



product introduction

The LHF300 Series of lights was designed as a direct LED replacement for standard fluorescent lighting. The plug n' play design of the Direct-Connect Linear Light Series gives users tremendous flexibility without the concern for additional wiring. The LHF300 array utilizes 30 high intensity LEDs and features a diffuse lens cover designed to disperse the light a uniform and homogenous pattern the same as a fluorescent light of equivalent length. It also features an integrated constant current driver built into the light. Direct-Connect Series Linear Lights utilize 24VDC and can operate in continuous or strobe mode. NPN or PNP strobe triggers can be used to control the pulse of the light.



product features



- Direct-Connect – Daisy Chain up to 8 units
- T-Slot for mounting and connecting together
- Driver built in – 24VDC
- PNP and NPN Strobe input
- Continuous operation or Strobe mode
- Homogenous light pattern



product specifications

Electrical Input	24 VDC +/- 5%
Current	Max. 750mA
Wattage	Max. 18W
Strobe Input	PNP ► +3VDC or greater to activate. NPN ► GND (<1VDC) to activate
PNP Line	3.7mA @ 3VDC 6.2mA @ 5VDC 12.6mA @ 10VDC 30.4mA @ 24 VDC
NPN Line	22mA @ Common (0VDC)
Continuous Mode	Light will be in continuous mode by leaving signal on strobe input active
Connection	4 pin 2.5mm pitch phoenix connector
Daisy Chain	Up to eight LHF300
Ambient Temperature	-20° - 50° C (-4° - 122° F)
Lifespan	100,000 hrs
Color Temperature	White - 5000k
IP Rating	IP50
Weight	~455g
IEC 62471 Rating	See page 4



product number key

LHF300 – XXX

Product Family:
Fluorescent
Replacement
LHF300

Color:
470 – Blue
625 – Red
850 – IR
WHI – White

—» Part Number Key

CE and RoHS Compliant



warnings

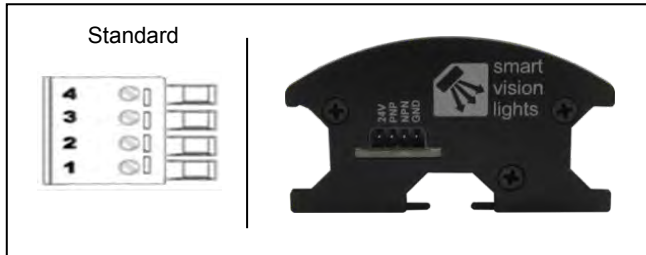


Attention

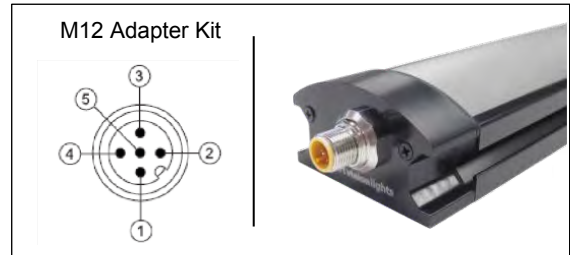
Please note that the power requirements are 750mA at 24VDC. Failure to supply light with 750mA will result in non-repeatable lighting. Contact Smart Vision Lights for more information.



wiring configuration



*Phoenix Contact - PTSM 0,5/4-P-2,5 Spring Cage Connector



*5-pin M12 Connector

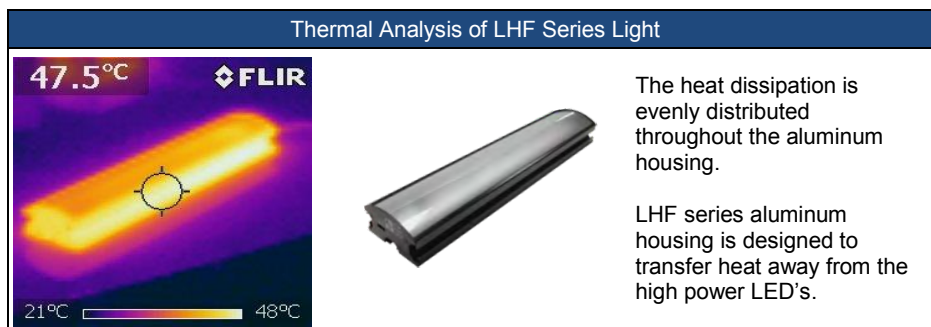
PIN	Function	Signal
4	Ground	GND
3	NPN Strobe	GND for active ON
2	PNP Strobe	4VDC to 30VDC for active ON
1	+24VDC	Power In

