

ES40 LIGHT

ES Series with Internal Driver

ELECTRICAL:

Input Voltage: 12 to 26.4VDC
 Input Current: 80mA typical (320mA max for burst) @24VDC
 120mA typical (620mA max for burst) @12VDC
Note: Power supply must be capable of 320mA per light for burst feature to work correctly.
 Strobe Input Impedance: 10KΩ – PNP typical, 9.1KΩ – NPN typical
 Strobe Timing: <20 microseconds from strobe to LED on
 0-10V Input Impedance: 15KΩ 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 ± 5°C strobe disable / "Error" LED on; 5°C hyst. for strobe enable / "Error" LED off

Wiring:

Pin #	Wire Color	Function
1	Brown	+12 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 ≤30 VDC for "ON"
5	Grey or Green/Yellow	0-10VDC analog intensity control – 0V = 100%, 10V = 0%



ENVIRONMENTAL:

Operating Temperature: 0 to 40°C
 Relative Humidity: 5 to 85% non-condensing

MECHANICAL:

Lighted Area: 40mm
 Connector: M12 - 5 pin
 Weight: 3.88 oz (110g)

ILLUMINATION:

Light Source: LED – available in 4 Colors and IR
 Quantity HB LED's: 1
 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



Additional stickers to cover Switch / Potentiometer holes

FEATURES:

- Built-in Driver
- Aluminum Single Interface Housing
- Auto Burst – LED high current for 500µs ±10% (burst pulse width repeatability ±1% same light), 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 – 3.88 oz (110g)

PART NUMBER DESIGNATION: ES40-XXX

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

Color	Dash #	λ Dominant Typical	λ Dominant Range	Spectral Half-width Δλ½	λ 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