

# MB-BL

## Area Back Light

### Model: MB-BL

The Metabright Series is a high performance and uniform light source for silhouetting and transmissive applications. Using a full array LED layout, we can pack more LEDs per square inch to provide greater intensity, uniformity and performance. The Metabright Backlight Series is available with a wide variety of LED colors and sizes such as White, Red, Green, Blue, IR, UV (365 nm and 395 nm) and RGB with independent color control. Sizes up to 5 ft x 5 ft (1.5m x 1.5m)



#### FEATURES

- High density LED array makes our backlights the brightest, most stable backlights
- Exclusive optical lens provides high uniformity ( $\pm 5\%$  to  $\pm 10\%$ ), shadow-free backlight illumination
- Patent pending thermal management design draws heat directly from the die ensuring long life
- Metaphase Technologies has the largest selection of Backlights in the vision industry.
- Backlight shapes/sizes include low profile, narrow and large area backlights are available.
- Options include 0 to 10VDC (-Z), manual and automated intensity control
- Can be operated in either DC mode or in strobe operating using your preferred controller/driver

#### SPECIFICATIONS

Cable	10 ft (3.05m) cable with flying leads
Housing:	Aluminum
Finish:	Powder coated black
Intensity Control:	Optional
Operating Temperature:	-30°C to 60°C
Illuminance (white):	30,000 to 60,000 Lux (consult Metaphase for possible higher intensity)
Uniformity:	$\pm 5\%$ to $\pm 10\%$
Lifetime Hours:	75,000

#### WAVELENGTH (nanometers)

W	White 6000K
R	Red 630 nm
G	Green 530 nm
B	Blue 470 nm
IR	Infrared 850
UV (long)	395 nm
UV (short)	365 nm
RGB	625 nm/530 nm/470 nm

## SPECIFICATIONS (continued)

Model	Active Area (Inches)	Active Area (mm)	Model	Active Area (Inches)	Active Area (mm)	Model	Active Area (Inches)	Active Area (mm)
MB-BL10X23	0.39x0.91	9.9x23.1	MB-BL6X6	6x6	152.4x152.4	MB-BL11X56	11x56	279.4x1422.4
MB-BL105	1x1	25.4x25.4	MB-BL6X10	6x10	152.4x254	MB-BL12X12	12x12	304.8x304.8
MB-BL205	2x2	50.8x50.8	MB-BL6X12	6x12	152.4x304.8	MB-BL15X15	15x15	381x381
MB-BL305	2.4	50.8x101.6	MB-BL6X20	6x20	152.4x508	MB-BL15X20	15x20	381x508
MB-BL4X4	4x4	101.6x101.6	MB-BL8X32	8x32	203.2x812.8	MB-BL18X18	18x18	457.2x457.2
MB-BL410	5x5	127x127	MB-BL610	10x10	254x254	MB-BL20X25	20x25	508x635
MB-BL510	5x10	127x254	MB-BL10X12	10x12	254x304.8	MB-BL20X30	20x30	508x762
MB-BL5X17	5x17	127x431.8	MB-BL10X16	10x16	254x406.8	MB-BL20X40	20x40	508x1016
MB-BL5X20	5x20	127x508	MB-BL10X20	10x20	254x508	MB-BL24X24	24x24	609.6x609.6
MB-BL6X4	6x4	152.4x101.6	MB-BL10X52	10x52	254x1320.8			

### APPLICATIONS

- Absence/presence of objects
- Defect detection in glass/plastic containers
- Object tracking (fish in aquarium)
- Printed circuit board assembly through-hole lead detection
- Web inspection (pinholes in web)
- Bottle cap detection
- Fastener thread inspection
- Glass sheet defect detection
- Dimensional inspection

### DRIVERS/OPTIONS

- **24V** – for use with a standard 24V constant voltage power supply [**24**]
- **ULC-2** – for use with constant current controllers such as our ULC-2 Universal Controller [**U**]
- **ILS** – configure for strobing applications with power boost for increased intensity for rising and falling edge triggers [**ILS**]
- **Keyence** – compatible with Keyence light controllers such as the Keyence CA-DC21e [**KEY**]
- **Baumer** – compatible with Baumer VeriSens cameras
- **Cognex** – compatible with Cognex cameras
- Versions also available for 3<sup>rd</sup> party controllers such as: Gardasoft, Trinitri, Opteon, Visics, etc.
- 0-10VDC intensity control [**-Z**]

### COMPLIANCE



### CONTACT US

Contact your Metaphase Technologies representative at 215-639-8669 or your local representative for additional details, options, and customizations.