 24V / 0.62W	13mA 26mA	19
LBM-00-080-1-X-24V	92	9	84	5.6	●○ ●○	24V / 0.62W 24V / 1.25W	26mA 52mA	24
LBM-00-040-2-X-24V	50	13	42	9.6	●○ ●○	24V / 0.72W 24V / 1.44W	30mA 60mA	21
LBM-00-080-2-X-24V	92	13	84	9.6	●○ ●○	24V / 1.25W 24V / 2.50W	52mA 104mA	27
LBM-00-040-3-X-24V	50	16	42	12.6	●○ ●○	24V / 1.08W 24V / 2.16W	45mA 90mA	22
LBM-00-080-3-X-24V	92	16	84	12.6	●○ ●○	24V / 1.87W 24V / 3.74W	78mA 156mA	29

LBMQ SERIES – Compact Rectangular Illumination

LBMQ Series are combination of 4 LBM LED arrays.

Each array angle can be adjusted for different height application.



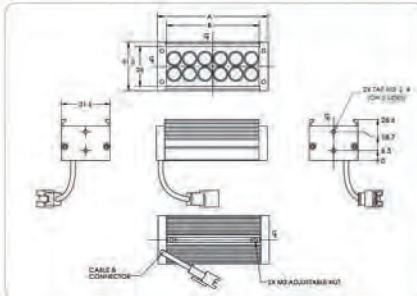
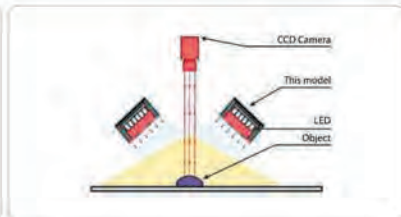
Model	Dimensions (MM)			Color	Voltage / Watt	Current	Weight (g)
	A	B	C				
LBMQ-00-040-1-X-24V	82	68	54	●○ ●○	24V / 1.25W 24V / 2.49W	52mA 104mA	102
LBMQ-00-040-2-X-24V	86	68	54	●○ ●○	24V / 2.88W 24V / 4.99W	120mA 208mA	116
LBMQ-00-040-3-X-24V	89	68	54	●○ ●○	24V / 3.74W 24V / 8.54W	156mA 360mA	120

Direct Illumination

MLBX2 SERIES – Direct, High Intensity, Rectangular Illumination (for middle working distance)

2 rows of mid-power SMD LEDs with lens arrays are arranged in a rectangular array to provide rectangular illumination, which can be mounted with different angles to provide differences in illumination reflection for image processing.

Applications: General Illumination, Label Inspection, Character Inspection, Code Recognition



Technical Specification:

- Color Red, Green, Blue, White and RGB
- 24V DC Input Power
- Continuous and Strobe Applications
- Compact Size
- Lighting Cable 500mm

Customize Lighting:

- Customize Sizes, Mounting Requirements
- Color and Voltage Available
- Consult Technical Sales for More Information

LED Wavelength (OSRAM LED Light Technology)

- Red Led is 620nm
- Blue Led is 450nm
- Green Led is 540nm

Model	Dimensions (MM)		Color	Voltage / Watt	Current	Weight (g)
	A	B				
MLBX2-00-060-2-X	72.0	60.0	● ● ● ○	24V / 2.304W 24V / 2.304W	96mA 96mA	75
MLBX2-00-090-2-X	102.0	90.0	● ● ● ○	24V / 3.46W 24V / 3.46W	144mA 144mA	98
MLBX2-00-120-2-X	132.0	120.0	● ● ● ○	24V / 4.61W 24V / 4.61W	192mA 192mA	118
MLBX2-00-150-2-X	162.0	150.0	● ● ● ○	24V / 5.76W 24V / 5.76W	240mA 240mA	139

