

Power Switching

DESIGN GUIDE



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System Overview

Crestron® Green Light® Power Switching (GLPS) is a family of switching systems designed for control of lighting in office buildings, warehouses, parking garages, sports facilities, public spaces, and anywhere centralized switching is required. With a range of panel sizes and configurations available, every system is fully scalable to fit each installation perfectly. An extensive selection of Crestron keypads, touch screens, occupancy sensors, photocells, shade controllers, and numerous other peripheral options afford astounding design flexibility with unparalleled capability for integration. GLPS is simple to install and easy to program. Native features include an astronomical time clock to allow scheduling of events to occur around the rise and fall of the sun. Other powerful, energy saving capabilities include occupancy sensing to turn off lights when they are not needed, daylight harvesting to harness natural light from windows and skylights, and emergency override to assure safe and reliable lighting of critical areas in the event of a power outage or emergency condition.

- Scalable and field-serviceable modular design
- Switching control for all types of lighting loads and motors up to 2 hp
- All outputs rated at 16 A @ 120 volts and 277 volts (347 volts also available)
- Local front panel relay controls
- 3 high-performance relay types available
- UL 508 Section 61C rated for electronic ballast
- Available 0-10 volts fluorescent dimming control
- Positive air gap at each output
- Feed-through, main lug only, main circuit breaker options
- CEC Title 24 listed
- Astronomical time clock
- Occupancy sensing and daylight harvesting
- Emergency override capability
- Easy programming via the IPAC-GL1 lighting processor
- Extensively programmable via PC software
- Wide selection of interface and computer control options
- Optional shade and drape controllers
- Crestron RoomView® remote management
- Integration into building management systems
- System design by Crestron
- Factory assembled and tested

System Features

Crestron GLEP Series power switching panels feature field-replaceable switching modules with a choice of relay technologies to address a wider range of applications and budgets.

Crestron's top of the line GLPS-HSW panels employ a robust 50 amp mechanically-latching relays in combination with advanced zero-cross arcless technology to achieve a relay lifetime of one million cycles. For a higher density switching solution, GLPS-SW panels utilize the same rugged 50 amp relays while putting more controlled circuits in less space. Either panel supports both 120 and 277 voltages and includes main lugs and integrated branch circuit breakers.

For installations using a separate circuit breaker panel, Crestron offers the Green Light Express series of feed-through panels. Like their main lug panel counterparts, the GLPS-HSW-FT and GLPS-SW-FT panels feature zero-cross arcless switching and standard high-inrush switching respectively. Green Light Express also offers one more relay option in the GLPS-HDSW-FT, utilizing heavy duty modular relays for an extra level of flexibility switching 120, 277 and 347 volts loads.

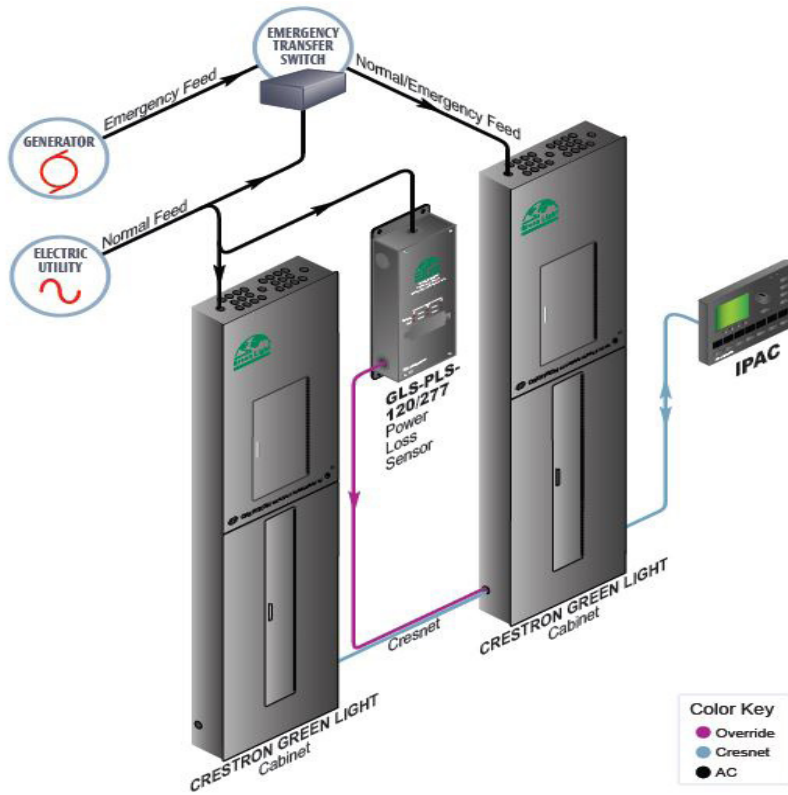
In addition to switching, some Green Light Power Switching panels also allow the option to add dimming control for 0-10 volts dimmable fluorescent ballasts. The IPAC-GL1 Control Processor is an innovative microprocessor-based control system for lighting and automation.

