



## product introduction

The IS7000-L300 Light Module is specially designed for Cognex In-Sight 7000 series camera systems. It operates at 500mA of strobing current provided by the camera system with an intense and even light distribution pattern. Strobe and pulse duration are determined by the IS7000 software.



## product features



- Powered directly from IS7000 camera
- SafeStrobe Technology
- M12 Quick Disconnect
- Standard optics provide tight focused light
- Wide and Line lenses also available
- Twelve, 1mm<sup>2</sup> Die High Current LEDs



## product specifications

Connection	Direct Connect to IS7000 Camera using Camera-To-Light Jumper Cable
Electrical Input	Supplied by IS7000 Camera – 24VDC
Current	Max. 500mA average draw from IS7000
Wattage	Max. 12W
Green Indicator	ON = Power
Yellow Indicator	LED Strobe Indicator ON = Light Active
Lifespan	100,000 hrs
Ambient Temp.	-20° - 50° C (-4° - 122° F)
IP Rating	IP50
Weight	~365g
Compliances	CE and RoHS
IEC62471	See Page 3



## product number key

# IS7000-L300 – XXX – X\* —» Part Number Key

**Product Family:**  
Linear Light  
IS7000-L300

**Color:**  
470, 530,  
625, 850 &  
WHI (White)

**Lenses:**  
W - Wide  
L - Line

\* Lights come standard with Narrow lenses



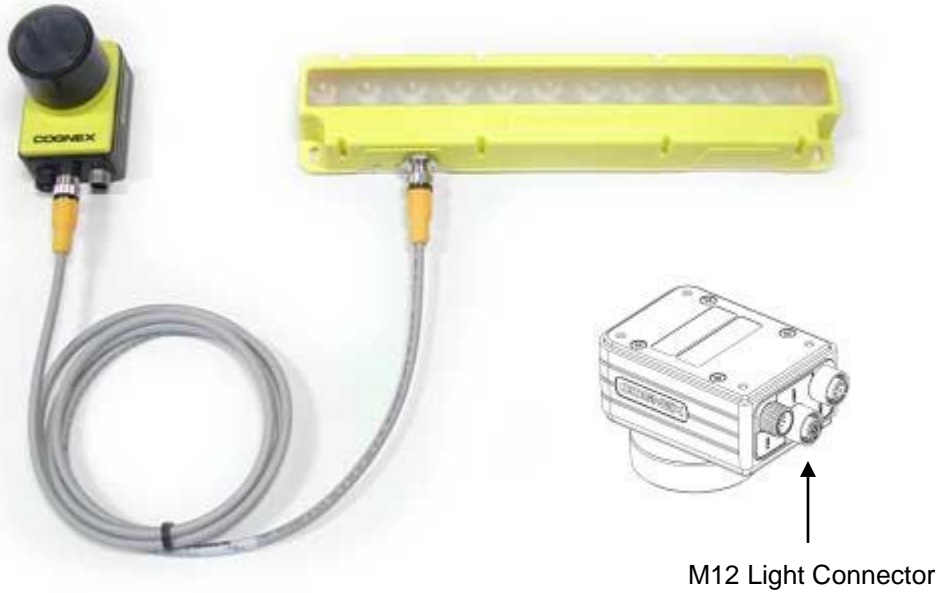
Direct Camera Connection to Light using M12 connection on IS7000 series

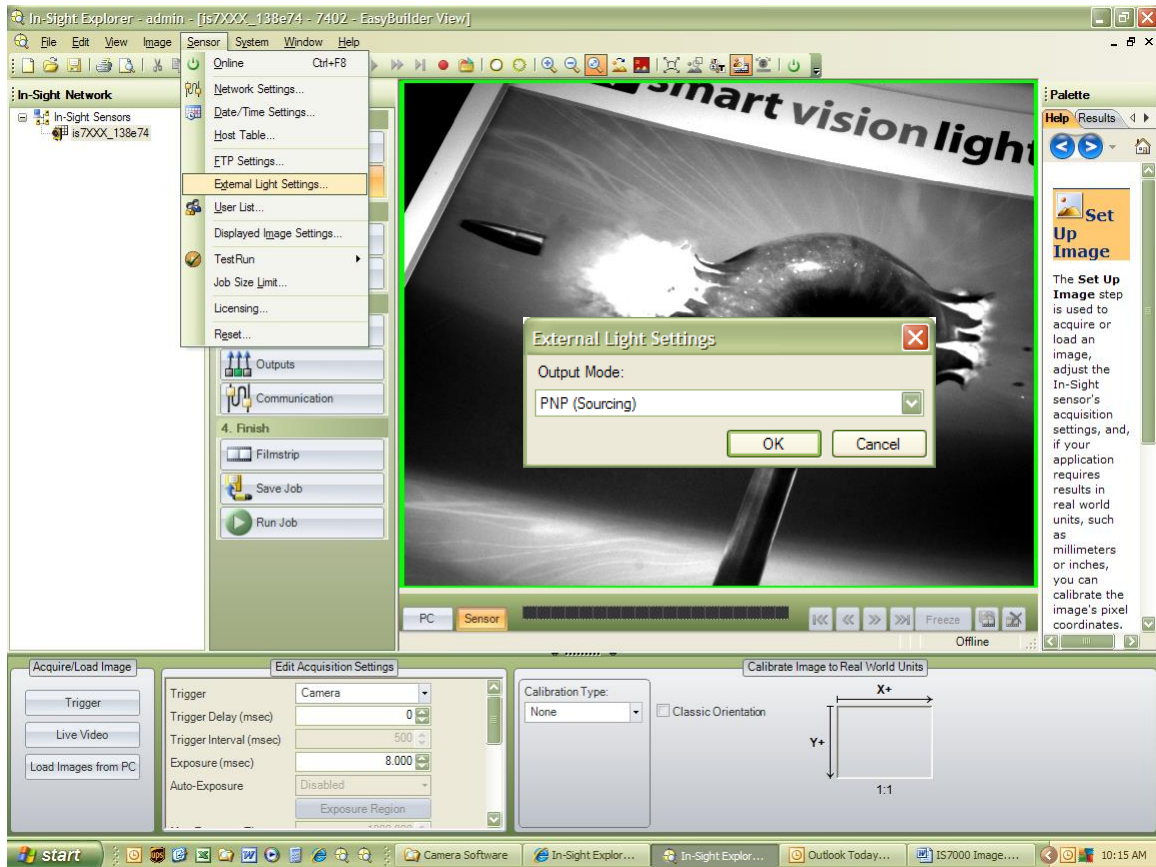
The Light cable is used to connect the IS7000 vision system to an external lighting device, providing power and strobe control.