Model	Dimensions (MM)		Color	Voltage / Watt	Current	Weight (g)
	A	B				
MLBX2-00-060-2-RGB	72.0	60.0	● ● ●	24V / 1.20W 24V / 0.96W 24V / 0.96W	50mA 40mA 40mA	90
MLBX2-00-090-2-RGB	102.0	90.0	● ● ●	24V / 1.80W 24V / 1.44W 24V / 1.44W	75mA 80mA 80mA	120
MLBX2-00-120-2-RGB	132.0	120.0	● ● ●	24V / 2.40W 24V / 1.92W 24V / 1.92W	100mA 80mA 80mA	140
MLBX2-00-150-2-RGB	162.0	150.0	● ● ●	24V / 3.00W 24V / 2.40W 24V / 2.40W	125mA 100mA 100mA	170

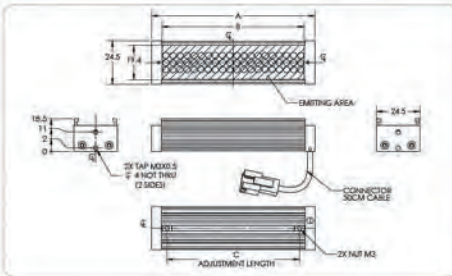
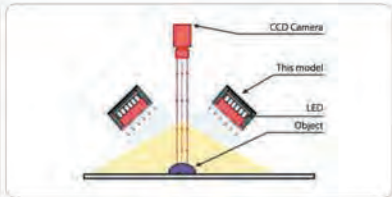
Remarks: MLBX part numbers are changed to MLBX2
MLBX2 series can cascade (Single colour / RGB) able to customize to maximum length 1170mm.

Direct Illumination

HLBRX SERIES – Direct, High Intensity, Rectangular Illumination (for middle working distance)

3 rows of SMD LEDs are arranged in a rectangular array to provide rectangular illumination that can be mounted with different angles to provide differences in illumination reflection for image processing.

Applications: General Illumination, Label Inspection, Character Inspection, Code Recognition



Technical Specification:

- Color Red, Green, Blue and White
- 24V DC Input Power
- Continuous and Strobe Applications
- Compact Size
- Lighting Cable 500mm

Customize Lighting:

- Customize Sizes, Mounting Requirements
- Color and Voltage Available
- Consult Technical Sales for More Information

LED Wavelength (OSRAM LED Light Technology)

- ✦ Red Led is 620nm
- ✦ Blue Led is 460nm
- ✦ Green Led is 640nm

Model	Dimensions (MM)			Color	Voltage / Watt	Current	Weight (g)
	A	B	C				
HLBRX-00-040-3-X	52	40	34.6	●●○	24V / 2.99W 24V / 3.36W	120mA 140mA	48
HLBRX-00-080-3-X	92	80	74.6	●●□	24V / 5.76W 24V / 8.72W	240mA 280mA	85

Optional Connector

Standard Lighting Male Connector

PIN 1	24V
PIN 2	-
PIN 3	GND

M8 Male Connector

M8 Pin Assignment

PIN 1	-	24V
PIN 2	RED	24V
PIN 3	-	-
PIN 4	BLACK	GND

M12 Male Connector

M12 Pin Assignment

PIN 1	BROWN	24V
PIN 2	WHITE	-
PIN 3	BLUE	GND
PIN 4	BLACK	-
PIN 5	GRAY	-

Product Part Numbering System:
HLBRX-00-040-3-X M8

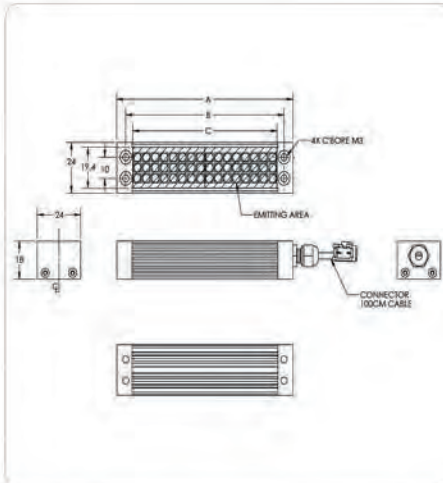
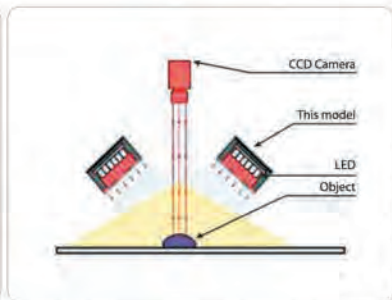
Product Part Numbering System:
HLBRX-00-040-3-X M12

