

MB-CBL-41

Collimated Tube Backlight Model: MB-CBL-41

Metaphase Technologies Collimated Tube Backlights are ideal for producing high contrast silhouettes. The Collimated Tube Backlight boasts increased illumination compared to standard backlights when used with telecentric lensing. Telecentric illumination is ideal for precision measurements where accuracy, repeatability, and throughput are key factors in the application's success. The key benefits of telecentric illumination are: superior detection of small defects; increased measurement accuracy and repeatability compared to standard backlight illumination; elimination of blurred edges caused by diffuse reflections; increased light intensity from collimated light rays; high contrast images from elimination of blurred edges and increased light intensity; reduced camera exposure times from increased light intensity; faster systems and high throughput compared to standard backlight illumination; and increased distance between object and illumination source.



SPECIFICATIONS

Power source:	24 VDC
Current Consumption:	0.02 A max. (White LED)
Cable:	10 foot (3.05 m) cable with flying leads
Housing:	Aluminum
Cooling:	Passive thermal conduction
Operating Temperature:	-30°C to 60°C
Illuminance:	5,000 Lux standard (consult Metaphase for possible Higher intensities)
Inline dimmer:	Optional
Lifetime Hours:	75,000

FEATURES

- Collimated spot size of 1.5 inches (3.81 cm)
- Compact housing for easy application integration
5.2 inch (13.2 cm) length, 1.9 inch (4.8 cm) diameter
- Optional mounting clamp available
- Multiple wavelength options
- 24V power supply (no special controller required)
- Ideal for producing high contrast silhouette images for edge detection and high accuracy measurements

WAVELENGTH (nanometers)

Color	[Code]	Wavelength
Red	R	630 nm
Green	G	530 nm
Blue	B	470 nm
Infrared	IR	850 nm
UV (long)	UVL	395 nm
UV (short)	UVS	365 nm
White (cool white)	W	6000K (highest intensity)



DRIVERS

- **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

Complete Model Ordering Information:

MB-CBL-41-[color code]-[driver code]

Mounting Options:

Please contact your local Metaphase representative to learn more about the mounting options for the MB-CBL-41. The bracket show below is a standard, black anodized with adjustable twin ring mounting clips.

Metaphase Technologies Mounting Bracket:

BRA-CBL-41



COMPLIANCE



CONTACT US

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

Vision Light Tech B.V.

Protonenlaan 22, 5405 NE UDEN, P.O. Box 345, 5400 AH UDEN, The Netherlands

Phone: +31 (0)413 26 00 67, Fax +31 (0)413 26 09 38, E-mail: inquiry@vlt.nl, Website: www.vlt.nl

Trade register No. 17150044, VAT No. NL8112.30.946.B01