## MetaBright™ Linear Backlights

PRODUCT DATA SHEET



## **MB-LBL**

The MetaBright<sup>™</sup> Linear Backlight provides uniform lighting (±5%) using High Density Precision Chip Technology (HDPCT) with the super bright LEDs.



#### FEATURES

- High density LED array provides maximum intensity area within ±5%
- High aspect ratio backlight
- Flicker free performance and instant start up with Metaphase analog driver technology
- Available in multiple versions including continuous, in-line strobe (ILS), current controlled (ULC-2), etc.
- Flicker free performance and instant start up with Metaphase analog driver technology
- Optional Constant Current driver with 0-10VDC intensity control (Z option)

WAVELENGTHS							
Order ID Description / nanometers							
W	White (6000K), Nominal						
R	Red / 630nm						
G	Green / 530nm						
В	Blue / 470nm						
IR850	Infrared / 850nm						
IR940	Infrared / 940nm						
UV395	Ultraviolet Long / 395nm						

#### **GENERAL SPECIFICATIONS**

Power Source: Cable (Standard): Housing: Ambient Temp: Lifetime Expectancy: 24VDC ±5% 10-foot cable with flying leads Black Anodized Aluminum -20°C to 40°C 75,000 hours (except UV)

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LINEAR BACKLIGHTS								
MODEL	All models: H =.71 inches (1.8cm) Width and Length Inches (cm)	Active Area Inches (cm)	Weight Ibs / grams	Cable QTY	Cable Length	Cable Description	Maximum Input Current @24VDC	
MB-LBL201	2.50 x 8.22 (6.35 x 20.88)	1.20 x 6.00 (3.05 x 15.24)	.63 / 286				040 amps	
MB-LBL211	2.50 x 8.80 (6.35 x 22.35)	1.20 x 8.00 (3.05 x 20.32)	1.0 / 454	1	10ft	24 AWG 4 Conductor	0.45 amps	
MB-LBL311	2.50 x 14.25 (6.35 x 36.20)	1.20 x 13.00 (3.05 x 33.02)	1.2 / 544				0.60 amps	

Wiring (4 conductors, flying leads)**						
Wire Color	Function					
RED	+24VDC					
WHITE	0-10VDC INTENSITY CONTROL					
BLACK	GROUND (24V RTN)					
GREEN	SIGNAL GROUND					

Wiring (4 conductors, without Intensity Control)						
Wire Color	Function					
RED	+24VDC					
WHITE	+24VDC					
BLACK	GROUND (24V RTN)					
GREEN	GROUND (24V RTN)					

M12 (5 position male)**					
Pin #	Function				
1	+24VDC				
2	0-10VDC Intensity Control				
3	GROUND (24V RTN)				
4	SIGNAL GROUND				
5	No Connection				
The M12 connector option is not recommended for lights rated more than 4 amps					

Wiring with ULC-2						
Wire Color	Function					
RED, WHITE (+)						
BLACK, GREEN (-)	LED INPUT					
Terminated within a 2 position ULC-2 output connector (Phoenix Contact P/N: BCP-508-2)						

\*\*Note: The 0-10VDC Intensity Control input can accept voltages from 0-24VDC where the light will operate at full intensity in the 10-24VDC range. The light is proportionally dimmer for any Intensity Control voltage less than 10VDC and the light is OFF at approximately 0V or not connected (floating).

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PART NUMBER KEY									
MODEL	SIZE	-	WAVELENGTH	-	DRIVER* (most common)	-	CABLE LENGTH	-	CONN.** (most common)
MB-LBL	ххх	-	ххххх	-	xxxxxxx	-	ххх	-	XXXX
MB-LBL	201 211 311 76x279 (mm)		W (White 6000K, Nominal) R (Red 630nm) G (Green 530nm) B (Blue 470nm) IR850 (Infrared 850nm) IR940 (Infrared 940nm) UV395 (UV Long 395nm)		24CV 24Z 24-ILZ 24-ILSXXX 24-ILD U <sup>1</sup> XXX=rate in μs Example: 250		5M 10M Length can be customized: ex.7M=7meters Select or leave blank for 3 meters		M12D <sup>1 2</sup> BC <sup>1 3</sup> Select or leave blank for flying leads
Example 1: MB-LBL201-G-24CV Example 2: MB-LBL311-R-24Z-M12D Contact Metaphase Technologies or your local representative for options such as custom diffusers, lenses, polarizers, IP-ra				ector is 19 inches nnector is 10 feet					

Contact Metaphase Technologies or your local representative for options such as custom diffusers, lenses, polarizers, IP-rated enclosures for harsh environments, higher intensity, custom wavelengths, higher uniformity, etc. Not all options are available for all lights.

Link to \*Driver Options Key / \*\*Connector Options Key

### MetaBright™

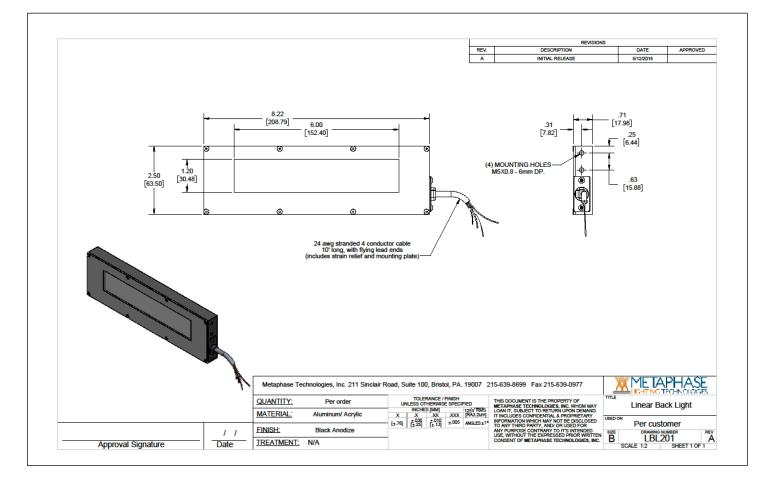
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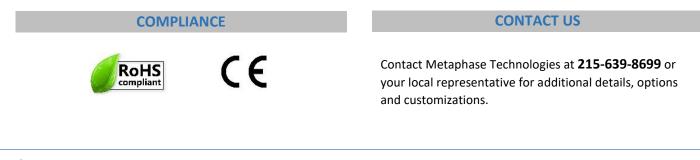


## **Linear Backlights**

### MB-LBL

### Sample Model Number: MB-LBL201-W-24Z





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METAPHASE 215-639-8699