PRODUCT DATA SHEET

LC300 Series | **LINEAR LIGHT** | Grey Series

product introduction

The LC300 Series of Linear Lights is a more basic version of the L300 Linear Light. It features an integrated constant current driver built into the light. It eliminates the need for any external components in the lighting system. LC300 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. Available in standard narrow, wide, and line optics.

product features

- 5 Pin M12 Quick Disconnect
- Driver built in – No External wiring to a driver
- PNP and NPN Strobe input
- Continuous operation or Strobe mode
- Twelve, 1mm² Die High Current LEDs

product specifications

Electrical Input	24 VDC +/- 5%
Current	Max. 700mA
Wattage	Max. 17W
Strobe Input	PNP ► +4VDC 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)
Yellow Indicator LED	LED Strobe Indicator ON = Light Active
Green Indicator LED	ON = Power
Continuous Mode	Light will be in continuous mode by leaving signal on strobe input active
Connection	5 pin M12 connector
Lifespan	100,000 hrs
Ambient Temp.	-20º - 50º C (-4º - 122º F)
IP Rating	IP50
Weight	~370g
Compliances	CE and RoHS
IEC 62471 Rating	See page 4

product number key

LC300 – XXX – X* —» Part Number Key

Product Family:
Linear Light
LC300

Color:
470, 530, 625, 850, & WHI

Lenses:
N - Narrow
W - Wide
L - Line

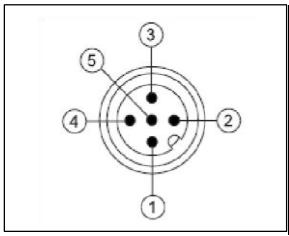
* Lights come standard with Narrow lenses

warnings

Attention

Please note that the power requirements are 700mA at 24VDC. Failure to supply light with 700mA will result in non-repeatable lighting. Contact Smart Vision Lights for more information.

wiring configuration

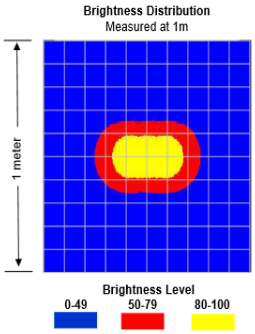


Function	Signal	Wire Color
1 – 24VDC	+24VDC	BROWN
2 – NPN	Sinking Signal	WHITE
3 – GND	Ground	BLUE
4 – PNP	Sourcing Signal	BLACK
5 – GREY (GREEN/YELLOW)	NOT USED	NOT USED

optical performance

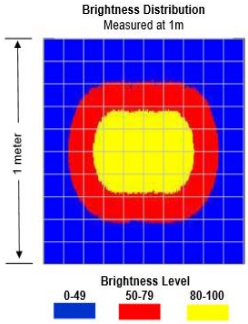
LC300-XXX

Working Distance mm (inches)	Pattern (80%-100% measured intensity) mm (Inches)
.5m (19.7")	210mm(~8") H x 100mm(~4") V
1m (39.4")	250mm(~10") H x 200mm(~8") V
1.5m (59")	310mm(~12") H x 300mm(~12") V
Typical output performance	Illumination (Lux)
Distance = .5 meter	14000
Illumination measurement taken on White Lights – 6500K	



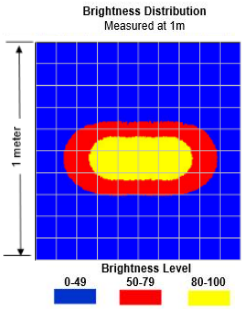
LC300-XXX-W

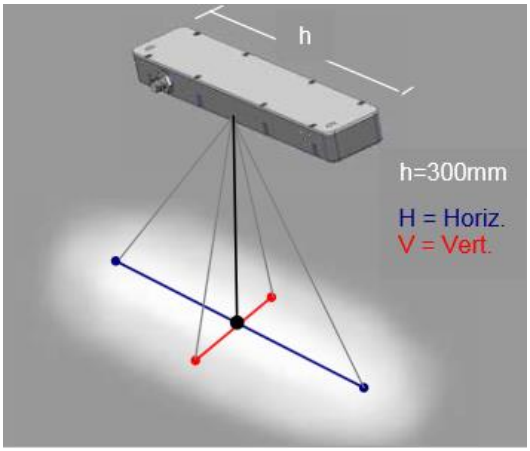
Working Distance mm (inches)	Pattern (80%-100% measured intensity) mm (Inches)
.5m (19.7")	220mm(~9") H x 160mm(~6") V
1m (39.4")	460mm(~18") H x 420mm(~16.5") V
1.5m (59")	570mm(~22") H x 550mm(~22") V
Typical output performance	Illumination (Lux)
Distance = .5 meter	6300
Illumination measurement taken on White Lights – 6500K	



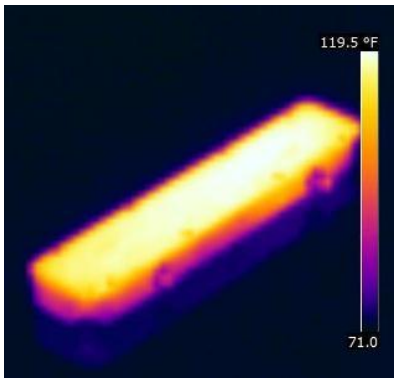
LC300-XXX-L

Working Distance mm (inches)	Pattern (80%-100% measured intensity) mm (Inches)
.5m (19.7")	260mm(~10") H x 100mm(~4") V
1m (39.4")	440mm(~17") H x 190mm(~7") V
1.5m (59")	660mm(~26") H x 300mm(12") V
Typical output performance	Illumination (Lux)
Distance = .5 meter	10000
Illumination measurement taken on White Lights – 6500K	





thermal analysis



LC300 series aluminum backplates designed to transfer heat away from high power LED's.

Additional heat sinking recommended in ambient air temperatures above 25˚C.

Thermal image taken after 2 hours of continuous ON operation at 25˚C.

mounting & accessories

Power Cables
5m, 10m, 15m

3-Axis Pan and Tilt Mount
PB300-M5

T-mount Rail Mount

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: 625 and 850.

Caution

Risk Group 1: Possibly hazardous optical radiation emitted from this product. Do not stare at operating lamp. May be harmful to eye. Safe for most applications except prolonged exposures.
Applicable for wavelengths: 470, 530, and WHI.