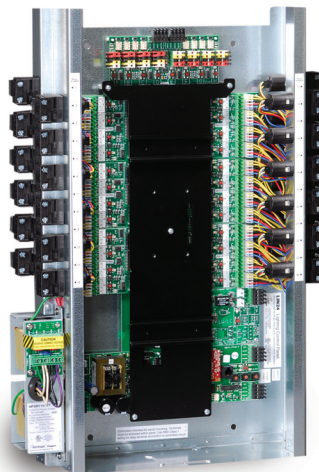


# COMPLETE CONTROL LEVEL INTERIOR (LIC8, LIC24, LIC48, LICA8, LICA24, LICA48)

| LIC

Distributed processing architecture with robust 2-wire digital network communications

Complete scheduling, monitoring, and reporting capabilities via exclusive WinControl software



Priority array based logic engine for simple execution of complex control scenarios

Compatible with legacy Complete Control systems

## Description

The Wattstopper Lighting Integrator Complete Control (LIC) system is a full featured networked control system that provides the maximum flexibility for lighting control by providing both panel based and distributed load control options. A digital communication bus allows user programming generated at the WinControl workstation to be transferred to the panels where it runs autonomously. Once loaded into the panels, the lighting automation features operate without the need for an online PC. This distributed processing capability ensures a high degree of reliability. LIC incorporates all the base features of the Lighting Integrator hardware platform including the HDR mechanically latching, heavy duty relay.

LICA panels, with local dataline support, provide local Dataline Switch functionality.

## Operation

Each LIC panel stores the user generated programming in non volatile memory housed within the Complete Control intelligence card. This controller monitors all inputs and uses a unique priority array based logic engine to generate the appropriate load response (relay control) based on simple or complex combinations of input triggers that can include schedules, override switches, occupancy sensors, photocells and signals from other building systems.

LIC features a library of scenario based control schemes that provide powerful control options without the complexity of low level user programming. These control scenarios include provisions for common area logic with egress, cleaning crew overrides, load shed, force on, force off, blink warn, and after hour time delay.

## Features

- Network up to 500 panels via open topology digital data bus
- Create user programming offline using WinControl software and transfer to panels
- Import site documentation from WinControl Designer project design and documentation software
- Programmable group codes with scenario based logic provide system-wide control
- Powerful data logging feature with manual and automatic log transfer to PC
- Option for seamless building system integration using BACnet protocol
- Supports Wattstopper occupancy sensors directly without power packs
- Generate detailed documentation reports of all aspects of system hardware and software via WinControl software
- Programmable analog inputs provide multiple set points for photocells or other analog devices
- Programmable dataline switches connect to panel with 4 wire open topology digital data bus
- Provides full support for Wattstopper AS series Automatic Wall Switch
- Remote network supervision and programming via TCP/IP connection using optional WebLink device
- BAA/TAA-compliant models available

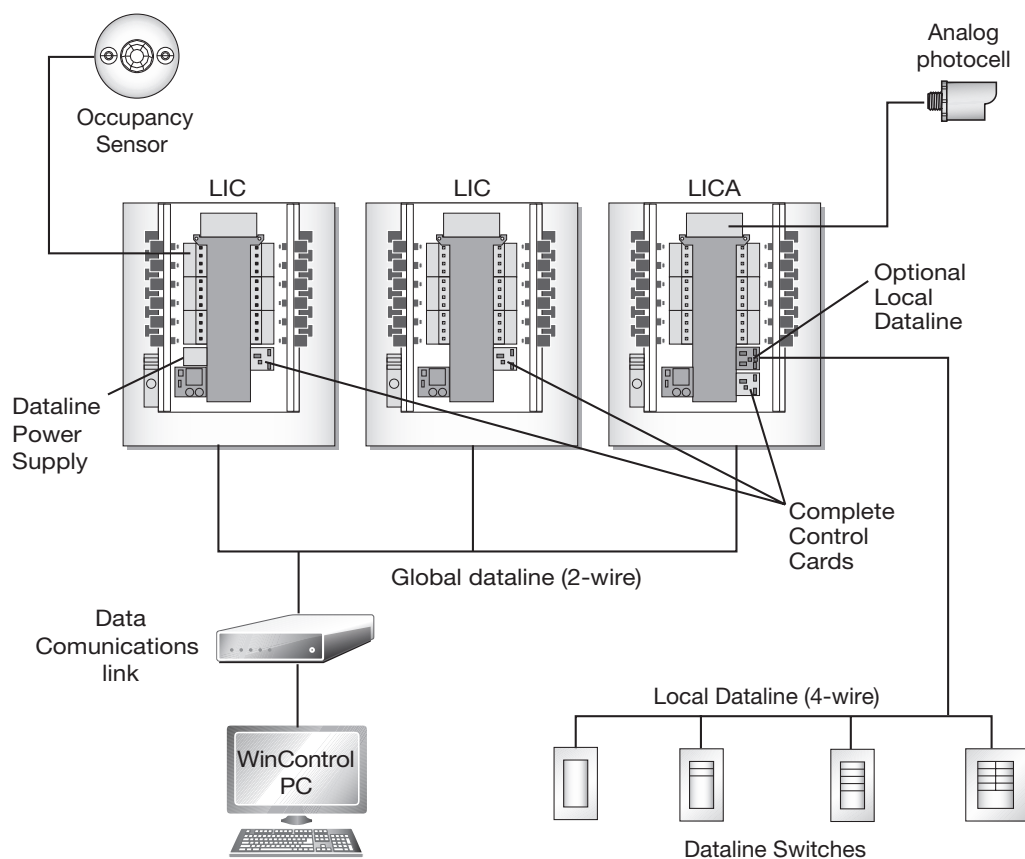
PROJECT	LOCATION/ TYPE
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## LIC Specifications

