Crestron Green Light Architectural Dimming Specification Guide

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System Overview

Crestron Green Light Architectural Dimming is a family of dimming systems designed for control of lighting in office buildings, warehouses, parking garages, sports facilities, public spaces, and anywhere centralized dimming 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, touchpanels, occupancy sensors, photocells, shade controllers, and numerous other peripheral options afford astounding design flexibility with unparalleled capability for integration

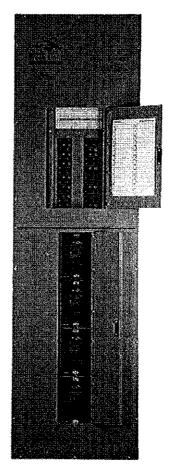
Green Light Architectural Dimming is simple to install and easy to program. Native features include an astronomical time clock to allow scheduling of events to occur around the rise and fall of the sun. Other powerful, energy saving capabilities include occupancy sensing to turn off lights when they 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
- Control for all types of lighting loads and motors up to 1 HP
- All outputs rated at 16A @ 120V and 277V
- Local front panel dimming controls
- high-performance relay available
- UL 508 Section 61C rated for electronic ballast
- Available 0-10V fluorescent dimming control
- UL 924 listed (emergency power equipment)
- · Positive air gap at each output
- Feed-through, main lug only, main circuit breaker options

System Features

High-Performance Power Dimming—Crestron GLPD Series power dimming panels feature field-replaceable dimming modules with a choice of technologies to address a wider range of applications and budgets.

All of our GLPD panels employ Phase-Synchronous Detection Circuitry, Crestron proprietary zero cross filter technology provides superior immunity to noise on the power line, reducing lamp flicker and compensating for fluctuations in line voltage and frequency. Panels support both 120 and 277 voltages, include 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 above, the GLPD-DIM-FT panels feature Phase-

Crestron Green Light Architectural Dimming Specification Guide System Overview

- CEC Title 24 listed
- Astronomical time clock
- Occupancy sensing and daylight harvesting
- Emergency override capability
- Easy programming via 2 series lighting processor
- 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

Synchronous Detection Circuitry. In addition to dimming Green Light Architectural Dimming panels have the option of dimming control for 0-10V dimmable fluorescent ballasts and High inrush power switching utilizing heavy duty modular relays for flexibility in switching 120 and 277 loads.

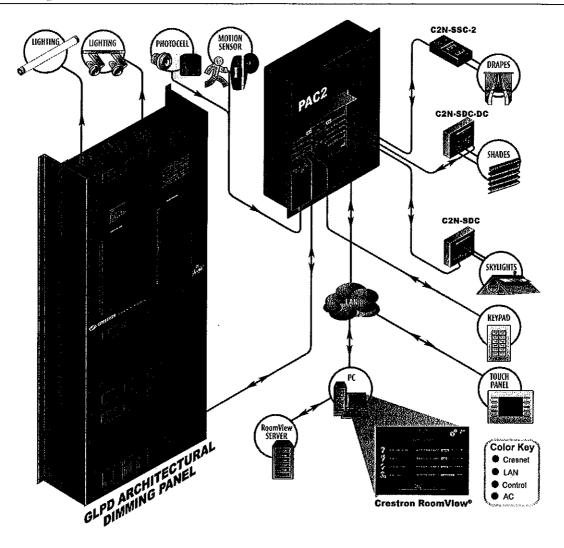
Control Processor—Crestron has been manufacturing and innovating microprocessor-based control systems for lighting and automation longer than anybody, an entire system of lighting loads, keypads, touchpanels, sensors, and scheduled events can be programmed

Featuring the 2-Series control engine, Crestron processors allow 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.

Local Controls—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.

Emergency Override—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.

Cresnet Each Green Light Power Switching panel communicates with Crestron 2-Series processors, via the Cresnet control network. This simple 4-wire bus affords proven reliable digital control and flexible system configuration, carrying data communications and 24 volt DC power to support a complete system of lighting panels, keypads, touchpanels, sensors, and numerous other Cresnet devices.



Selection Guide

Crestron 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 your application.

This table represents the full line of Crestron Green Light and Green Light Express Power Switching panels, as well as Green Light and Green Light Express Architectural Dimming panels. All are shown side-by-side for easy comparison. The Power Switching panels are each fully detailed under their respective specifications pages within this document. For details about Architectural Dimming panels, please refer to the Crestron Green Light™ Power Switching Specification Guide, Doc. 4784.

