

## FR-SL205

Metaphase's LED spotlight provides low cost, washdown illumination. These illuminators are available in a variety of beam angles and optimal working distances and are encased in a rugged waterproof housing that can stand up to high-pressure washdown environments. The standard spotlight has a  $\pm 16^\circ$  (Medium) beam angle (i.e. 1.1m coverage at 4.0m working distance). Other beam angles include  $\pm 12^\circ$  (Narrow) and  $\pm 25^\circ$  (Wide).



### FEATURES

- Homogenous light output that provides high intensity illumination
- Rugged design, IP67 washdown rated housing
- LED thermal management for stable performance
- Swivel bracket allows for precise positioning
- Flicker free performance and instant start up with Metaphase analog driver technology
- Available in  $\pm 12^\circ$ ,  $\pm 16^\circ$  or  $\pm 25^\circ$  beam angles
- An ideal light with many applications including, Spot lighting, Area illumination, Packaging transportation
- Built-in Constant Current Driver with 0 – 10VDC intensity control
- Compatible with DDC-3 and ILD-35 Dimmers

### WAVELENGTHS

Order ID	Description / nanometers
<b>W</b>	White (6000K), Nominal
<b>R</b>	Red / 630nm
<b>G</b>	Green / 530nm
<b>B</b>	Blue / 470nm
<b>IR850 (or IRN)</b>	Infrared / 850nm
<b>IR880 (or IRL)</b>	Infrared / 880nm
<b>IR940</b>	Infrared / 940nm
<b>UV365 (or UVS)</b>	Ultraviolet Short / 365nm

### GENERAL SPECIFICATIONS

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

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Washdown LED Spotlight							
MODEL	Dimensions Length x Diameter Inches (cm)	Lens Diameter Inches (cm)	Weight lbs (grams)	Cable QTY	Cable Length	Cable Description	Typical Input Current (White) @24VDC
FR-SL205	3.16" x Ø3.15" (8.0cm x Ø8.0cm)	Ø1.77" (Ø4.5cm)	1.2 (550)	1	10ft	24 AWG 4 Wire	.47A

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 BCP-508-2 connector to interface with the ULC-2 "LED Output"

\*\*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).

**FR-SL205**

PART NUMBER KEY											
MODEL	SIZE	-	WAVELENGTH	-	DRIVER* (most common)	-	LENS	-	CABLE LENGTH	-	CONN.** (most common)
FR-SL	XXX	-	XXXXX	-	XXXXXXX	-	XXX	-	XXX	-	XXXX
<b>FR-SL</b>	<b>205</b>		<b>W</b> (White 6000K, Nominal) <b>R</b> (Red 630nm) <b>G</b> (Green 530nm) <b>B</b> (Blue 470nm) <b>IR850</b> (Infrared 850nm) <b>IR940</b> (Infrared 940nm) <b>UV395</b> (UV Long 395nm)		<b>24Z</b> <b>24NZ</b> <b>24-ILSXXX</b> <b>24-ILD</b> <b>U<sup>1</sup></b>		<b>L12</b> (12°) <b>L16</b> (16°) <b>L25</b> (25°)		<b>5M</b> <b>10M</b>  Length can be customized: ex.7M=7meters  Select or leave blank for 3 meters		<b>M12D<sup>1 2</sup></b>  Select or leave blank for flying leads
Example 1: <b>FR-SL205-W-24Z-L16</b>					<sup>1</sup> Not available in lights exceeding 4A input current						
Example 2: <b>FR-SL205-R-24-ILD-L25</b>					<sup>2</sup> Default cable length for an M12D connector is 19 inches						

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.

# FR-SL205

Sample Part Number: **FR-SL205-W-24Z-L16**

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	5/25/2013	
B	CHANGED SCREW SPECS.- SHEET 2 ITEM 15	7/15/2013	
C	ADDED SEAM GASKET AND LENS SEALANT	01/03/2017	
D	ADDED CORRECT LENS SEALANT AND DELETED OLD ORING	2/1/2017	
F	ASSEMBLY PROCEDURE UPDATED	6/25/2017	
G	BRACKET PART NUMBER CLARIFICATION	12/27/2017	
H	BOM LINK AND PART NUMBER UPDATES	2/23/2018	

Metaphase Technologies, Inc. 211 Sinclair Road, Suite 100, Bristol, PA. 19007 215-639-8699 Fax 215-639-0977			
SEE SHEET 2 FOR EXPLODED VIEW AND BOM	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.
Approval Signature _____	MATERIAL: Per BOM	INCHES [MM]	
Date / /	FINISH: Black Anodized	±.005 [±.13]	
	TREATMENT: N/A	±.010 [±.25]	
		±.005 [±.13]	ANGLES ±1°
			TITLE: Top Assy - FRSL Light USED ON: Per customer PART NUMBER: FRSL-205-1 SCALE: 1:2 SHEET 1 OF 1

## COMPLIANCE



IP67

## CONTACT US

For more information please contact:

**BOCK OPTRONICS INC.**  
 14 Steinway Blvd., Unit 7  
 Toronto, Ontario M9W 6M6



Tel: (416) 674-2804  
[sales@bockoptronics.ca](mailto:sales@bockoptronics.ca)  
[www.bockoptronics.ca](http://www.bockoptronics.ca)