

MB-RL205

The Metaphase Washdown Ring Light offers high intensity, shadow-less illumination with five times the lifetime over fluorescents. Ring lights are essential for lighting specular or diffused surfaces. The MetaBright™ Washdown Ring Light is built with high density LEDs that create bright illumination of surfaces for a wide spectrum of inspection purposes.

The Washdown Ring Light allows the use of one of the most popular lighting systems in a larger variety of environments and can be used where they may be exposed to water, moisture, and debris. With this watertight gasket design, high-pressure jets and washdowns are not a problem; great for food, drug, or outdoor applications. Three ¼-20 tapped holes provide the ability to mount the ring light directly on the camera. This light is available in both aluminum and stainless-steel housings.



FEATURES

- Homogenous light output that provides high intensity ON-axis illumination
- IP67 rated, rugged design with thermally potted LEDs
- LED thermal management for stable performance
- Ideal for solder joint and electronic component inspection
- Flicker free performance and instant start up with Metaphase analog driver technology
- An ideal light with many applications including, label Identification, part markings, surface inspection etc.
- Built-in Constant Current Driver with 0 – 10VDC intensity control, compatible with DDC-3 and ILD-35-24-L

WAVELENGTHS

Order ID	Description / nanometers
W	White (6000K), Nominal
R	Red / 630nm
G	Green / 530nm
B	Blue / 470nm
IR850 (or IRN)	Infrared / 850nm
IR880 (or IRL)	Infrared / 880nm
IR940	Infrared / 940nm
UV395 (or UVL)	Ultraviolet Long / 395nm

GENERAL SPECIFICATIONS

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

MB-RL205

Washdown RING LIGHT							
MODEL*	Outside Diameter Inches (cm)	Inside Diameter Inches (cm)	Weight lbs (grams)	Cable QTY	Cable Length	Cable Description	Maximum Input Current @24VDC
MB-RL205-IP67	5.15 (13.09)	2.00 (5.09)	.84 (380)	1	10ft	24 AWG 4 Wire	.75A
MB-RL205-67SS	5.15 (13.09)	2.00 (5.09)	~2.0 (900)				.75A

*Custom sizes and configurations available upon request

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	

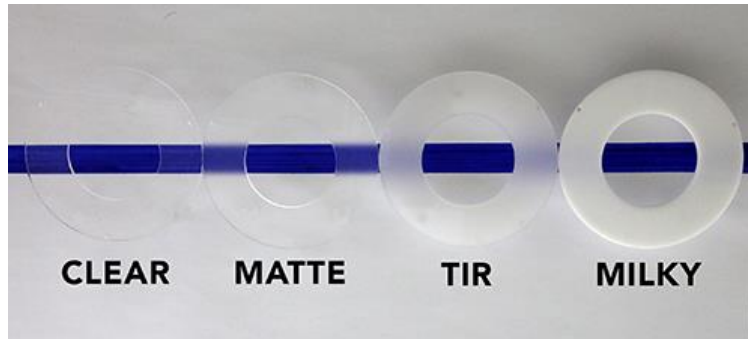
Wiring with ULC-2	
Wire Color	Function
RED, WHITE (+)	LED INPUT
BLACK, GREEN (-)	
Terminated within a 2 position ULC-2 output connector (Phoenix Contact P/N: BCP-508-2)	

**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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MODEL NUMBER KEY								
MODEL	-	WAVELENGTH	-	VOLTAGE	-	LENS	-	OPTION
MB-RLXXX	-	XXX	-	XXX	-	XX	-	X-XXX
MB-RL205-IP67 MB-RL205-67SS	-	W (White 6000K, Nominal) R (Red 630nm) G (Green 530nm) B (Blue 470nm) IR850 (or IRN) (Infrared 850nm) IR880 (or IRL) (Infrared 880nm) IR940 (Infrared 940nm) UV395 (or UVL) (UV Long 395nm)	-	24 (+24VDC, standard) U (ULC-2 interface) KEY (Keyence Controller) ILD (In Line Dimmer) ILS (In Line Strobe)	-	CC (Clear Cover) D2 (Matte) D3 (TIR) D4 (Milky White)	-	T (M12 Connector) XXX (Custom code)

Lens/Diffuser Options



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.

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Wiring (4 conductors, flying leads)**	
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RED	+24VDC
WHITE	0-10VDC INTENSITY CONTROL
BLACK	GROUND (24V RTN)
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RED, WHITE (+)	LED INPUT
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MetaBright™ Washdown Ring Light

PRODUCT
DATA SHEET



MB-RL205

Sample Model Number: **MB-RL205-IP67-W-24-CC-Z**

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	10/19/2017	

STRAIN RELIEF

POWER CABLE:
24 AWG Stranded;
2 conductor
w/ flying leadwire ends;
10' Lg. - .19" OD

2.121
[53.88]
SQUARE

3.000
[76.20]

2.003
[50.88]

1.500
[38.10] CENTERED

4X ϕ .130 [3.30] ∇ .300 [7.62]
M4X0.7 - 6H ∇ .250 [6.35]

1.435
[36.45]

2X ϕ .130 [3.30] ∇ .300 [7.62]
M4X0.7 - 6H ∇ .250 [6.35]

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QUANTITY:	Per order	TOLERANCE/FINISH UNLESS OTHERWISE SPECIFIED	THIS DOCUMENT IS THE PROPERTY OF METAPHASE TECHNOLOGIES, INC. WHOM MAY LOAN IT. SUBJECT TO RETURN UPON DEMAND. IT INCLUDES CONFIDENTIAL & PROPRIETARY INFORMATION WHICH MAY NOT BE DISCLOSED TO ANY THIRD PARTY, AND/OR USED FOR ANY PURPOSE CONTRARY TO ITS INTENDED USE, WITHOUT THE EXPRESSED PRIOR WRITTEN CONSENT OF METAPHASE TECHNOLOGIES, INC.										
MATERIAL:	ALUM	INCHES [MM] 128/FRMS [3.0/0.076]	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">X</td> <td style="width: 20%;">.005</td> <td style="width: 20%;">.010</td> <td style="width: 20%;">.000</td> <td style="width: 20%;">ANGLES 1°</td> </tr> <tr> <td>[.75]</td> <td>[.127]</td> <td>[.254]</td> <td>[.0254]</td> <td></td> </tr> </table>	X	.005	.010	.000	ANGLES 1°	[.75]	[.127]	[.254]	[.0254]	
X	.005	.010		.000	ANGLES 1°								
[.75]	[.127]	[.254]		[.0254]									
FINISH:	BLK ANODIZE												
TREATMENT:	N/A												

SEE SHEET 2 FOR EXPLODED VIEW AND BOM.

Approval Signature	Date
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METAPHASE LIGHTING TECHNOLOGIES	<p>TITLE: Top Assy.; 3" Ring Light</p> <p>USED ON: Per customer</p> <p>SIZE: B ORDER NUMBER: MB-RL205-IP67-1 REV: A</p> <p>SCALE: 1:2 SHEET 1 OF 1</p>
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COMPLIANCE



IP67

CONTACT US

For more information please contact:

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