GREEN LIGHT

GREEN LIGHT EXPRESS

| | GREEN DIGHT | | | | GREEN HIGHT EAPRESS | | | |
|--|---|------------------------------------|--|--------------------------------|-------------------------------|--|---------------------------|---------------|
| | Power Switching | | Architectural Dimming | | ng sake ng pada sa sa dake | | and Complete Action | |
| Switching Relay | GLPS-HSW see Page 4 | ভোগমহা (হয়) (হয়েহ)কালুহিচ (হ | GLPD-DIM see Note 1 | eras igade ra Graza man isu | GLPS-SW-FT see:Page:9 | (gars most val dae Mage uit | GLPD-DIM-FT see Note 1 | (èii |
| Arcless High-inrush | • | | | Ó | | | • | |
| Standard high-inrush | | C C | | | • | | | |
| Modular high- inrush | | | | | | Ö, | | |
| 2-pole available Dimming Load Types | | | legio de la Companya | | | O | | |
| Incandescent, MLV | | | • | | | | • 00/1635 | raese av |
| ELV | | | , i de la companya d | | | | • 55 | |
| 2-wire fluorescent | | | • | | | | • | 1/18 B (V) |
| 3-wire fluorescent | | | | | | | • | |
| 0-10V fluorescent Ratings | • | O | • | | | | • | |
| Voltages | 120/230/277 | 1220//2230//2211 | 120/230/277 | 35204/26304/23111 | 120/230/277 | 102 0 4/223 0 4/ 22111/3321 | 120/230/277 | 1190 |
| Output capacity, lighting loads | 16A | 1H69A | 16A ⁴ | 11694 | 16A | 207 | 16A ⁴ | |
| Output capacity, motor loads @ 120/230/277 volts | 0.5/1/1 hp | 31 <i> 21 2</i> 3 1530 | 0.5/1/1 hp | (0.451/h/n. 1999). | 1/2/2 hp | (0, 55//ii ,55//ii ,65 Phje | 0.5/1/1 hp | |
| Rated relay lifetime ⁵ Circuit Breakers | 1,000,000 | 10,000 | 1,000,000 | 11.,0000,0000 | 10,000 | 30,,000 | 1,000,000 | |
| Integrated branch breakers | • | 0 | | | | | | |
| Available main breaker Additional Features | | O | | | | | | |
| Load state indicators | . • • • • • • • • • • • • • • • • • • • | | | O | • | O | • | |

Crestron Green Light Architectural Dimming Specification Guide GLPD-DIM

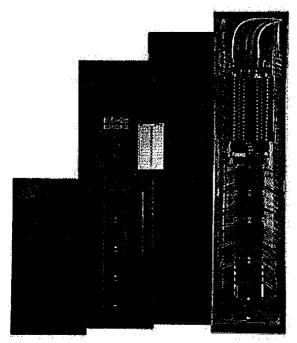
| Local override | | \circ | • | O | • | O | • |
|-----------------------------------|------|---------|---|---|-----------------|---------|---|
| Emergency override | • | Ö | • | Ο | • | o O | • |
| Mechanical override | | | | | | Ö | |
| Local contro | ol . | | | | 6000 12/00 2014 | | |
| door option | | | | | | | |
| Backup power supply capable | | ٥. | | Ġ | | . Autor | • |

Notes:

- 1. Please see Crestron Green Light™ Power Switching Specification Guide, Doc. 4784 for full description and specifications.
- 2. Supported via use of appropriate CLS-EXP expansion module.
- 3. 3-wire fluorescent loads require 2 control outputs per load.
- 4. Consult detailed specifications for ratings for ELV loads.
- 5. Relay lifetime based on number of cycles (on/off) with full electronic ballast load.

GLPD-DIM Green Light Architectural Dimming Panels

(MLO) Main Lug Only and (MCB)
Main Circuit Breaker PhaseSynchronous Detection Circuitry
Dimmers



The GLPD-DIM Architectural Dimming Panels come standard with 20A branch circuit breakers, and accept 208Y/120 or 480Y/277 volt feeds terminating to main lugs provided. An optional backfed main circuit breaker may also be specified.

Four panel sizes are available. The panel size is ordinarily determined according to the number of control circuits specified, ranging from 30 to 60 circuits per panel. Each control circuit is rated for 16A at 100-277V.

The GLPD-DIM panels employ Phase-Synchronous Detection Circuitry, Crestron's proprietary zero cross filter technology. This is a complete solution providing superior immunity to noise on the power line, reducing lamp flicker and compensating for fluctuations in line voltage and frequency. Panels may be equipped with As an option, GLPD-DIM Panels may be equipped with high inrush switch control substituted in place of some diming circuits.

The GLPD-DIM panels employ field-replaceable lighting control modules, with 6 or 8 control circuits per module, for excellent configurability and serviceability. Each module includes local dimmer 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 GLPD-DIM panel for access to the circuit breaker panelboard.

As part of a complete Green Light system, GLPD-DIM panels connect to a 2-Series lighting control processor 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. Remote override 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 GLPD-DIM 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 Architectural Dimming panels are configured to order, factory assembled and tested prior to shipping. Each panel is engineered to provide a clean and manageable installation with

Crestron Green Light Architectural Dimming Specification Guide GLPD-DIM

0-10v four wire fluorescent dimming.

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.

MODEL NUMBERS

Specifying and ordering a Green Light Architectural Dimming is facilitated using the following model number system. Simply fill in the appropriate entry in each position according to the steps that follow:

Product Model Number

Example: GLPD-MLO-2D2F-30-120-10K

| GLPD | MLO | 2D2F | 30 | 120 | 10K |
|--------|------|--------|--------|---------|--------|
| System | Feed | Module | Number | Voltage | AIC |
| Туре | Туре | Qty | of | | Rating |
| | | and | Ckts | | |
| | | Туре | | | |

This example is for a "Main Lug Only" panel with 28 circuits consisting of, (2) 6 channel dimmer, (2) 8 channel 0-10v fluorescent dimmers, 120V / 10kAIC circuit breakers.

System Type: GLPD- Green Light Power Dimmer

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

MLO Main lug only
MCB60 60A back-fed main circuit breaker
MCB80 80A back-fed main circuit breaker
MCB100 100A back-fed main circuit breaker
MCB125 125A back-fed main circuit breaker
(available for 277V

only)

Note: Main feeds are 3-phase, 4-wire; rated 225A @ 120/208V or250A @ 277/480V. Consult Crestron Sales Support Services for 400Afeed and other main circuit breaker options.

