

# EL300 LIGHT

## EL Series with Internal Driver

### ELECTRICAL:

Input Voltage: 23.5-26.4VDC (24VDC  $\pm$ 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: 15K $\Omega$  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).  
 Over-temperature LED: 65  $\pm$  5°C strobe disable / "Error" LED on; 5°C hyst. for strobe enable / "Error" LED off

Wiring:

Pin #	Wire Color	Function
1	Brown	+23.5 to +26.4VDC
2	White	NPN STROBE INPUT: GND for "ON", Open or >Vin-1V for "OFF"
3	Blue	0VDC (DC GND)
4	Black	PNP STROBE INPUT: < 1 VDC for "OFF", >3 $\leq$ 30 VDC for "ON"
5	Grey or Green/Yellow	0-10VDC analog intensity control – 0V = 100%, 10V = 0%



### ENVIRONMENTAL:

Operating Temperature: 0 to 50°C  
 Relative Humidity: 5 to 85% non-condensing

### MECHANICAL:

Lighted Area: 300mm  
 Connector: M12 - 5 pin  
 Weight: 12.8 oz (363g)



### ILLUMINATION:

Light Source: LED – available in 4 Colors and IR  
 Quantity HB LED's: 10  
 LED Lens: 16° FWHM Standard  
 23° FWHM Optional  
 39° FWHM Optional  
 44x15° FWHM Line Optional  
 LED Life: up to 50,000 hours\*.

\*Contact us for LED life information

### FEATURES:

- Built-in Driver
- Aluminum Single Interface Housing
- Auto Burst – LED high current for 500 $\mu$ s  $\pm$ 10%, then drops to standard current
- Auto Burst Disable Switch
- 0-10VDC Intensity Control
- Potentiometer Intensity Control
- PWM Dimming Capable (with Auto Burst disabled)
- Internal Thermal Protection
- Robot Friendly Weight – 12.8 oz (363g)

### PART NUMBER DESIGNATION: EL300-XXX

XXX = Light Color - 470, 530, 630, 850, WHI

Color	Dash #	$\lambda$ Dominant Typical	$\lambda$ Dominant Range	Spectral Half-width $\Delta\lambda_{1/2}$	$\lambda$ Peak Typical	Units	Typical mW per LED
Blue	-470	465	455 - 475	21	453	nm	420
Green	-530	530	525 - 535	39	518	nm	175
Red	-630	625	618 - 630	17	632	nm	200
Infrared	-850	850	n/a	30	860	nm	190
Pure White	-WHI	Color Temp 5700 - 7000K CRI 70 typ					360

Other colors available on request

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