FLIGHT LIGHT INC.

Heliport System Controller

Application

Flight Light's heliport system controller is designed to provide complete control of heliport lighting systems. Lighting control can be provided by low voltage DC or AC control signals. The controller activates the output by internal on/off switch, or with optional external on/off switch, photocell, or programmable timer. The system is fully protected from input transients, output overload, over-voltage, and over-temperature conditions. The watertight NEMA 4 compliant enclosure and lock provides protection from adverse weather and security from unauthorized access.

Heliport System Controller Benefits

- Lower Maintenance Costs
 - Fully integrated control and power distribution system simplifies system setup and maintenance.
- Flexibility
 - Ability to control the system operation by various means: on/ off switch, photocell, and timer.
 - Lights can be dimmed at night to reduce glare.

Features

- Low voltage DC or AC output control.
- Solar power option available.
- Dimming option available for DC output brightness control selector allows lights to be dimmed at night to reduce glare.
- Simple operation: internal on/off power switch.
- DC output power options: extend output power capability from 150W (standard) to 300W.



- AC output power: breaker size 20A; 2400W max for 120V and breaker size 10A; 2400W max for 240V; 5540W max for 277V. System recommended to be used at 80% capacity.
- Wide operating temperature range: -10°C to + 55°C.
- Input transient protection.
- Output overload and over-voltage protection.
- Superior Surge Suppression supplied with a 70kA 8/20uS surge current rating which complies with UL1449 (US & Canada), IEC 61643-1 and CSA C22.2 No. 8-M1986. A Visual Fault Indicator provides feedback to the user when a surge is detected. The Surge Suppressor used includes a thermal disconnect compliant to UL-60691.
- Circuit Breakers have 10kA short circuit withstanding capacity and are compliant with UL508 and C22.2 No. 14.
- Over-temperature shut-down protection.
- ANSI 61 Gray powder coat.
- Weatherproof NEMA 4 enclosure with security lock.

Ordering Codes

Model	Input Power	Output Power	Activation Options	Features	Output Power Options
HL-HSC	AC1: AC (120V, 60HZ) AC2: AC (240V, 60HZ) AC3: AC (220V, 50HZ) DC1: DC (12V) DC2: DC (24V) DC4: DC (48V) SP: DC Input from 24V Solar Array	AC: AC DC1: DC (12V) DC2: DC (24V) DC4: DC (48V)	P: FAA style photocell T: Programmable timer	D: Dimming (DC out- put only) ¹	AUX: Auxiliary AC output (120-240V), dry contact H: Extends output power capability from 150 to 300W (DC output only)
	AC4: AC (277V, 60HZ)	AC4: AC (277V), 20A ² AC5: AC (120V), 150W ² DC5: DC (12V), 120W ²	P: FAA style photocell	D: Dimming (DC output only) ¹	AUX: Auxiliary AC output (120-240V), dry contact

¹ Dimming Control for use with Low Voltage Dimming LED Flight Light Fixtures only. 2 For 277V power input, choose one, two or all output power options.

System Components

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SL-PANEL65-HPM	Solar Panel 65W			
SL-PANEL90-HPM	Solar Panel 90W			
SL-PANEL130-SPM	Solar Panel 130W			

SL-PANEL140-SPM	Solar Panel 140W
SL-8G24	Solar Gel Battery 73.6AH@20h
SL-8G31	Solar Gel Battery 97.6AH@20h

The system components used in the solar power supply (solar panel, battery, pole kit, etc.) are specified in the sizing report/quote. Please contact Flight Light to discuss any modifications or additions to the controller system.





Heliport System Controller Options

Photocell Option

Use of a photocell is recommended for dusk-to-dawn control of operations of non-solar-powered systems. The DC photocell activates at 35 ft-cd and turns off at 58 ft-cd, and has a minimum rated life of 5,000 operations. Photocell is supplied in a UL stabilized high-impact polypropylene housing which contains the cadmium sulfide light sensitive element. Surge protection is provided by a metal oxide varistor rated at 320 joule. Operating temperature range of -40°F to 170°F. Measures 3.07" diameter by 2.15" high.

Programmable Timer Option

The programmable timer option is recommended for precise control of operating times. The programmable timer is a 12 hour, 8 event clock based timer. Multiple on/off times may be programmed into the timer. Each day can be programmed with its own unique timing pattern. An internal battery is capable of maintaining the clock and program memory for up to 3 months without external power.

Dimming Option

With the dimming option, the lights can be dimmed at night to reduce glare. Three brightness levels can be selected. This option is available only with Low Voltage Dimming LED Flight Light Fixtures.

Output Power Options

The standard DC output model supplies up to 150 watts of power and is capable of controlling most small heliport lighting systems. For larger heliports, the power option may be added, extending the output power capability to 300 watts. The standard 120V AC output model has a 20A breaker. 277V AC output model has a 20A breaker, 5540W maximum.

Solar Power Option

The solar power option equips the system to run with free, renewable energy from the sun. Unprecedented in the industry, this green feature is the ideal long-term investment. Ongoing savings afforded by utilizing solar energy are calculated over the lifetime of the installation. The maximum output power is 300 watts. Location of the helipad and the estimated activation time need to be determined before requesting quote.