Module Quantity and Type: Enter number and type, D for incandescent dimmer, F for fluorescent dimmer.

Number of Circuits: choose one of the following numeric values from the appropriate column to specify the number of controlled circuits in the panel:

| max dim | Max |
|---------|-------------|
| loads | switched |
| | loads |
| 24 | 32 |
| • | |
| \$16 | 7,48 |
| | |
| 48 | 60 |
| | |
| (6,0):/ | 6,00 |
| | 10ads 24 |

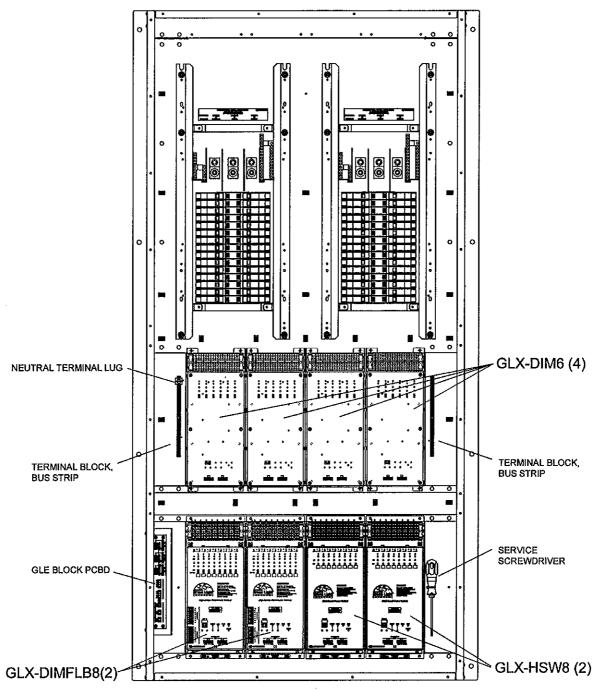
Consult Crestron Sales Support Services for alternate configurations.

Voltage: To specify the circuit breaker voltage, enter "120" for 120/208V or "277" for 277/480V.

AIC Rating: Choose one of the following values from the appropriate column to specify the Ampere Interrupting Capacity of the circuit breakers:

| 120 Volt | 277 Volt |
|----------|----------|
| 10K | 18K |
| 2020 | \$151K |
| 65K | 65K |

Note: Consult Crestron Sales Support for MCB options



120 VOLT BREAKERS (INTERIOR TRIM REMOVED FOR CLARITY)

GLPD SPECIFICATIONS

Load Ratings

Dimmed Load Types: Dimmable Electronic Low-Voltage, Neon/Cold Cathode, Fluorescent Lamp, Incandescent, Magnetic Low-Voltage Fluorescent Ballast, 0-10 Volt 4-Wire

Switch Channels: 8 to 60 depending upon panel size and options, each channel phase-independent

Maximum per Channel: 16 Amps @ 100 to 277 Volts AC, 50/60 Hz; 1/2 HP @ 120 Volts, 1 HP @ 277 Volts

Switched Load Types: Incandescent, Magnetic Low-Voltage Ballast, High-Intensity Discharge, Motors

Rated Relay Lifetime: 1,000,000 cycles at full rated electronic ballast load

Input Power

Line Power: 120/208 VAC, 225 Amps maximum, 50/60 Hz phase-to-neutral, or 277/480 VAC, 250 Amps maximum, 50/60 Hz phase-to-neutral. Cresnet Power Usage (optional): 50 Watts (2.08 Amps @ 24 Volts DC) per panel, use Crestron GLA-PWS50 or equivalent power supply.

Circuit Breakers

Branch, 120V: 20A Square D° QOB Bolton type; 10k, 22k, or 65k AIC rated as required Branch, 277V: 20A Square D EDB, EGB, EJB E-Frame type; 18k, 35k, or 65k AIC rated as required Main, 120/208V (optional): 120/208V: 60A, 80A, or 100A Square D QOB Bolton type; 10k AIC rated (consult Crestron for additional options) Main, 277/480V (optional): 60A, 80A, 100A, or 125A Square D EDB, EGB, EJB E-Frame type; 18k, 35k, or 65k AIC rated

Lightning Protection

Can withstand 6 kV / 3 kA surge, as per IEC 61000-4-5 and ANSI/IEEE C62.41-1991

Dimensions

GLE-2x2: 67.82 x 22.88 x 10.63 in $(172.25 \times 58.11 \times 26.99 \text{ cm}) \text{HWD}$ GLE-3x2: 96 x22.8 x10.63 in $(243.84 \times 58.11 \times 26.99 \text{ cm}) \text{HWD}$ $GLE-2x4:67.82 \times 35.07 \times 10.63 in$ (175.25 x 89.06 x 26.99 cm) HWD 3x4: 89.82 x 35.7 x 10.63 in $(228.13 \times 89.06 \times 26.99 \text{ cm}) \text{ HWD}$

Weight

Fully loaded with modules, 277V circuit breakers, and wiring: GLE-2x2: 70 lb (31.8 kg) maximum GLE-3x2: 140 lb (63.5 kg) maximum GLE-2x4: 165 lb (74.9 kg) maximum GLE-3x4: 181 lb (82.1 kg) maximum