Ingress Protection Illumination (IP65)

LBRP SERIES – Large Uniform Bar Illumination

LBRP series is a 3 rows of SMD LEDs with lens arrays are arranged in a rectangular array to provide rectangular illumination, which can be mounted with different angle to provide differences in illumination reflection for image processing. This illumination is dust tight and protected from low pressure water jets from any direction.

Applications: General Illumination, Label inspection, character Inspection, Code Recognition



Technical Specification:

- Color Red, Green, Blue and White
- 24V DC Input Power
- Continuous and Strobe Applications
- Compact Size
- Lighting Cable 1000mm

Customize Lighting:

- Customize Sizes, Mounting Requirements
- Color and Voltage Available
- Consult Technical Sales for More Information

Model	Dimensions [MM]			Color	Voltage / Watt	Current	Weight (g)
	A	B	C				
LBRP-00-040-3-X	57.8	47.8	40	• • • □	24V / 1.44W	60mA	81
LBRP-00-080-3-X	97.8	87.8	80	• • • □	24V / 1.52W 24V / 3.84W	80mA 130mA	80

HBL3 SERIES- High Intensity Barlight

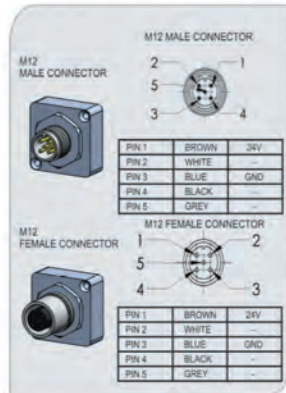
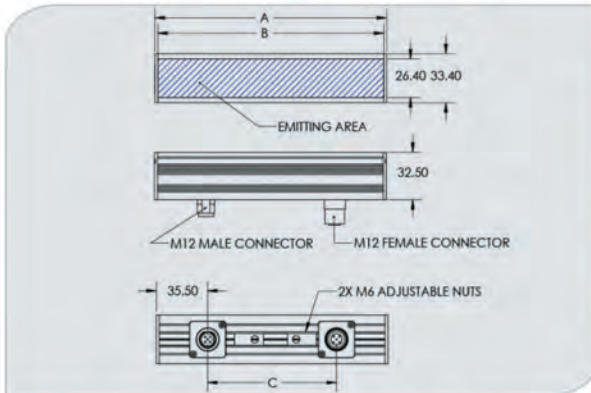
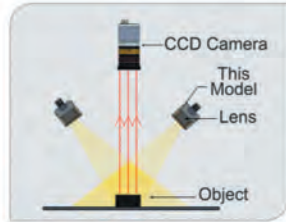
HBL3 is a high power bar illumination which is suitable for applications that require high intensity illumination.