Accessed from the front panel, an entire system of lighting loads, keypads, touch screens, sensors, and scheduled events can be programmed without ever having to connect a computer. Featuring the same 2-Series control engine as other Crestron processors, the IPAC-GL1 allows advanced programming to support all kinds of control options and interfaces, custom functionality, and extensive integration with third-party systems. Crestron processors also deliver the most comprehensive capabilities available for remote control and management over an IP network.

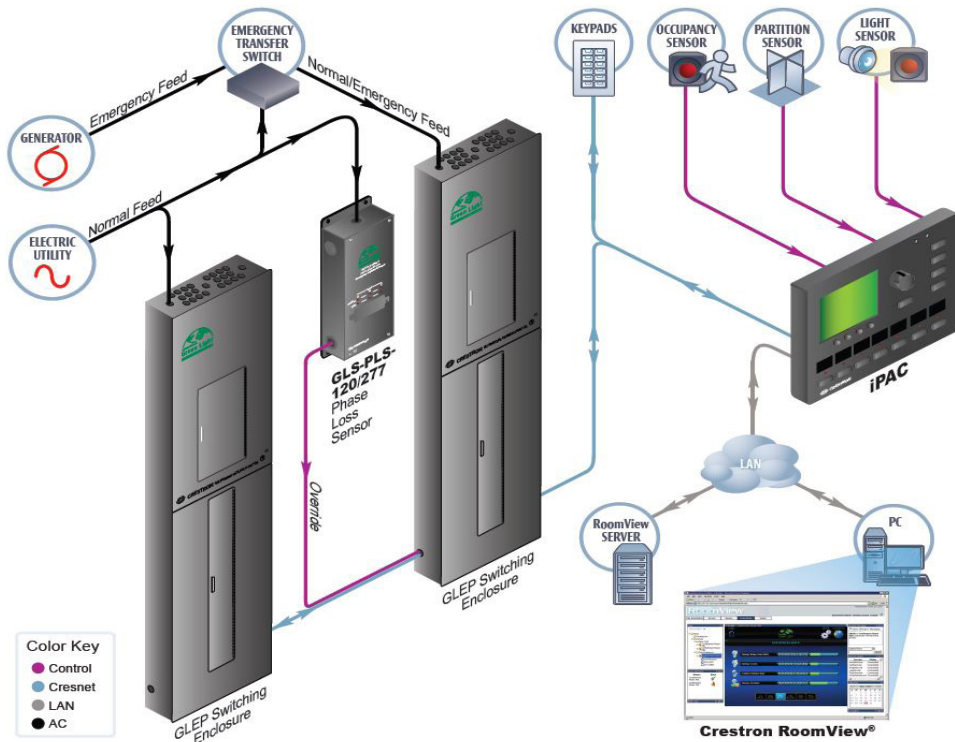
- Crestron Green Light simplifies installation by providing local controls right on the front of each switching module. Even before the lighting processor gets installed, these simple controls can be used to switch each load on and off for testing and operation during construction.
- Remote emergency override capability allows a power loss sensor (GLS-PLS-120/277) or any external contact closure to override the lighting system program and set each circuit to its override preset state. In a power failure situation using a backup power source, this allows designated emergency lighting circuits to be turned on immediately.
- Override settings can be made easily using the local controls on the front of each switching module. Each Green Light Power Switching panel communicates with the IPAC-GL1, or other Crestron 2-Series processor, via the Cresnet® control network.
- This simple 4-wire bus affords proven reliable digital control and flexible system configuration, carrying data communications and 24 Vdc power to support a complete system of lighting panels, keypads, touch screens, sensors, and numerous other Cresnet devices while connected to an IPAC-GL1 Integrated Professional Automation Computer.



GLS-PLS-120/277 - Typical Connections



GLS-PLS-120/277 - Phase Loss Sensor Application



Selection Guide

Green Light Power Switching panels are available in five basic configurations. Use to the following cross-reference table to begin specifying the configuration that fits the application. The table below represents the full line of Green Light and Green Light Express Power Switching panels, as well as Green Light and Green Light Express Architectural Dimming panels.