Testing & Compliance

UL924 listed , FCC Part 15

Feed Wiring - 120/208V

Neutral and Main Lugs: 10-2/0 AWG (CU) 6-2/0 AWG (AL) 6-300 kcmil (CU or AL)

Neutral Bus:

14-4 AWG (CU)

12-4 AWG (AL)

Feed Wiring - 277/480V

Neutral and Main Lugs: 6-350 kcmil (CU or AL) 1/0-750 kcmil (CU or AL)

Neutral Bus:

14-6 AWG (CU or AL)

14-2/0 AWG (CU or AL)

Load Wiring

Load Outputs: 14-10 AWG 0-10V Dim Outputs: 28-12 AWG Ground Bar: 14-10 AWG Ground Lug: 14-4 AWG

Notes:

- For Feed wiring, use copper or aluminum conductors only.
- For Load wiring, use copper conductors only.
- All wiring rated 75°C

Crestron Green Light Architectural Dimming Specification Guide GLPD-DIM

Enclosure

NEMA Type 1, IP20 rated protection,

for indoor use only

Back Box: 16 Gauge galvanized steel,

surface wall mount

Front Cover: 16 Gauge steel, grey

powder coat finish

Environmental

Temperature: 32° to 104°F (0° to

40°C)

Humidity: 10% to 90% RH (non-

condensing)

GLPD-DIM-FT Green Light Express Feed-Through

Phase-Synchronous Detection Circuitry dimmers

The GLPD-DIM-FT panels employ Phase-Synchronous Detection Circuitry, Crestron's proprietary zero cross filter technology. This is a complete solution providing superior immunity to noise on the power line, reducing lamp flicker and compensating for fluctuations in line voltage and frequency. Panels may be equipped with 0-10v four wire fluorescent dimming.

As an option, GLPS-HSW-FT panels may be equipped with 0-10V fluorescent dimming control substituted in place of some or all switching circuits. Consult Crestron Sales Support Services to specify this option. The GLPD-DIM-FT panels employ fieldreplaceable lighting control modules, with 6 or 8 control circuits per module, for excellent configurability and serviceability. Each module includes local dimmer 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 GLPD-DIM -FT panel for access to the circuit breaker panelboard.

As part of a complete Green Light system, GLPD-DIM-FT panels connect to a 2-Series lighting control processor 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.de 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.

MODEL NUMBERS

Specifying and ordering a Green Light Architectural Dimming is facilitated using the following model number system. Simply fill in the appropriate entry in each position according to the steps that follow:

Example: GLPD-FT-2D2F-30-120

| GLPD | FT | 2D2F | 30 | 120 |
|--------|------|--------|----------|---------|
| System | Feed | Module | Number | Voltage |
| Туре | Туре | Qty | of | |
| | | and | Circuits | |
| | | Туре | | |

This is an example of a "Feed Though" panel with 28 circuits consisting of, (2) 6 channel dimmer, (2) 8 channel 0-10 v fluorescent dimmers.

16 Amp, 1 HP load switching is also available. Consult Crestron Sales Support Services to specify this option.

System Type: GLPD- Green Light Power Dimmer

Feed Type: Enter "FT" to specify "Feed-Through."

Note: For other feed types, refer to the Selection Guide

Module Quantity and Type: Enter number and type, D for incandescent dimmer, F for fluorescent dimmer.

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 | Max dim | Max switched | |
|---------------|---------|---|--|
| | loads | loads | |
| GLE-2x2 | 24 | 32 | |
| (G)(i5) 35(2) | 36 | (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) | |
| GLE-2x4 | 48 | 60 | |
| (@JL)D/ 35%(A | 6(0) | 60 | |

Consult Crestron Sales Support Services for alternate configurations.

Voltage: To specify the circuit breaker voltage, enter "120" for 120/208V or "277" for 277/480V.

Remote override 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 GLPD-DIM-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
Architectural Dimming 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.

GLPD-DIM-FT Specifications

Load Ratings

Dimmed Load Types

Dimmable Electronic Low-Voltage, Neon/Cold Cathode, Fluorescent Lamp, Incandescent, Magnetic Low-Voltage Fluorescent Ballast, 0-10 Volt 4-Wire

Switch Channels

8 to 60 depending upon panel size and options, each channel phase-independent

Maximum per Channel

16 Amps @ 100 to 277 Volts AC, 50/60 Hz; 1/2 HP @ 120 Volts, 1 HP @ 277 Volts

Switched Load Types

Incandescent, Magnetic Low-Voltage Ballast, High-Intensity Discharge, Motors

Rated Relay Lifetime

1,000,000 cycles at full rated electronic ballast load

Input Power

Line Power: 120 or 277 VAC, 20 Amps maximum per circuit, 50/60 Hz Cresnet Power Usage (optional): 50 Watts (2.08 Amps @ 24 Volts DC) per panel, use Crestron GLA-PWS50 or equivalent power supply