Single Color / IR860



UV365



Features



Cascade Illuminators



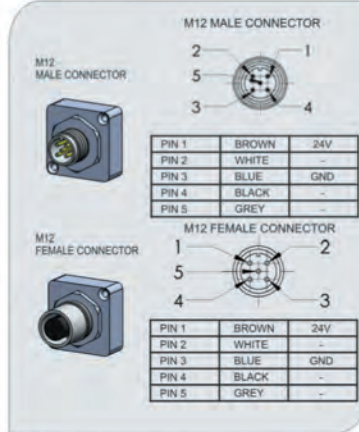
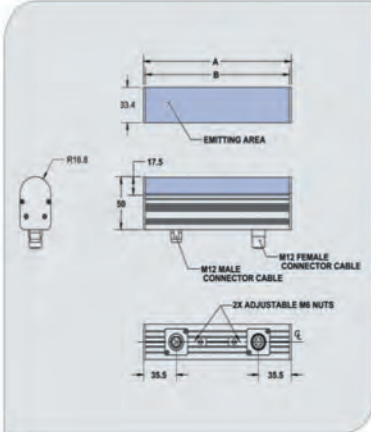
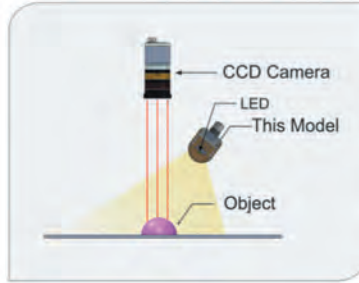
Easy Mounting

1. Angle Mount (Joint Bracket)
2. Horizontal Mount (L-shaped Plate)

MODEL	DIMENSIONS (MM)			COLOR	VOLTAGE / WATT	CURRENT	WEIGHT (g)
	A	B	C				
HBL3-00-160-1	160	156	89	 IR860 UV365	24V / 3.84W	160mA	270
					24V / 3.84W	160mA	
					24V / 4.80W	200mA	
					24V / 2.88W	120mA	
HBL3-00-320-1	320	316	249	 IR860 UV365	24V / 7.68W	320mA	500
					24V / 7.68W	320mA	
					24V / 9.60W	400mA	
					24V / 14.40W	240mA	

HLBD3 SERIES – Diffused Tube Light

HLBD3 series is a high power, wide angled light tube which provides an intense diffused light with uniform distribution.



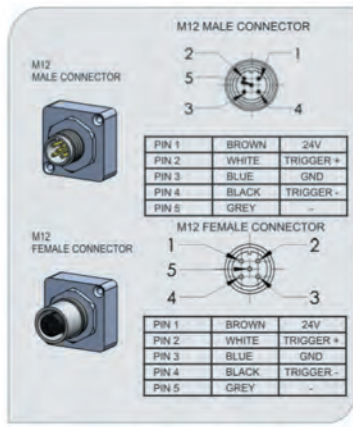
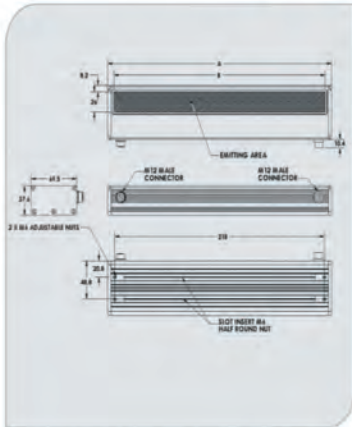
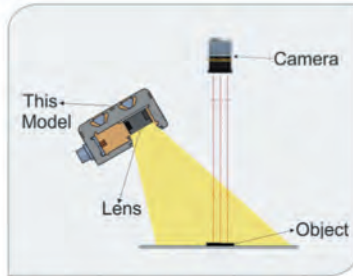
Features



MODEL	DIMENSIONS (MM)		COLOR	VOLTAGE / WATT	CURRENT	WEIGHT (g)
	A	B				
HLBD3-00-160-1	160	156	•••○	24V / 4.68W 24V / 4.90W	195mA 204mA	320
HLBD3-00-320-1	316	312	•••○	24V / 9.36W 24V / 9.80W	390mA 408mA	515
HLBD3-00-480-1	472	468	•••○	24V / 14.04W 24V / 14.70W	585mA 612mA	748

HBLP SERIES (IP65) – High Power Bar Light

HBLP series is a high power bar illumination with IP65 rating that is suitable for applications that require high intensity illumination.



MODEL	DIMENSIONS (MM)		COLOR	VOLTAGE / WATT	CURRENT	WEIGHT (g)
	A	B				
HBLP-00-320-1-X	340	320	•••	24V / 7.68W 24V / 7.68W	320mA 320mA	1050