- Panel configurations provide 8, 24, or 48 relay size interiors
- Standard relay, individually replaceable Wattstopper HDR series, latching SPST, meets new NEMA electronic ballast requirements, 14,000 Amps SCCR, with integral manual override
- Digital network dataline, one pair twisted and shielded, open topology allows linear, star, and T network configurations for panels/connectivity 4000' max length
- Network link device provides RS-232 connection to digital dataline for PC or WebLink and visual indication of system operation
- Analog input, 12 VDC source provided, 0 – 4 VDC input, 8 inputs provided per group switching card
- Optional local dataline, two pair twisted, open topology allows linear, star, and T configurations, 63 HDLS series switch addresses available per dataline, 1500' max length (LICA option)
- Analog set points, 32 maximum per panel, high set/low set with individual high/low time delays
- Direct wire switch inputs, one each per relay and group switch channel, automatically configure for occupancy sensor operation
- Pilot light output per relay and group switch channel, configurable for any Class 2 voltage
- DIN rail mounting for automation modules
- UL listed, one year warranty

## LIC System Layout

### Panel System Layout and Configuration



Note: Dataline power supply required in one panel only.

## General LI Information

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### Description

Wattstopper's Lighting Integrator (LI) is a low voltage, relay based lighting control panel. Panel interiors are configured as 8, 24 or 48 relay capacity with the quantity of relays installed as called for on the order. The interior mounts into the appropriate enclosure. The LI panel enclosure and cover are shipped separately from the panel interior to facilitate project rough-in requirements.

### Operation

LI relays are driven to a latched on or off position via a 24 volt DC pulse generated by the relay driver cards. A momentary pushbutton is provided for each relay to manually toggle the relay's state with each button press. An isolated contact in the relays provides positive status feedback to the relay driver circuits, which are annunciated by an LED associated with each relay. Removable terminal blocks allow connection of direct wired low voltage devices for remote control of relays.

- Interior provides complete isolation between line and low voltage when used with an LI enclosure (LENC)
- Individual plug-in, latching style single pole HDR relays with isolated pilot/status contacts
- Integral push button override, status LED, and pilot light output per relay
- Two slots available for optional automation, networking and integration control cards

Inputs can be wired to accommodate maintained or momentary three wire or two wire inputs. The switch input circuits are auto sensing and will automatically configure appropriately when Wattstopper occupancy sensors are connected.