Lightning Protection

Can withstand 6 kV / 3 kA surge, as per IEC 61000-4-5 and ANSI/IEEE C62.41-1991

Enclosure

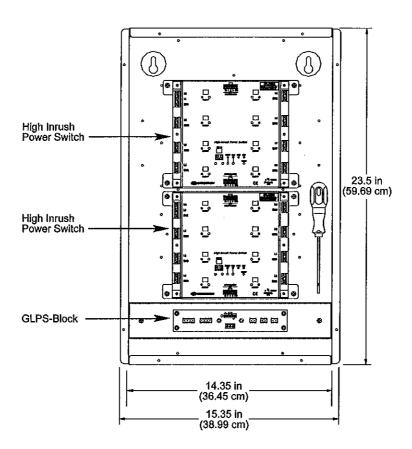
NEMA Type 1, IP20 rated protection, for indoor use only Back Box: 16 Gauge galvanized steel, flush or surface wall mount Front Cover: 16 Gauge steel, grey powder coat finish

Environmental

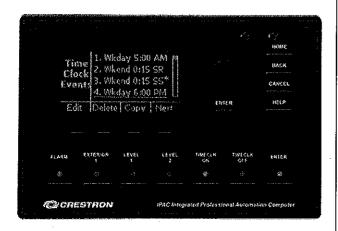
Temperature: 32° to 104°F (0° to 40°C) Humidity: 10% to 90% RH (non-condensing)

Dimensions

Small: 23-1/2 x 14-3/8 x 4 in (59.7 x 36.5 x 10.2 cm) HWD Large: 38-1/4 x 14-3/8 x 4 in (97.2 x 36.5 x 10.2 cm) HWD



IPAC-GL1 Integrated Professional Automation Computer for Green Light Power Switching



- 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, & 4 relay control ports
- Cresnet and 10/100 Ethernet communications
- Onboard e-Control Web server
- RoomView and SNMP remote management
- SSL (Secure Sockets Layer) network protection
- Extensively programmable via PC software

The onboard e-Control® Web server allows for complete integration as part of a facility-wide managed control network.

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

- Up to 210 switched circuits
- 16 keypads and 2 touchpanels
- 30 occupancy sensors and photocells
- 500 time clock events

Keypads with as many as 12 buttons each can be programmed easily to control lighting loads and zones. As well, the seven function buttons on the front panel of the IPAC-GL1 may also be programmed for lighting control or a variety of other common functions. Custom backlit labeling of these 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 photocells may also be implemented to enable automatic on/off lighting control based on room occupancy and ambient light levels.

Custom programmability—with additional custom programming, the IPAC-GL1 can support virtually any functionality imaginable. It works seamlessly with the entire line of Crestron touchpanels, wireless remotes, lighting dimmers, shade controllers, thermostats, and more. It can also interface with third-party devices and systems such as security and access

- 3-gang wall-mountable
- Available in white or black

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.

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.

IPAC-GL1 Specifications

Processor

CPU: 32-bit Freescale ColdFire® Microprocessor

Memory

SDRAM: 32 MB NVRAM: 1 MB Flash: 8 MB

Power Failure Memory: 10 years

Time Clock

Accuracy: ±1 minute per year

Operating System

Real-time, preemptive multithreaded/multitasking kernel; FAT32 file system with long names; includes default program for Green Light Power Switching systems

Ethernet

10/100BaseT, auto-negotiating, full/half duplex, static IP or DHCP, DNS, SSL, TCP/IP, UDP/IP, CIP, SMTP, SNMP, built-in Web server and e-mail client; supports Crestron e-Control[®]2 XPanel and RoomView[®] applications

Control Ports

Cresnet: Cresnet port and 24 Volt DC power input with parallel pass-thru

LAN: 10/100BaseT Ethernet port w/link status and activity
LED indicators

RS-232: (2) Bidirectional RS-232 ports
Up to 115.2k baud; software handshaking support
Hardware handshaking on COM 1 only

Relays: (4) normally open, isolated relays (every two share a common)
Rated 1 Amp, 30 Volts AC/DC, MOV arc suppression across contacts

Inputs: (4) digital or analog input ports (referenced to GND)
Digital Input: Rated for 0-24 Volts
DC, input impedance 20k ohms,
logic threshold 1.25 Volts DC;
Analog Input: Rated for 0-10 Volts
DC, protected to 24 Volts DC maximum,
input impedance 20k ohms;
Programmable 5 Volts, 2k ohms pull-up
resistor per input

Computer: (1) USB 1.1 computer console port (behind front cover)

LCD Display

Green LCD dot matrix, 128 x 64 resolution, adjustable LED backlight

Power Requirements

Cresnet Power Usage: 5 Watts (0.21 Amps @ 24 Volts DC), use Crestron GLA-PWS50 or equivalent power supply

Environmental

Temperature: 32° to 104°F (0° to 40°C) Humidity: 10% to 90% RH (non-condensing)

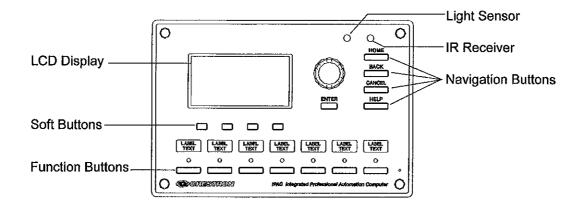
Enclosure

Faceplate: High-impact plastic, black or white, with polycarbonate label overlay

Chassis: Injection-molded plastic with steel mounting plate Mounting: Requires 3-gang plaster ring or electrical box (2.5 inch deep recommended)

Testing & Compliance

UL Listed, FCC Part 15, CEC Title 24

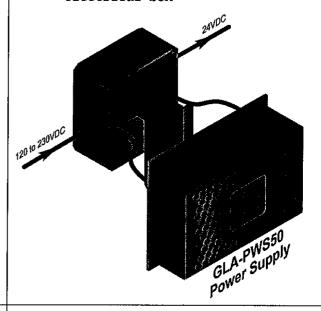


GLA-PWS50 Wall Mount 50 Watt Cresnet Power Supply



The GLA-PWS50 is a 50 watt 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" square or 2-gang electrical box. All connections are made inside the electrical box via flying leads using wire nuts. A partition is included to isolate Class 1 from Class 2 wiring within the box.

