

RING LIGHT

3.5" / 89mm Series With Internal Driver



ELECTRICAL:

Input Voltage: 23.5-26.4VDC (24VDC ±10% burst disabled)

Input Current: 350 to 650mA typical (3.0A max for burst) @24VDC

Note: Power supply must be capable of 3.0A per light for burst feature to work correctly with supplied cable.

Strobe Input Impedance: $10K\Omega - PNP$ typical, $9.1K\Omega - NPN$ typical Strobe Timing: <20 microseconds from strobe to LED on

0-10V Input Impedance: 15KΩ typical

0-10V Input Control: 0V = 100%, 10V = 0% LED current. (Can be left disconnected for 100% LED current)

Variable Intensity: Adjustable via trim potentiometer from 0% (CCW) to 100% (CW).

Wiring: Pin # Wire Color Function

Brown +23.5 to +26.4VDC White NPN STROBE INPO

White NPN STROBE INPUT: GND for "ON", Open or >Vin-1V for "OFF"

Blue 0VDC (DC GND)
Black PNP STROBE IN

Black PNP STROBE INPUT: < 1 VDC for "OFF", >3 ≤30 VDC for "ON"

Grey or

0-10VDC analog intensity control – 0V = 100%, 10V = 0%

5 Green/Yellow

Operating Temperature: 0 to 50°C

Relative Humidity: 5 to 85% non-condensing

MECHANICAL:

ENVIRONMENTAL:

Lighted Area: 3.5" / 89mm Connector: M12 - 5 pin Weight: 0.85lbs (386g)

ILLUMINATION:

Light Source: LED – 4 Colors, UV and IR

Quantity HB LED's: 6 LED's Light Emitting Pattern: 3.5" / 89mm

LED Life: up to 100,000 hours*.

*Contact us for LED life information

PART NUMBER DESIGNATION: MRLD3.5-XXX

XXX = Light Color – see table dash # below

				Cnastral		
		2 Daminant	2 Daminant	Spectral Half-width	2 Daale	
		λ Dominant	λ Dominant	naii-widiii	λ Peak	
Color	Dash #	Typical	Range	$\Delta\lambda\frac{1}{2}$	Typical	Units
Infrared	-940	940	n/a	37	950	nm
Infrared	-850	850	n/a	30	860	nm
Red	-630	625	620 - 630	n/a	n/a	nm
Green	-530	530	520 - 535	n/a	n/a	nm
Blue	-470	475	465 - 485	n/a	n/a	nm
Ultra Violet	-395	395	390 - 410	n/a	n/a	nm
Ultra Violet	-365	365	n/a	n/a	360 - 370	nm
Pure White	-WHI	Color Temp 5700 - 7000K CRI 70 typ				
Natural White	-NWH	Color Temp 3800 - 5000K CRI 70 typ*				
Warm White	-WWH	Color Temp 2700 - 3750K CRI 70 typ*				

* higher CRI available on request





FEATURES:

- Built-in Driver
- Auto Burst LED high current for 500µs ±10%, then drops to standard current
- Auto Burst Disable Switch
- 0-10VDC Intensity Control
- · Potentiometer Intensity Control
- PWM Dimming Capable (with Auto Burst disabled)
- Includes hardware to mount on Cognex Series 5000 and 9000 cameras

Light includes 1 EC3 3-meter cable – cable also available in 5 meter length



LENS

DEGREE

Monster Lights have changeable lenses for matching the area of illumination with the working distance



Monster Lenses - P/N MRLD3.5-XXX/XX

12° Narrow (Standard) /16 – 16° Frosted Narrow /30 – 30° Medium Angle /23 – 23° Frosted Medium

/50 – 50° Medium Angle /39 – 39° Frosted Wide

/F - ~70° Wide Angle /R60 - 60° Reflectors /L - 44° x 12° Angle /R - 90° Reflectors

*** UV lights are standard with 60° reflectors, other options available. ***