Crestron Green Light Panel Comparison Chart

	GREEN LIGHT			GREEN LIGHT EXPRESS				
	Power Switching		Architectural Dimming	Power Switching			Architectural Dimming	
	GLPS-HSW	GLPS-SW	GLPD-DIM	GLPS-HSW-FT	GLPS-SW-FT	GLPS-HDSW-FT	GLPD-DIM-FT	GLPD-DIMX-FT
Switching Relay Types								
Arcless High-inrush	•		•	•			•	
Standard high-inrush		•			•			
Modular high-inrush						•		
2-pole available						•		
Dimming Load Types								
Incandescent, MLV			•				•	•
ELV			•				•	•
2-wire fluorescent			•				•	•
3-wire fluorescent			•				•	•
0-10V fluorescent	•	•	•				•	•
Ratings								
Voltages	120/230/277	120/230/277	120/230/277	120/230/277	120/230/277	120/230/277/347	120/230/277	120/230/277
Output capacity lighting loads	16A	16A	16A ⁴	16A	16A	20A	16A ⁴	8A
Output capacity, motor loads@ 120/230/277 volts	0.5/1/1 hp	1/2/2 hp	0.5/1/1 hp	0.5/1/1 hp	1/2/2 hp	0.5/1.5/1.5 hp	0.5/1/1 hp	
Rated relay lifetime ⁵	1,000,000	10,000	1,000,000	1,000,000	10,000	30,000	1,000,000	
Circuit Breakers								
Integrated branch breakers	•	•	•					
Available main breaker	•	•	•					
Additional Features								
Load state indicators	•	•	•	•	•	•	•	•
Local override	•	•	•	•	•	•	•	•
Emergency override	•	•	•	•	•	•	•	•
Mechanical override						•		
Local control access door option	•	•						
Backup power supply capable	•	•	•	•			•	

Notes:

1. Supported via use of appropriate CLS-EXP expansion module.
2. 3-wire fluorescent loads require 2 control outputs per load.
3. Consult detailed specifications for ratings for ELV loads.
4. Relay lifetime based on number of cycles (on/off) with full electronic ballast load.



GLPS-HSW: Power Switching Panels

Main Lug Only (MLO) and Main Circuit Breaker (MCB) Zero-Cross Arcless Relays

The GLPS-HSW Power Switching panels come standard with 20 A branch circuit breakers, and accept 208Y/120 or 480Y/277 volt feeds terminating to the main lugs provided. An optional back-fed main circuit breaker may also be specified. The panels are available in a range of sizes and configurations.

The panel size is ordinarily determined according to the number of control circuits specified, ranging from 8 to 42 circuits per panel. Each control circuit is rated for 16 A at 100-277 volts. The GLPS-HSW panels utilize Crestron zero-cross arcless relay technology, achieving a relay lifetime of one million cycles. A high-current triac is employed to handle the high-inrush current turn on, especially with certain load types such as HID and electronic ballasts. Within milliseconds, the continuous load is transferred to a robust 50 A mechanically-latching relay. All switching occurs at the zero-cross point of the ac waveform under microprocessor control.

This is a complete solution eliminating arcing at the physical relay contacts during turn on and turn off, and supports switching of all types of lighting loads up to 16 A at 100-277 volts, as well as motors up to 1 hp. As an option, GLPS-HSW panels may be equipped with 0-10 volts fluorescent dimming control substituted in place of some or all switching circuits. The GLPS-HSW panels employ field-replaceable lighting control modules, with 8 or 12 control circuits per module.

Each module includes local relay controls and load state indicators for each circuit, plus additional controls and indicators for use during system commissioning. Individual hinged doors are provided on the front of each GLPS-HSW panel for access to the circuit breaker panelboard and the local controls on each module. As an option, the local control access door may be omitted.

As part of a complete Crestron Green Light system, GLPS-HSW panels connect to an IPAC-GL1 lighting control processor (or other 2-Series control system) via the Cresnet control network. An optional GLA-PWS50 (or equivalent) power supply is also recommended for each panel to provide backup power to the lighting modules.

Remote Emergency Override mode allows the lighting system program to be overridden while each circuit is set to an override preset state. The override preset for each circuit is set using the local controls on the front of each lighting module. This mode is activated by an external contact closure from a Crestron GLS-PLS-120/277 power loss sensor or other device.

All low-voltage connections to a GLPS-HSW panel are made via a connector block located near the bottom of the panel. Connections are provided for Cresnet communications, backup power supply, and emergency override. Crestron Green Light Power Switching panels are configured to order, factory assembled, and tested prior to shipping. Each panel is engineered to provide a clean and manageable installation with provisions for wire termination and conduit knockouts. On-site installation is fast and easy with all termination points clearly labeled and accessible from the front.

Refer to the GLPS product page on the [Crestron website](#) for more information.

Specifying and Ordering a GLPS-HSW Panel

When specifying and ordering a Crestron Green Light Power Switching panel follow the model number system shown in the example below.

GLPS-HSW-MLO-30-120-10K-ND

GLPS-Relay Type-Feed Type-Number of Ckts-Vac Rating-Door Option

NOTE: The example above is for a "main lug only" panel with 30 "HSW" zero-cross arcless relays, 120 V / 10 kAIC circuit breakers, and no local control access door.

Fill in the appropriate entry in each position according to the steps below:

1. **Relay Type:** Enter "HSW" to specify zero-cross arcless switching relays.

NOTE: For other relay types, refer to the Selection Guide 0-10 volts fluorescent dimming. Consult Crestron Sales Support Services to specify this option.

2. **Feed Type:** Choose one of the following to specify the type of feed.