### Group Switching

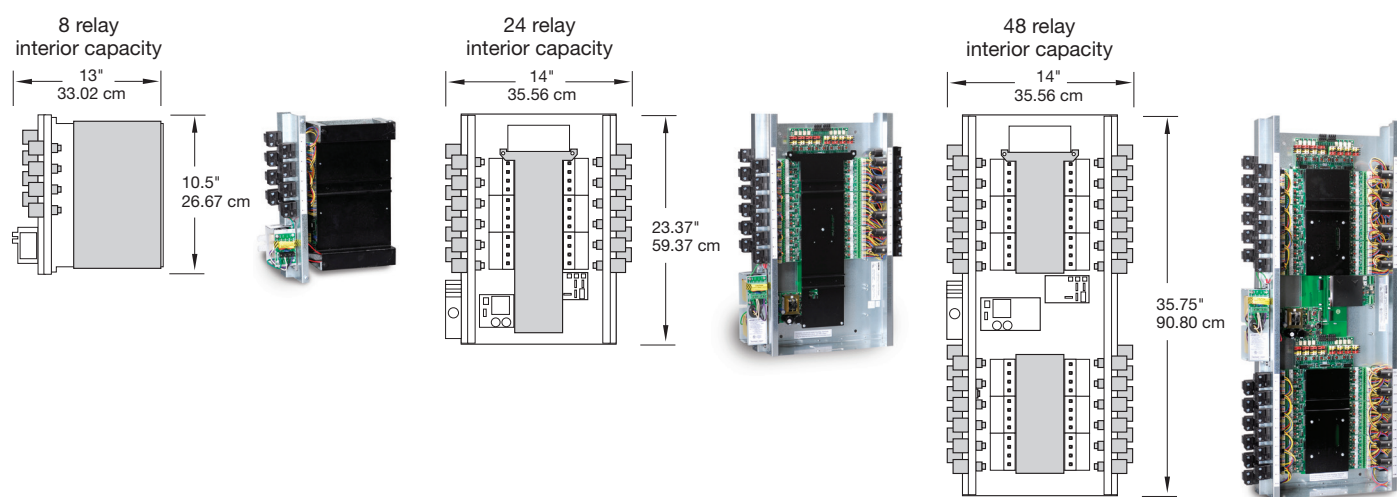
Group switching, also referred to as Smartwired switching, is a simple button press interface that allows any quantity of relays in a panel to be assigned quickly to each group switching channel for common on/off control or for pattern (scene) control. Each of the eight channels is provided with an override pushbutton, LED status indicator and terminals for connection of wall switches and occupancy sensors. An eight or 24 size panel can be ordered with one group switch card (8 channels), 48 size panels can have two group switch cards for a total of 16 channels (8 controllable by scheduling, eight by switching only).

- Supports Wattstopper low voltage occupancy sensors without need for separate sensor power packs
- Smartwiring feature allows grouping of relays for common control
- DIN rail mounting provided within the Class 2 section for mounting of optional accessories
- Control multi-pole circuits with optional contactors and compatible LENC enclosure
- Optional configuration available for use on emergency lighting circuits

## General LI Specifications

- Interior capacity:
  - 8 SPST relays
  - 24 SPST relays
  - 48 SPST relays
- Input voltage options, 120/277V 60 Hz, 120/347V 60 Hz, 240V 50 Hz
- Group switching, eight channels per installed group switching card. One card max per LI8 and LI24. Two cards max LI48.
- Low voltage switch inputs, removable terminal blocks with tool-less connection, configurable for three wire momentary, two wire momentary (toggle), and two wire maintained dry contact switches or Wattstopper occupancy sensors.
- Accessory power available
  - LI8: 1000 MA @24VAC or 800 MA @ 24VDC
  - LI24 and LI48: 1400 MA @ 24VAC or 800 MA @ 24VDC
- SCCR (short circuit current rating) 14,000 amps with HDR Heavy Duty Relay
- HDR SPST relays:
  - Coil voltage, 24 VDC, pulse ON and pulse OFF
  - Mechanically latched contacts
  - ½" K.O. mounting, LV plug-connection, individually replaceable
  - UL 20 listed for receptacle circuit control
  - Contact ratings
    - 30 amps ballast @ 277V
    - 20 amps ballast @ 347V
    - 20 amps tungsten @ 120V
    - 30 amps resistive @ 347V
    - 1.5 HP @ 120V
  - Endurance: 300,000 mechanical cycles
- Pilot light output, 24 V rectified or 24VAC, other voltages configurable with external power supply
- One year warranty

## Panel Interior Dimensions



## Ordering Information

Interior Capacity	Voltage Options	Relay Count	Group Switch Card	Installed Options		
				Emergency Relays	Coil Voltage	Dataline Power Supply
<input type="checkbox"/> LIC8	<input type="checkbox"/> 115/277	___ HDR relays installed (max of interior capacity)	___ GS cards (max 1 in 8, 24, 2 in 48)	___ EM relay count (Not available in 8-relay size panels; max. of 24 in 24-relay or 48-relay size interior)	<input type="checkbox"/> 115	___ DP dataline power supply (one required per each network)
<input type="checkbox"/> LIC24	<input type="checkbox"/> 115/347				<input type="checkbox"/> 240	
<input type="checkbox"/> LIC48	<input type="checkbox"/> 240				<input type="checkbox"/> 277	
<input type="checkbox"/> LICA8					<input type="checkbox"/> 347	
<input type="checkbox"/> LICA24						
<input type="checkbox"/> LICA48						