

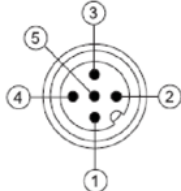

**product introduction**

The LM Series are the smallest linear lights available with an integrated built in driver. The driver features the new Multi-Drive™ which allows the user to operate this light in either constant ON operation or OverDrive depending on wiring method. The industry standard 5 Pin M12 connector makes for simple wiring and the multiple lensing options gives this light a broad range of illumination area. The 0-10V analog control gives the user total control over intensity.


**product features**


- Driver Built In – No External Wiring To A Driver
- 5 Pin M12 Quick Disconnect Cable
- Over-Current Protection
- PNP and NPN ON/OFF Input
- Continuous Operation or OverDrive Mode
- (4) High Output LEDs


**constant ON product specs**
**Wiring configuration for CONSTANT ON operation**

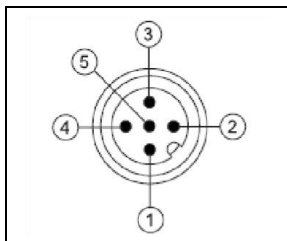
	Pin	Function	Signal	Wire Color
	1	Power In	+24VDC	<b>BROWN</b>
	2	NPN	Ground (common)	<b>WHITE</b>
	3	GND	Ground	<b>BLUE</b>
	4	PNP	> 4VDC	<b>BLACK</b>
	5	Intensity Control	1-10VDC	<b>GREY</b>

\* Some cables use green with yellow stripe for 1-10V adjustment.

\* Either a negative NPN or a positive PNP signal, not both must be applied for light to function.

<b>Electrical Input</b>	24 VDC +/- 5%
<b>Current</b>	.10 - .12A <i>NOTE: current is LED color dependent</i>
<b>Wattage</b>	2.88W
<b>Strobe Input</b>	PNP ▶ +4VDC or greater to activate   NPN ▶ GND (<1VDC) to activate
<b>PNP Line</b>	4mA @ 5VDC   8mA @ 10VDC   15mA @ 24 VDC
<b>NPN Line</b>	10mA @ Common (0VDC)
<b>Continuous Mode</b>	Light will be in continuous mode by leaving signal on strobe input active – <i>analog dimming is active</i>
<b>Connection</b>	5 pin M12 connector
<b>Lifespan</b>	100,000 hrs
<b>IP Rating</b>	IP65
<b>Certification</b>	CE and RoHS certified
<b>Weight</b>	52g
<b>Ambient Temperature</b>	-40° - 50° C (-40° - 122° F)

### Wiring configuration for **OverDrive** operation

	Pin	Function	Signal	Wire Color
	1	Power In	+24VDC	<b>BROWN</b>
	2	NPN	Sinking Signal	<b>WHITE</b>
	3	GND	Ground	<b>BLUE</b>
	4	PNP	Sourcing Signal	<b>BLACK</b>
	5	OverDrive Signal	Ground	<b>GREY</b>

- \* Some cables use green with yellow stripe for 1-10V adjustment.
- \* A strobing negative NPN or a positive PNP signal, not both must be applied for light to function.
- \* No analog to OverDrive operation.

<b>Electrical Input</b>	24 VDC +/- 5%
<b>Current</b>	.85 - .97A <i>NOTE: current is LED color dependent</i>
<b>Wattage</b>	23.3W
<b>Strobe Input</b>	PNP ► +4VDC or greater to activate   NPN ► GND (<1VDC) to activate   5µS LED activation time
<b>PNP Line</b>	4mA @ 5VDC   8mA @ 10VDC   15mA @ 24 VDC
<b>NPN Line</b>	10mA @ Common (0VDC)
<b>OverDrive Mode</b>	Connect Pin 5 to GND (more info. in wiring configuration) – <i>analog dimming is inactive</i>
<b>Duty Cycle</b>	Max.10%
<b>Strobe Duration</b>	Max. 125mS



**LM45 – XXX – X**

**Product Family:**  
Mini Linear  
LM45 Series

**Color:**  
470 - Blue  
530 - Green  
625 - Red  
850 - IR  
WHI - White

**Lens:**  
W – 80° wide

—» **Part Number Key**

- \* Standard 40 degree lens included
- \* Wide lens options available

**CE and RoHS Compliant**

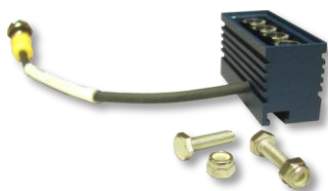



**Attention**

Please note that the power requirements are 175mA at 24VDC for constant ON and 800mA for OverDrive. Failure to supply light with appropriate current will result in non-repeatable lighting. Contact Smart Vision Lights for more information.



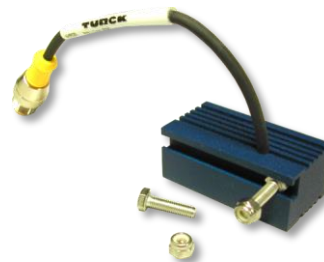
## mounting & accessories



Housing includes T-slot for easy mounting

Hardware includes:

- (2) M4x16 screws
- (2) M4 nylon nuts



## optical performance

### LM45-XXX (40° lens)

Working Distance mm (inches)	Pattern (80%-100% measured intensity) mm (Inches)		
0.25m (9.84")	120mm(~4.7") H x 125mm(~4.9") V		
0.5m (19.7")	260mm(~10.2") H x 260mm(~10.2") V		
Typical output performance		Constant ON Illumination (lux)	OverDrive Illumination (lux)
Distance = 0.25 meter		3,600	18,000
<i>Illumination measurement taken on White Lights – 6500K</i>			

### LM45-XXX-W (80° lens)

Working Distance mm (inches)	Pattern (80%-100% measured intensity) mm (Inches)		
0.25m (9.84")	240mm(~9.4") H x 250mm(~9.8") V		
.5m (19.7")	520mm(~20.4") H x 520mm(~20.4") V		
Typical output performance		Constant ON Illumination (Lux)	OverDrive Illumination (Lux)
Distance = 0.25 meter		1,200	6,000
<i>Illumination measurement taken on White Lights – 6500K</i>			