MLO	Main Lug Only
MCB60	160 A back-fed main circuit breaker
MCB80	80 A back-fed main circuit breaker
MCB100	100 A back-fed main circuit breaker
MCB125	125 A back-fed main circuit breaker (available for 277 volts only)

NOTE: Main feeds are 3-phase, 4-wire; rated 225 A @ 120/208 volts or 250 A @ 277/480 volts. Consult Crestron Sales Support Services for 400 A feed and other main circuit breaker option.

3. **Number of Circuits:** Choose one of the following numeric values from the appropriate column to specify the number of controlled circuits in the panel.

	GLPS-HSW-MLO	GLPS-HSW-MCB
Small	8, 12	8, 12
Medium	16, 20, 24, 28, 30	16, 20, 24, 27, 30
Large	32	32
Extra Large	36, 40, 42	36, 39

NOTE: Small, Medium, Large, and Extra Large refer to the default panel size per number of circuits. Consult Crestron Sales Support Services for alternate configurations.

4. **Voltage:** To specify the circuit breaker voltage, enter "120" for 120/208 volts or "277" for 277/480 volts.
5. **AIC Rating:** Choose one of the following values from the appropriate column to specify the Ampere Interrupting Capacity (AIC) of the circuit breakers.

120 Volts	277 Volts
10 kAIC	18 kAIC
22 kAIC	35 kAIC
65 kAIC	65 kAIC

NOTE: Consult Crestron Sales Support Services MCB options.

6. **Door Option:** Enter "ND" to omit the local control access door. The circuit breaker door cannot be omitted.

GLPS-SW: Power Switching Panels

Main Lug Only (MLO) and Main Circuit Breaker (MCB) with Standard High-Inrush Relays

The GLPS-SW Power Switching panels come standard with 20 A branch circuit breakers, and accept 208Y/120 or 480Y/277 volt feeds terminating to main lugs provided. An optional back-fed main circuit breaker may also be specified.

The panels are available in a range of sizes and configurations. The panel size is ordinarily determined according to the number of control circuits specified, ranging from 8 to 42 circuits per panel. Each control circuit is rated for 16 A at 100-277 volts. The GLPS-SW-FT panels utilize robust 50 A relays to handle all types of lighting loads including electronic ballasts, as well as motors up to 2 hp. As an option, GLPS-SW panels may be equipped with 0-10 volts fluorescent dimming control substituted in place of some or all switching circuits. Consult Crestron Sales Support Services to specify this option.

The GLPS-SW panels employ field-replaceable lighting control modules, with 10 or 16 control circuits per module, for excellent configurability and service-ability. Each module includes local relay controls and load state indicators for each circuit, plus additional controls and indicators for use during system commissioning. Individual hinged doors are provided on the front of each GLPS-SW panel for access to the circuit breaker panelboard and the local controls on each module. As an option, the local control access door may be omitted.

As part of a complete Crestron Green Light system, GLPS-SW panels connect to an IPAC-GL1 lighting control processor (or other 2- Series control system) via the Cresnet control network. An optional GLA-PWS50 (or equivalent) power supply is also recommended for each panel to provide backup power to the lighting modules.

Remote Emergency Override mode allows the lighting system program to be overridden while each circuit is set to an override preset state. The override preset for each circuit is set using the local controls on the front of each lighting module. This mode is activated by an external contact closure from a Crestron GLS-PLS-120/277 power loss sensor or other devices.

All low-voltage connections to a GLPS-SW panel are made via a connector block located near the bottom of the panel. Connections are provided for Cresnet communications, backup power supply, and emergency override. Crestron Green Light Power Switching panels are configured to order, factory assembled, and tested prior to shipping. Each panel is engineered to provide a clean and manageable installation with abundant provisions for wire termination and conduit knockouts. On-site installation is fast and easy with all termination points clearly labeled and accessible from the front.

Refer to the GLPS product page on the [Crestron website](#) for more information.

Specifying and Ordering a GLPS-SW Panel

When specifying and ordering a Crestron Green Light Power Switching panel follow the model number system shown in the example below.

GLPS-SW-MLO-30-120-10K-ND
 GLPS-Relay Type-Feed Type-Number of Ckts-Voltage-AIC Rating-Door Option

NOTE: The example above is for a main lug only panel with 30 SW standard high-inrush relays, 120 volts / 10 kAIC circuit breakers, and no local control access door.

Fill in the appropriate entry in each position according to the steps below:

1. **Relay Type:** Enter “SW” to specify standard high-inrush switching relays.

NOTE: For other relay types, refer to the Selection Guide 0-10 volts fluorescent dimming is also available. Consult Crestron Sales Support Services to specify this option.

2. **Feed Type:** Choose one of the following to specify the type of feed.

MLO	Main Lug Only
MCB60	60 A back-fed main circuit breaker
MCB80	80 A back-fed main circuit breaker
MCB100	100 A back-fed main circuit breaker
MCB125	125 A back-fed main circuit breaker (available for 277 volts only)

NOTE: Main feeds are 3-phase, 4-wire; rated 225 A @ 120/208 volts or 250 A @ 277/480 volts. Consult Crestron Sales Support Services for 400 A feed and other main circuit breaker options.