- 50 watt Cresnet power supply
- Powers the IPAC and other Cresnet devices
- Provides power for Crestron Green Light panels
- Mounts to a 4" square or 2-gang electrical box



SPECIFICATIONS

Output Power

Output Power: 50 Watts (2.08 Amps) @ 24 Volts DC, regulated, limited power source

Ripple/Noise: <1%

Power Requirements

Line Power: 60 Watts @ 100-240 Volts AC, 50/60 Hz

Environmental

Temperature: 32° to 104°F (0° to

40°C)

Humidity: 10% to 90% RH (non-

condensing)

Heat Dissipation: 26 BTU/hr

Enclosure

Metal construction, mounts to a 4inch square or 2-gang electrical box, includes low-voltage partition

Testing & Compliance

UL Listed, FCC Part 15

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 volt 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 1A @ 24VDC.

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 units' 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.

- 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
- Each output rated 1A @ 24VDC
- Includes built-in test function for each phase input
- Surface mount enclosure includes conduit knockouts

SPECIFICATIONS

Input Voltages

277V Voltage Range: 235 to 305 Volts AC, 50/60 Hz 120V Voltage Range: 102 to 132 Volts

AC, 50/60 Hz

Connections

PHASE A, B, C: (3) Main feed sensing inputs, 277 or 120 Volts

Test Switches: (3) Slide switches behind cover plate, used to set each corresponding phase sensing input to TEST mode

Enclosure

Galvanized steel with polycarbonate label overlay; surface mount with integral mounting flanges top and bottom; 3/4" & 1/2" conduit knockouts

OUTPUTS: (2) Form 'A' contact closures, electrically isolated. Both outputs close when main feed power is removed from any phase sensing input. Rated 1 Amp @ 24 Volts DC

Indicators & Controls

NORMAL A, B, C: (3) Green LEDs, each illuminates when corresponding test switch is set to NORMAL and power is present at corresponding phase sensing input TEST A, B, C: (3) Red LEDs, each illuminates when corresponding test switch is set to TEST and power is present at corresponding phase sensing input

Related Products

C2N-CBD-TS Cameo™ Keypads

Crestron Cameo keypads present an innovative concept in keypad design, combining elegant looks, excellent usability under any lighting condition, and great flexibility to suit each application perfectly.

Cameo keypads are available in a choice of 12 colors and finishes matched perfectly to work with popular off-the-shelf style faceplates. Each is field-configurable

buttons in a variety of physical layouts. Each button is customizable with backlit text engraving. A built-in light sensor controls the backlight intensity automatically to achieve a crisp, legible appearance in both darkened and fully lit rooms.

Additional features include stylish pinhead-sized white feedback LEDs, two contact-closure sensing inputs, and built-in photocell light sensor.

Please refer to the product specification sheet for complete information.

C2N-DB Decorator Keypads

Crestron Decorator Series keypads deliver versatile keypad control with contemporary styling. Available in configurations of 8, or 12 buttons, Decorator keypads are top, bottom, and both sides

Environmental

Temperature: 32° to 104°F (0° to 40°C) Humidity: 10% to 90% RH (noncondensing) Heat Dissipation: 51 BTU/Hr

Dimensions

Height: 12.69 x 5.19 x 2.82 in (32.23 x 12.75 x 7.14 cm) HWD

Weight

3.7 lb (1.7 kg)

designed to allow installation in perfect harmony with non-Crestron devices using readily available Decora® style faceplates (not included). All button caps are engravable and include integral red LED feedback indicators. Available in black, white, and almond.

Please refer to the product specification sheet for complete information.

CNX-B Designer Keypads

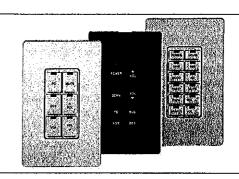
Crestron Designer series keypads offer elegant styling with large buttons. Models are available with the choice of 2, 4, 6, 8, or 12 buttons. Custom engraving is available, including backlit engraving (black model only) for extra visibility in a darkened room. Each button includes an LED feedback indicator, with additional capability for audible feedback using custom WAV sound files. Available in black, white, and almond, each Designer keypad mounts in a standard electrical gang box and includes a matching 1-gang faceplate. Optional 2 and 3-gang faceplates are available to allow up to three keypads to be installed side-by-side. Optional Designer and Architectural faceplates are offered in a variety of elegant finishes.

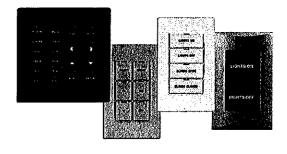
Please refer to the product specification sheet for complete information.

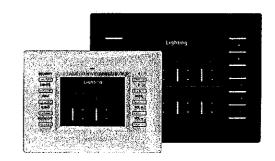
TPS Series Isys Touchpanels

Crestron touchpanels 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. Touchpanels 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 touchpanel based control systems. Our Isys line of color touchpanels includes a full range of sizes and features to suit every application perfectly.