**CAUTION**

Cognex cable CBL-M12LTF-0x must be used.

Cognex Cables Part Number	Length
CCB-M12LTF-00	0.5 meter
CCB-M12LTF-01	1 meter
CCB-M12LTF-02	2 meter
CCB-M12LTF-05	5 meter





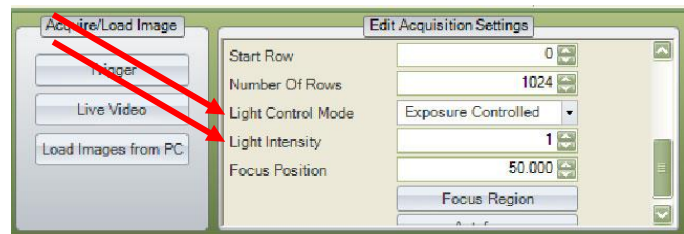
In-Sight SOFTWARE CONFIGURATION

- Under Sensor set External Light Settings....
- To PNP (Sourcing)
- No additional settings required (Discrete 0 does not need to be set under Discrete Output)

Light Settings under “Edit Acquisition Settings”

“Edit Acquisition Settings” operate Cognex Internal light.

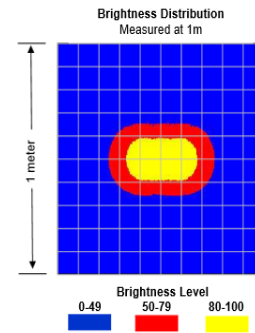
**Note: Settings are inactive when using only external lights.**





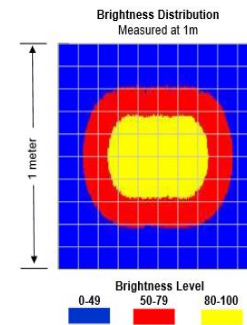
### IS7000-L300-XXX

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	
Distance = .5 meter	Illumination (Lux) 10000
<i>Illumination measurement taken on White Lights – 6500K</i>	



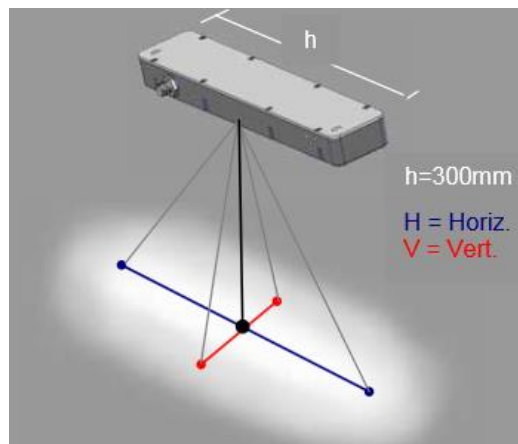
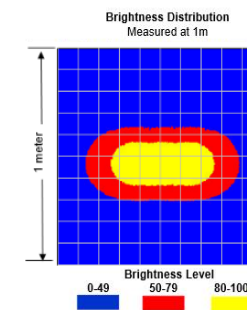
### IS7000-L300-XXX-W

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	
Distance = .5 meter	Illumination (Lux) 4200
<i>Illumination measurement taken on White Lights – 6500K</i>	



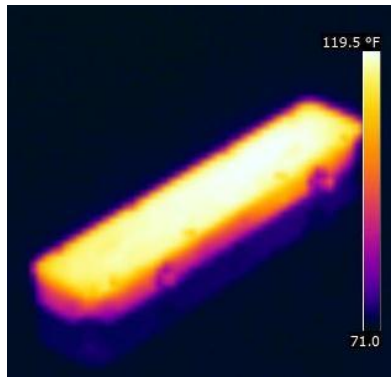
### IS7000-L300-XXX-L

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	
Distance = .5 meter	Illumination (Lux) 7000
<i>Illumination measurement taken on White Lights – 6500K</i>	





## thermal analysis



IS7000 series aluminum back plate is designed to transfer heat away from high power LED's.

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

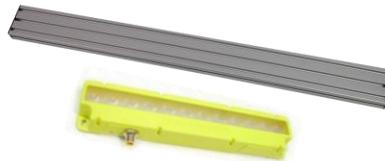
*Thermal image taken after 2 hours of continuous ON operation at 25°C.*



## mounting & accessories



3-Axis Pan and Tilt Mount  
(PB300-M5)



T-Slot Rail Mount



Camera-To-Light Jumper  
Cable (5PM12-J2000-CTL &  
5PM12-J300-CTL)



## risk group

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

### Notice

Exempt Group: No photo biological hazard to eyes or skin even for continuous, unrestricted use.  
Applicable for wavelengths: 625.

### 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: WHI.