3. **Number of Circuits:** Choose one of the following numeric values from the appropriate column to specify the number of controlled circuits in the panel.

Panel Size	GLPS-SW-MLO	GLPS-SW-MCB
Small	10, 16	10, 15
Medium	20, 26, 30	20, 26, 27
Large	32, 26, 40, 42	32, 36, 39

NOTE: Small, Medium, and Large refer to the default panel size per number of circuits. Consult Crestron Sales Support Services for alternate configurations.

4. **AIC Rating:** Choose one of the following values from the appropriate column to specify the Ampere Interrupting Capacity (AIC) of the circuit breakers.

120 Volts	277 Volts
10 kAIC	18 kAIC
22 kAIC	35 kAIC
65 kAIC	65 kAIC

NOTE: Consult Crestron Sales Support Services MCB options.

5. **Door Option:** Enter “ND” to omit the local control access door. The circuit breaker door cannot be omitted.

GLPS-HSW-FT: Express Feed-Through

Power Switching Panels with Zero-Cross Arcless Relays

The GLPS-HSW-FT panels utilize Crestron zero-cross arcless relay technology, achieving a relay lifetime of one million cycles. A high-current triac is employed to handle the high inrush current turn on, especially with certain load types such as HID and electronic ballasts. Within milliseconds, the continuous load is transferred to a robust 50 A mechanically-latching relay. All switching occurs at the zero-cross point of the ac waveform under microprocessor control. This is a complete solution, eliminating arcing at the physical relay contacts during turn on and turn off, and supports switching of all types of lighting loads up to 16 A at 100 to 277 volt, as well as motors up to 1 hp.

GLPS-HSW-FT panels may be equipped with an optional 0-10 volt fluorescent dimming control substituted in place of some or all switching circuits. Consult Crestron Sales Support Services to specify this option. The panels employ field-replaceable lighting control modules, with 8 or 12 control circuits per module, for excellent configurability and serviceability. Each module includes local relay controls and load state indicators for each circuit, plus additional controls and indicators for use during system commissioning.

As part of a complete Crestron Green Light system, GLPS-HSW-FT panels connect to an IPAC-GL1 lighting control processor (or other 2-Series Control System) via the Cresnet control network. An optional GLA-PWS50 (or equivalent) power supply is also recommended for each panel to provide backup power to the lighting modules.

Remote Emergency Override mode allows the lighting system program to be overridden while each circuit is set to an override preset state. The override preset for each circuit is set using the local controls on the front of each lighting module. This mode is activated by an external contact closure from a Crestron GLS-PLS-120/277 power loss sensor or other devices. All low-voltage connections to a GLPS-HSW-FT panel are made via a connector block located near the bottom of the panel. Connections are provided for Cresnet communications, backup power supply, and emergency override.

Crestron Green Light Express Power Switching panels are configured to order, factory assembled, and tested prior to shipping. Each panel is engineered to provide a clean and manageable installation with abundant provisions for wire termination and conduit knockouts. On-site installation is fast and easy with all termination points clearly labeled and accessible from the front.

Refer to the GLPS product page on the [Crestron website](#) for more information.

Specifying and Ordering a GLPS-HSW-FT Panel

When specifying and ordering a Crestron Green Light Express Power Switching panel follow the model number system shown in the example below.

GLPS-HSW-FT-32
GLPS-Relay Type-Feed Type-Number of Ckts

NOTE: The example above is for a feed-through panel with 32 HSW zero-cross arcless relays.

Fill in the appropriate entry in each position according to the steps below:

- Relay Type:** Enter “HSW” to specify zero-cross arcless switching relays.
NOTE: For other relay types, refer to the Selection Guide 0-10 volts fluorescent dimming is also available. Consult Crestron Sales Support Services to specify this option.
- Feed Type:** Enter “FT” to specify feed-through.
NOTE: For other feed types, refer to the "[Selection Guide](#)" on page 4.
- Number of Circuits:** Choose one of the following numeric values to specify the number of controlled circuits in the panel.
Small: 8, 12, 16
Large: 20, 24, 28, 32
NOTE: Small and Large refer to the default panel size per number of circuits. Consult Crestron Sales Support Services for alternate configurations.

GLPS-SW-FT: Express Feed-Through

Power Switching Panels with Standard High-Inrush Relays

The GLPS-SW-FT Power Switching Panels are designed for use with a separate circuit breaker panel. Two feed-through panel sizes are available, configurable with as few as 8, or as many as 56 control circuits per panel. Each control circuit is rated for 16 A at 100-277 volts. Panels may be deployed with a mix of 120 volts and 277 volts circuits within a single cabinet. The GLPS-SW-FT panels utilize robust 50 A relays to handle all types of lighting loads including electronic ballasts, as well as motors up to 2 hp. The panels employ field-replaceable lighting control modules, with 8 control circuits per module, for excellent configurability and serviceability. Each module includes local relay controls and load state indicators for each circuit.