Please refer to the product specification sheets for complete information.

GLS-ODT & GLS-OIR Green Light Occupancy Sensors

Crestron Green Light™ sensors deliver a powerful and cost-effective solution for reducing energy costs and enhancing the functionality of lighting and environmental systems. Crestron offers ceiling and wall mount occupancy sensors for areas up to 2500 square feet.

Advanced self-adaptive motion sensing using a combination of ultrasonic and passive infrared technologies affords extreme reliability for control of lighting, climate control and other devices in the room. A built-in photocell can be set to override the occupancy sensor if the ambient light level is above a set threshold, preventing lights from turning on when there is sufficient daylight in the room.

Sensors are easily connected to the lighting control processor via the Cresnet control network using a GLS-SIM Sensor Integration Module. Alternately, they may be connected directly via a digital input port.

Please refer to the product specification sheet for complete information.



GLS-LOL & GLS-LCL Green Light Photocell Light Sensors

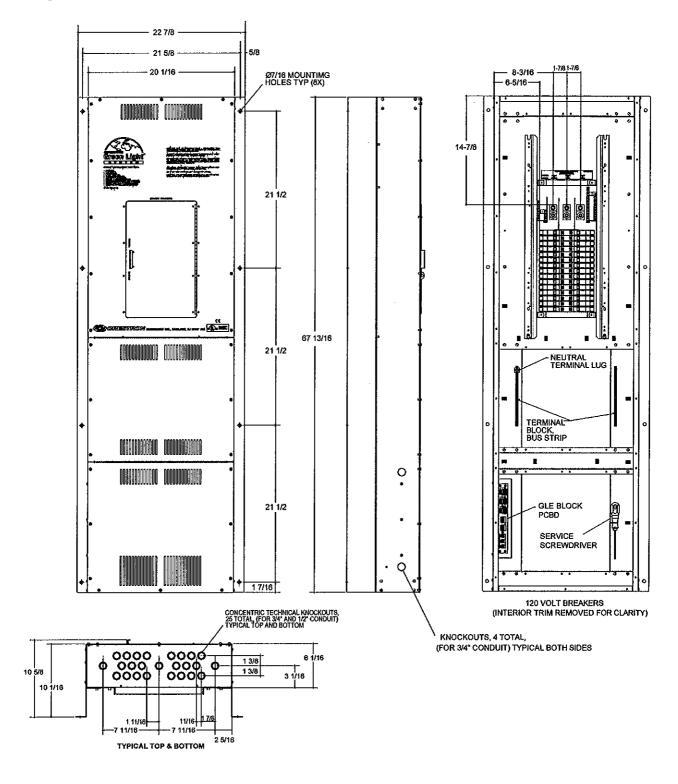
Crestron Photocell Light Sensors are designed for daylight harvesting applications to control the balance of natural and artificial lighting in an indoor space. By harnessing natural daylight from windows and skylights, electrical lighting can be turned off or dimmed, reducing energy usage while maintaining a consistent light level for a more efficient and comfortable work space. Outdoor lighting may also be turn off and on automatically using a photocell light sensor.

Please refer to the product specification sheet for complete information.

