

eStrobeMaster ILLUMINATION CONTROLLER

Opteon's eStrobeMaster is a snap-in, solid-state illumination controller which may be directly operated from any host computer in a network via Ethernet as part of a multi-camera work-cell cluster.

By precisely controlling current to the LED's, illumination levels are repeatable to a tenth of a gray scale level and LEDs can safely be driven to 5-50 times steady state current levels. The eStrobeMaster exceeds industrial and laboratory requirements for high output and short pulse width control of LED illuminators. Light levels can be maintained to closer than a single grayscale from shot to shot.

Features:

- Models available with any combination of 1, 2, 4 or 8 amp drive capability on each adjacent pair of light channels.
- Each pair of light channels can use a dedicated voltage source or supply power to LEDs from an IEEE 802.3af/at compliant Ethernet switch or MidSpan.
- Each of 8 Opto-Isolated I/O points can be remotely, independently configured as an input or an output.
- Current levels and pulse widths are easily controlled through software commands from any computer in a network.
- 12 LED channels can be used in any combination by using input triggers from I/O points or responding to triggers over the Ethernet. Multiple channels can be assigned to a single strobe input for high LED count or high output illuminators.
- PLC programs run on the eStrobeMaster with 1 microsecond latency
- Strobe output pulse width control 0 - 16.7 sec in 1μsec increments



Product Highlights

- 12 independent channels precisely control current to LED lighting systems
- Trigger LED channels and cameras over Ethernet or from opto-isolated inputs
- Automatic LED protection for over-current and excessive duty cycle via autonomous, full time individual monitoring of the energy supplied to and dissipated from each connected light
- Small, compact design
- IEEE 802.3af/at Power-over-Ethernet compatible
- 8 opto-isolated Bidirectional Inputs/Outputs
- Internal Programmable Logic Controller with 1 uS Scan time

Environmental Specifications

| | |
|---------------------------------|--------------|
| Acceleration | 15 G |
| Shock | 70 G |
| Thermal operating range (Case) | -30 to 50 °C |
| Thermal storage range (Ambient) | -60 to 85 °C |
| Humidity | 0 - 95% NC |
| Weight | 400 gm |

Interfaces

| | |
|---|-----------|
| Ethernet | |
| (Automatic PoE Negotiation, Local Voltage Priority) | 1000BaseT |
| BiDirectional, Opto-Isolated Digital I/O Channels | 8 |
| Input Response | 10 Mhz |
| Input Voltage, Minimum - Maximum | 5-30VDC |
| Output Response | 50 KHz |
| Output Response (with High Speed Option) | 10 Mhz |
| Output Load, maximum | 40VDC |
| Output current, sinking, maximum | 75mAmp |
| Integrated Programmable Logic Controller, 1 uS Scan | 0 or 1 |
| LED Light Control Channels | 12 |
| Independently Programmable | |
| 0 - 8 Amps from 8 to 50 VDC Light Voltage, 8 bit resolution | |
| Available in versions that can drive lights from 8 to 75 VDC Light Voltage | |

Physical Dimensions