As part of a complete Crestron Green Light system, GLPS-SW-FT panels connect to an IPAC-GL1 lighting control processor (or other 2-Series control system) via the Cresnet control network. A GLA-PWS50 (or equivalent) power supply is also required for each panel to provide operating power to the lighting modules.

Remote Emergency Override mode allows the lighting system program to be overridden while each circuit is set to an override preset state. The override preset for each circuit is set using the local controls on the front of each lighting module. This mode is activated by an external contact closure from a Crestron GLS-PLS-120/277 power loss sensor or other devices. All low-voltage connections to a GLPS-SW-FT panel are made via a connector block located near the bottom of the panel. Connections are provided for Cresnet communications, power supply, and emergency override.

Crestron Green Light Express Power Switching panels are configured to order, and factory assembled and tested prior to shipping. Each panel is engineered to provide a clean and manageable installation with abundant provisions for wire termination and conduit knockouts. On-site installation is fast and easy with all termination points clearly labeled and accessible from the front. Refer to the GLPS product page on the [Crestron website](#) for more information.

Specifying and Ordering a GLPS-SW-FT Panel

When specifying and ordering a Crestron Green Light Express Power Switching panel follow the model number system shown in the example below.

GLPS-SW-FT-56
GLPS-Relay Type-Feed Type-Number of Ckts

NOTE: The example above is for a feed-through panel with 56 SW zero-cross arcless relays.

Fill in the appropriate entry in each position according to the steps below:

1. **Relay Type:** Enter "SW" to specify standard high-inrush switching relays.
2. **Feed Type:** Enter "FT" to specify feed-through.
NOTE: For other feed types, refer to the "[Selection Guide](#)" on page 4.
3. **Number of Circuits:** Choose one of the following numeric values to specify the number of controlled circuits in the panel.

Small: 8, 16, 24

Large: 32, 40, 48, 56

NOTE: Small and Large refer to the default panel size per number of circuits. Consult Crestron Sales Support Services for alternate configurations.

GLPS-HDSW-FT: Express Feed-Through

The GLPS-HDSW-FT Power Switching panels are designed for use with a separate circuit breaker panel. Two feed-through panel sizes are available, configurable with as few as 8, or as many as 56 control circuits per panel. The panels utilize individual, field-installable modular relays. Panels are specified according to the number of relay spaces. The relays are ordered separately. Each space accommodates one single-pole relay (Model# GLRHD-1P). Allow 2 spaces for each double-pole relay (Model # GLR-HD-2P).

Each control circuit is rated for 20 A, supporting 120 volts, 277 volts, and 347 volts lighting loads, as well as motors up to 2 hp. Panels may be deployed with a mix of different voltages within a single cabinet. The GLPS-HDSW-FT panels include local relay controls and I4784oad state indicators for each circuit.

As part of a complete Crestron Green Light system, GLPS-HDSW-FT panels connect to an IPAC-GL1 lighting control processor (or other 2-Series control system) via the Cresnet control network. A GLA-PWS50 (or equivalent) power supply is also required for each panel to provide operating power.

Remote Emergency Override mode allows the lighting system program to be overridden while each circuit is set to an override preset state. The override preset for each circuit is set using the local relay controls. This mode is activated by an external contact closure from a Crestron GLS-PLS-120/277 power loss sensor or other devices. All low-voltage connections to a GLPS-HDSW-FT panel are made via a connector block located near the bottom of the panel. Connections are provided for Cresnet communications, power supply, and emergency override.

Crestron Green Light Express Power Switching panels are configured to order, and factory assembled and tested prior to shipping. Each panel is engineered to provide a clean and manageable installation with abundant provisions for wire termination and conduit knockouts. On-site installation is fast and easy with all termination points clearly labeled and accessible from the front. Refer to the GLPS product page on the [Crestron website](#) for more information

Specifying and Ordering a GLPS-HDSW-FT Panel

When specifying and ordering a Crestron Green Light Express Power Switching panel follow the model number system shown in the example below.

GLPS-HDSW-FT-56
GLPS-Relay Type-Feed Type-Number of Ckts

NOTE: The example above is for a feed-through panel with 56 HDSW modular high-inrush relays.

Fill in the appropriate entry in each position according to the steps below:

1. **Relay Type:** Enter "HDSW" to specify modular high-inrush switching relays.
2. **Feed Type:** Enter "FT" to specify feed-through.

NOTE: For other feed types, refer to the "[Selection Guide](#)" on page 4.

3. **Number of Circuits:** Choose one of the following numeric values to specify the number of controlled circuits in the panel.

Small: 8, 16, 24

Large: 32, 40, 48, 56

NOTE: Small and Large refer to the default panel size per number of circuits. Consult Crestron Sales Support Services for alternate configurations.