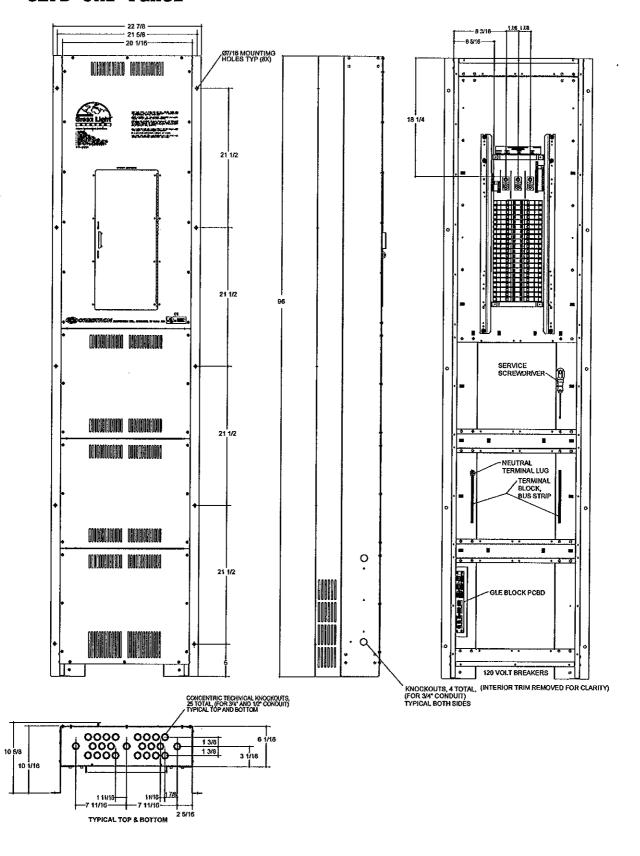


Dimensions

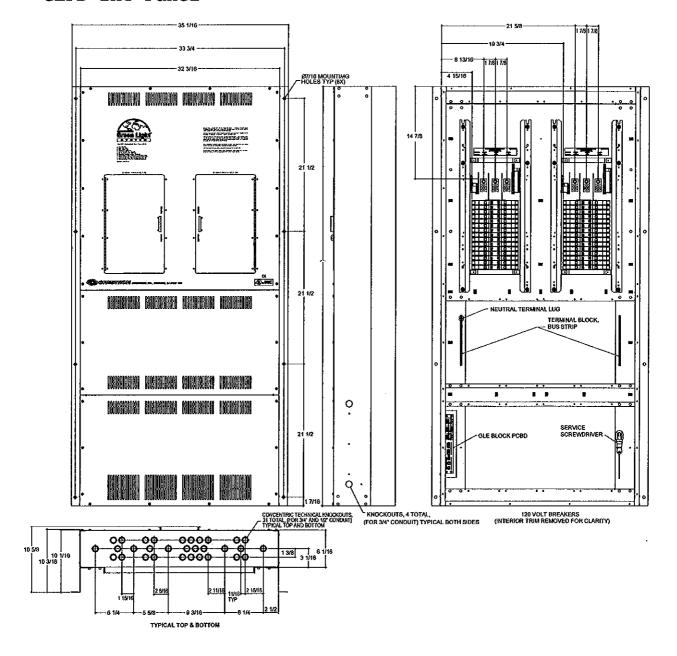
GLPD 2x2 Panel



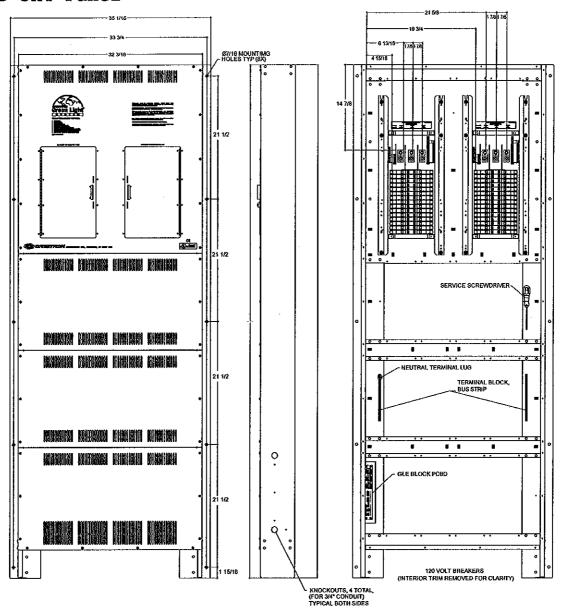
GLPD 3x2 Panel

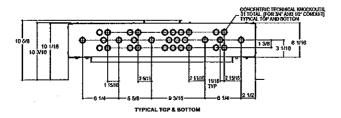


GLPD 2x4 Panel

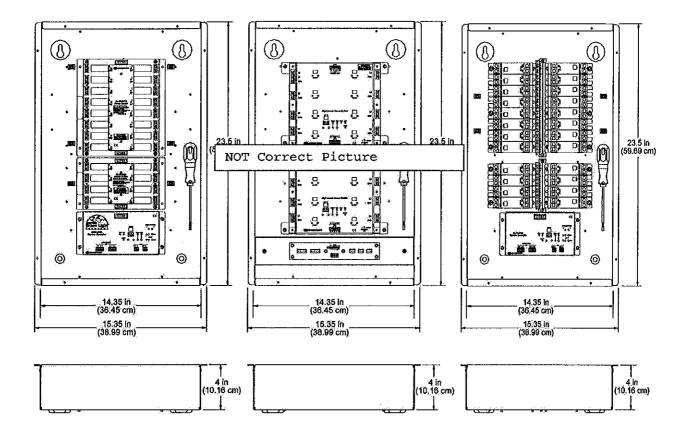


GLPD 3x4 Panel

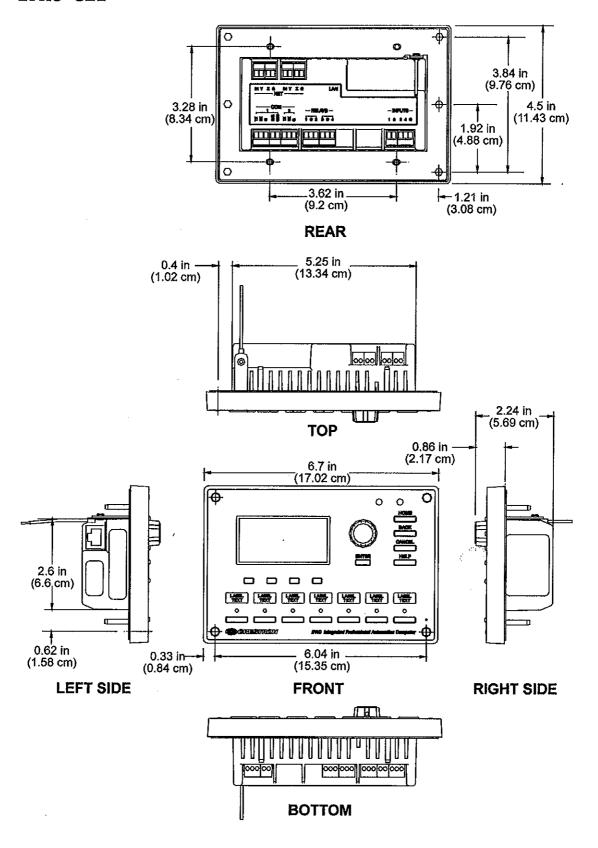




GLPD-FT Panel



IPAC-GL1





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