PIN	Function	Signal
1	Power In	+24 VDC
2	NPN Strobe	GND for active ON
3	Ground	GND
4	PNP Strobe	4-30V for active ON
5	NOT USED	NOT USED



thermal analysis

The LHF series of linear lights is the brightest in the vision industry due to the heat dissipation of the housing. Lifespan and power output for LED lights are based on the junction temperature of the high current LED. The junction is the point where the light is generated inside the LED and the point of heat generation. To dissipate heat, Smart Vision Lights directly mounts high current LED's to an aluminum circuit board. The aluminum circuit board is in direct contact with LHF series aluminum housing. This design efficiently transfers heat away from the high powered LEDs. Therefore, the LHF series Linear Light can be run at higher current, producing an increased output due the even heat dissipation of the aluminum housing. In constant operation the housing on Smart Vision Lights LHF series lights will run at 50 C° in an ambient temperature of 25 C°.





connecting lights

Power Input Connection



End View of Light Connections



Connecting Lights Together – Daisy Chain



daisy chain / direct connect



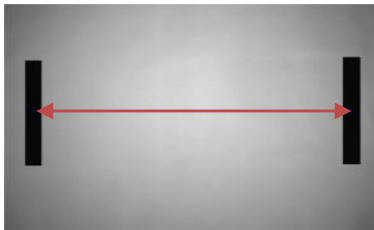
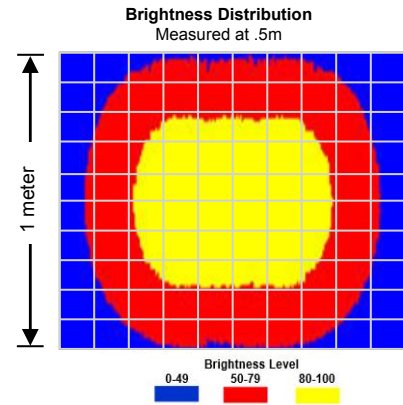
Illumination and intensity

Able to connect up to eight LHF300 linear lights in parallel for a seamless and diffuse illumination pattern.

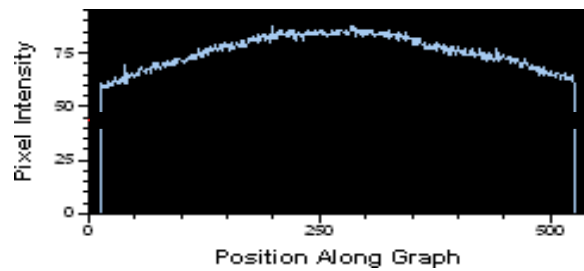


illumination pattern

Working Distance mm (inches)	Pattern (80%-100% measured intensity) mm (Inches)
.5m (~19.7")	570mm(~22.4") H x 580mm(~22.8") V
1m (~39.4")	800mm(~31.5") H x 800mm(~31.5") V
1.5m (~59.1")	1031mm(~40.6") H x 1031mm(~40.6") V
Typical output performance	
Distance = .5 meter	Illumination (Lux)
Distance = 1 meter	1700 lux
Distance = 1.5 meter	520 lux
Distance = 1.5 meter	160 lux
<i>Illumination measurement taken on White Lights – 5000K</i>	



1 meter measured pattern



Intensity to working distance

At a 1 meter working distance the projected 1 meter pattern is within 80% of its maximum intensity.



accessories



M12 Male Adapter
Part# LHF300-PKIT
available



M12 Female Adapter
Part# LHF300-E-PKIT
available



M12 Cover Adapter
Part# LHF300-EC
available



Swivel Mounting Bracket
Part# LHF-300-BKT
available



risk group

According to IEC 62471:2006. Full documentation upon request.

Notice

Exempt Group: No photobiological hazard to eyes or skin even for continuous, unrestricted use.
Applicable for wavelengths: WHI