HDSW relays must be ordered separately. Quantities shown indicate the number of available relay spaces. Each space accommodates one single-pole relay (Model# GLR-HD-1P). Allow 2 spaces for each double-pole relay (Model# GLR-HD-2P).

IPAC-GL1: Integrated Professional Automation Computer

The Crestron IPAC is a 2-Series control processor designed for wall mount installation. Its front panel controls and LCD display deliver a user-friendly interface for out-of-the-box system setup. Built-in Ethernet, Cresnet, RS-232, relay, and sensor inputs provide direct connectivity for interfacing with all kinds of devices, controls, and networks. The onboard e-Control® web server allows for complete integration as part of a facility-wide managed control network.



- Wall mount lighting control processor
- Crestron 2-Series control engine
- Easy system programming via LCD front panel
- 7 programmable buttons with LED feedback
- Customizable backlit button labels
- CEC Title 24 listed
- Astronomical time clock
- Occupancy sensing and daylight harvesting
- 2 RS-232, 4 digital/analog input, and 4 relay control ports
- Cresnet and 10/100 Ethernet communications
- Onboard e-Control web server
- RoomView and SNMP remote management
- Secure Sockets Layer (SSL) network protection
- Extensively programmable via PC software
- 3-gang wall-mountable

The GL1 version of IPAC comes preconfigured for use as the central control processor for a Green Light Power Switching system. Out of the box, the IPAC-GL1 affords easy setup and programming for a complete switching system consisting of the following:

- Up to 210 switched loads
- CNX-B, C2N-DB, and Cameo® keypads
- 41 occupancy sensors and photosensors
- 100 time clock events

Keypads with as many as 12 buttons each can be programmed easily to control lighting loads and other functions. The seven function buttons on the front panel of the IPAC-GL1 may also be programmed. Custom backlit labeling of the front panel buttons is facilitated using an assortment of pre-printed labels or Crestron Engraver software. Lights can be programmed to turn on and off automatically using the built-in astronomical time clock feature. Lighting events may be programmed to occur at specific times or at an offset from sunrise or sunset. Occupancy sensors and photosensors may also be implemented to enable automatic on/off lighting control based on room occupancy and ambient light levels.

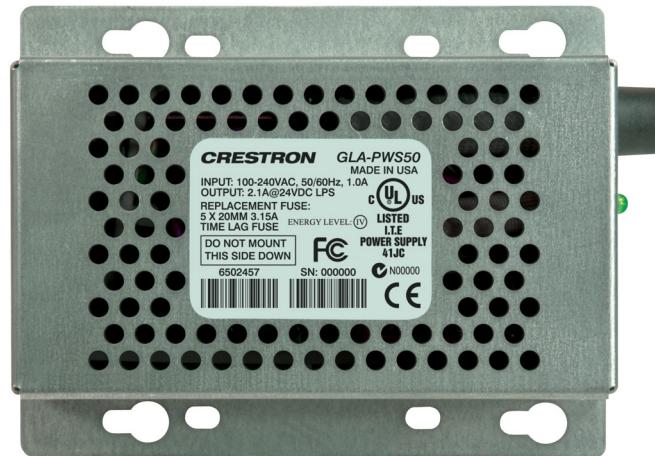
With additional custom programming, the IPAC-GL1 can support virtually any functionality imaginable. It works seamlessly with the entire line of Crestron touch screens, wireless remotes, lighting dimmers, shade controllers, thermostats, and more. It can also interface with third-party devices and systems such as security and access controls, surveillance cameras, and HVAC for a fully integrated solution. Contact Crestron Sales Support Services for more information.

The IPAC-GL1 is designed to be mounted in a standard 3-gang electrical box independent of the lighting panels, allowing it to be installed wherever it is most advantageous for the project.

Refer to the IPAC-GL1 product page on the [Crestron website](#) for more information.

GLS-PWS5: Wall Mount 50 W Cresnet Power Supply

The GLA-PWS50 is a 50 W Cresnet Power Supply designed for use with a Crestron Green Light system, or anywhere a wall-mountable Cresnet power supply is needed. The GLA-PWS50 mounts conveniently over a 4 in square or 2-gang electrical box. All connections are made inside the electrical box via flying leads using twist-on wire connectors. A partition is included to isolate high voltage from Class 2 wiring within the box.



- 50 W Cresnet power supply
- Powers the IPAC and other Cresnet devices
- Provides backup power for Crestron Green Light cabinets
- Mounts to a 4 in square or 2-gang electrical box
- Euro/UK mountable version also available (GLA-PWSI50)

Refer to the GLA-PWS50 product page on the [Crestron website](#) for more information.

GLS-PLS-120/277: Power Loss Sensor

The GLS-PLS-120/277 is a 3-phase power loss sensor designed for use with Crestron Green Light systems to activate *Override* mode during a power failure. In response to a signal from the GLS-PLS-120/277, the lighting system program can be temporarily overridden while designated emergency lighting circuits are changed to their override preset levels and unnecessary lighting and other devices are shut down to minimize the demand on emergency power equipment.

