

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
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
UV365 (or UVS)	Ultraviolet Short / 365nm

GENERAL SPECIFICATIONS

Power Source:	24VDC $\pm 5\%$
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)

FR-SL205

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
FR-SL	205		W (White 6000K, Nominal) R (Red 630nm) G (Green 530nm) B (Blue 470nm) IR850 (Infrared 850nm) IR940 (Infrared 940nm) UV395 (UV Long 395nm)		24Z 24NZ 24-ILSXXX 24-ILD U¹		L12 (12°) L16 (16°) L25 (25°)		5M 10M Length can be customized: ex.7M=7meters Select or leave blank for 3 meters		M12D^{1 2} Select or leave blank for flying leads
Example 1: FR-SL205-W-24Z-L16					¹ Not available in lights exceeding 4A input current						
Example 2: FR-SL205-R-24-ILD-L25					² 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	6/26/2017	
G	BRACKET PART NUMBER CLARIFICATION	12/27/2017	
H	BOM LINK AND PART NUMBER UPDATES	2/23/2018	

Labels: HEAT SINK, POWER CABLE, DIRECTION OF LIGHT, $\phi 1.77$ LENS, $\phi 3.15$, $\phi 1.77$ LENS [44.96], 360° PIVOT ADJUSTMENTS, MOUNTING BRACKET, FULL GASKET SEAL, MOUNTING HOLES 3X $\phi .22$ [5.56], WATER PROOF STRAIN RELIEF.

Dimensions: 3.16 [80.19], 4.59 [116.60], 3.00 [76.20], 3.75 [95.19], 2.00 [50.80], 1.00 [25.40]

SEE SHEET 2 FOR EXPLODED VIEW AND BOM

Metaphase Technologies, Inc. 211 Sinclair Road, Suite 100, Bristol, PA. 19007 215-639-8699 Fax 215-639-0977			
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: Per BOM	X .XX .XX .XXX [0.0015] [0.0025] [0.005] [0.01] [0.02] [0.05] ANGLES $\pm 1^\circ$	TITLE: Top Assy - FRSL Light	USED ON: Per customer
FINISH: Black Anodized		SIZE: B	QUANTITY NUMBER: FRSL-205-1
TREATMENT: N/A		SCALE: 1:2	REV: H SHEET 1 OF 1
Approval Signature: _____	Date: / /		

COMPLIANCE



IP67

CONTACT US

Contact Metaphase Technologies at **215-639-8699** or your local representative for additional details, options and customizations.