The GLS-PLS-120/277 senses each leg of a 120 or 277 volts 3-phase feed, providing LED indication of the status of each phase on its front panel. When power is lost on any phase, the corresponding status LED turns off and a contact closure is activated on each of two control outputs. Two isolated control outputs are provided to allow for interfacing with third-party equipment in addition to the Crestron lighting system. Each contact closure output is rated for 1 A @ 24 Vdc.

Testing the GLS-PLS-120/277 is facilitated using three test switches located behind a small cover plate on the front of the unit. Setting any switch to the test position simulates a loss of power on the corresponding phase leg, providing a test of the unit's internal circuitry and any connected equipment.

The steel enclosure is designed for mounting to a vertical surface. Conduit knockouts are provided on the bottom, top, and both sides. All electrical connections are made via screw terminals accessed by removing the front panel.

GLS-PLS-120/277 Power Loss Sensor (with and without Front Cover)



- Senses loss of power on each leg of a 3-phase feed
- Used to satisfy UL 924 (Emergency Power Equipment) requirements
- Works with 120 or 277 volt feeds
- Designed to activate the *Override* mode on Crestron lighting modules
- Provides two isolated contact closure outputs
- Includes built-in test function for each phase input
- Surface mount enclosure includes conduit knockouts

Refer to the GLS-PLS-120/277 product page on the [Crestron website](#) for more information.

GL-IPAC-SW8: Integrated Switching System

The GL-IPAC series of switching panels are designed to control up to 8 circuits of lighting load. The GL-IPAC devices provide inputs for sensors and keypads and provide an LCD user interface to setup the system.



The GL-IPAC-SW8 comes preconfigured for use as the central control processor for a Green Light Power Switching system. Right out of the box, the GL-IPAC-SW8 affords easy setup and programming for a complete switching system consisting of up to 40 switched loads, keypads, occupancy and photo sensors, and 100 time clock events.

Keypads with as many as 12 buttons each can be programmed easily to control lighting loads and other functions. Lights can be programmed to turn on and off automatically using the built-in astronomical time clock feature. Lighting events may be programmed to occur at specific times or at an offset from sunrise or sunset. Occupancy sensors and photo sensors may also be implemented to enable automatic on/off lighting control based on room occupancy and ambient light levels.

- Supports up to 8 internally switched loads
- Expandable to 56 externally switched loads
- Supports 100 to 277 volts applications
- 16 Amp load rating per channel
- No programming required
- Positive air gap at each output
- Phase-independent channels
- Local controls for setup, testing, and verification
- Local and remote override capability
- Non-volatile power failure memory
- Easy access is facilitated from the hinged front cover

Refer to the GL-IPAC-SW8 product page on the [Crestron website](#) for more information.

Related Products

Cameo Keypads

Both versatile and stylish, these wall mount keypads feature customizable buttons, auto-dimmable backlit text, enhanced LED feedback, and control ports. Select Cresnet wired or infiNET EX® wireless communication. The C2N-CBD-P models are available in 12 colors and finishes, and are designed for installation using standard electrical gang boxes and decorator-style faceplates. Add any of 7 ultra-fashionable Ascent® faceplates in a luxurious metallic finish designed to appease the most demanding interior designer.



Decorator Keypads

Decorator keypads are clean, retro styled keypads that offer simple, versatile push button control. Designed for installation using standard electrical boxes and decorator-style faceplates. Available in configurations of 6, 8, or 12 buttons for a broad range of applications and offered in 3 smooth finishes: almond, black, and white.



Designer Keypads

Designer keypads feature large buttons, optional backlighting, built-in audio feedback, and temperature sensing. Available in configurations of 2, 4, 6, 8, or 12 buttons for a broad range of applications and offered in 5 textured finishes. Combine 2 or 3 keypads to support a variety of custom button layouts.



Touch Screens

Crestron touch screens deliver a fully customizable graphical user interface, allowing lighting designers to provide clients with the perfect combination of user-friendly control and an alluring appearance. Touch screens can replace the clutter of a wall full of light switches, dimmers, keypads, and thermostats with a single point of control. Crestron is the world leader in touch screens based control systems. The Isys® line of color touch screens includes a full range of sizes and features to suit every application perfectly. Refer to the Crestron website for more information on [Touch Screens](#).



Occupancy Sensors

Lighting automation in response to changing conditions in a room is essential to a complete energy management solution. Crestron occupancy sensors reliably detect when someone is in the room. Lights are automatically turned off when they are not needed. Refer to the Crestron website for more information on [Occupancy Sensors](#).



Photocell Sensors

Crestron photocell sensors, integrated with Crestron communicating thermostats, enable daylight harvesting. Shades, drapery, lighting, and climate are automatically adjusted according to room temperature and available natural light. Refer to the Crestron website for more information on [Photocell Sensors](#).



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