

NEW

5-Series LED driver with EcoSystem®

Superior LED dimming and guaranteed system performance



Dimensions

Length: 215 mm
Width: 54 mm
Height: 31 mm



5-Series LED drivers with EcoSystem
New 50W Driver—specify today

Dimensions

Length: 359 mm
Width: 30 mm
Height: 25 mm

- **Unmatched LED dimming performance and reliability**
 - Flicker-free, smooth, continuous dimming down to 5%
 - Designed for 10-year operating lifetime
 - 50,000 hours lifetime of operation at full-rated load
- **Lutron EcoSystem—guaranteed system interoperability, no call-backs**
 - Single party accountability and issue-free start-up
 - EcoSystem is a complete rigorous protocol, not a minimum standard
 - EcoSystem drivers, ballasts and lighting controls are engineered, tested and guaranteed to work seamlessly together
 - Helps meet energy codes and green building standards while using fewer components

Meets requirements:

- DALI compliant
- CE compliant
- RoHS compliant
- ENEC certified

For more information:

www.lutron.com/5seriesLED
www.lutron.com/findafixture
www.lutron.com/ledbuildamodel



Order now:

Call 0800 282 107

EcoSystem® Digital Addressability

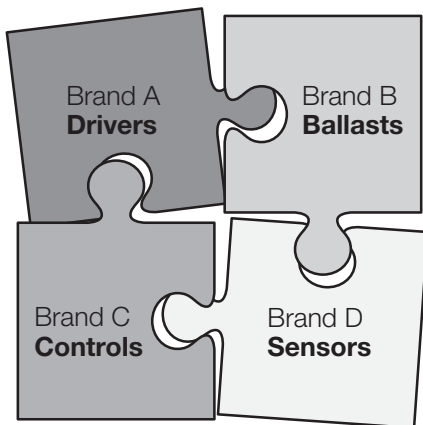
Benefits	EcoSystem	DALI
A digital control protocol with guaranteed compatibility and performance that has been engineered and tested into the system	✓	✗
One company takes ownership with a versatile control system that addresses any need	✓	✗
Implement any energy-saving strategy combining daylighting, occupancy and personal control without compromising visual comfort	✓ 100 groups or zones	✗ 16 groups or zones

Lutron EcoSystem

No headaches at start-up, no call-backs

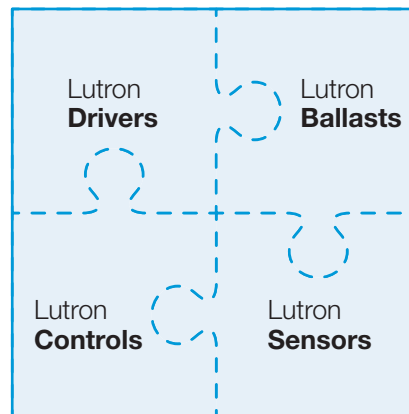
- Going beyond the DALI standard, EcoSystem is Lutron's enhanced digital ballast and LED driver communication technology providing guaranteed compatibility between devices and controllers
- Digital addressing enables easy reconfiguration and easy maintenance—each lighting fixture reports status and power consumption back to the centralized control system
- No incompatibility issues because it is all Lutron. We take complete ownership

Other Systems—Will it work?



A minimum standard can cause compatibility problems

Lutron EcoSystem—Designed to work together



EcoSystem is a complete, rigorous protocol that guarantees system performance

A versatile system that addresses any need

Lutron LED control solutions are available for any application from single-room retrofit solutions to whole building solutions. Solutions feature personal control, daylight harvesting and occupancy sensing.

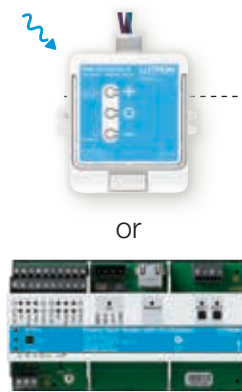
EcoSystem drivers work with Lutron systems in small, medium and large spaces.*

- Energi TriPak®—single room
- GRAFIK Eye® QS with EcoSystem—single room
- Energi Savr Node™ with EcoSystem—multiple room
- Quantum®—whole building
- HomeWorks® QS—residential and whole building

Keypads and sensors



Controllers



Drivers and ballasts



Clear Connect® wireless guarantees the performance and the reliability of the control system, with battery powered options for maximum flexibility

EcoSystem digital fixture control guarantees compatibility and performance of the solution.

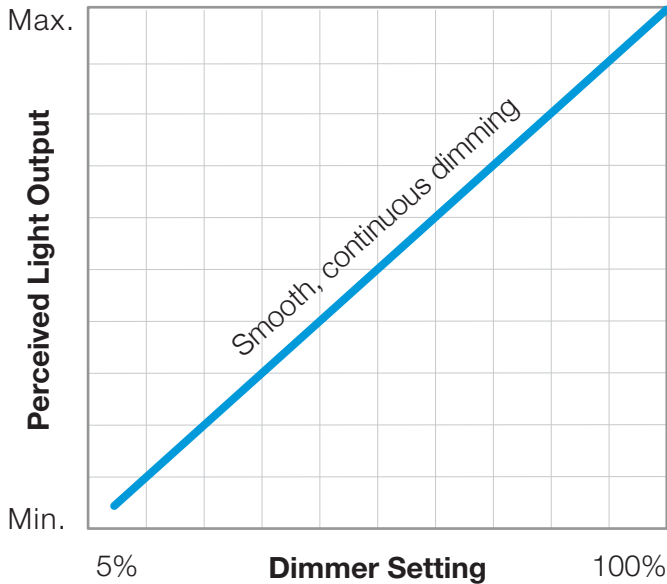
* Contact Lutron for availability in your region

Realize the full benefits of a digital control solution

- Overlay daylighting, occupancy and personal control for robust energy savings without compromising on visual comfort—use up to 100 EcoSystem groups
- Group commands ensure that fixture groups respond instantly, and in sync, to sensors and controls
- DALI systems are limited to 16 groups per link
- In some applications individual fixture commands can lead to “popcorning” which distracts the occupants as well as delays response to sensors and controls

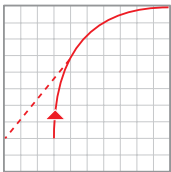
Lutron 5-Series LED Drivers

Unmatched LED dimming performance



- Smooth, continuous dimming—no pop-on, steps, flicker, or drop-out—which are common problems with other dimming LED drivers
- Designed for 50,000 hours of operation at full-rated load and backed by 50 years of Lutron experience designing power electronics
- The eye perceives a smooth linear variation of light level as the control is lowered or raised

Lutron LED drivers are designed to prevent these common problems when dimming an LED*



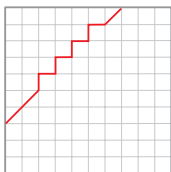
Pop-on

After being dimmed to low level and switched off, LED bulb does not turn on until slider is moved up



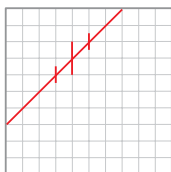
Dead travel

Adjusting the control without a corresponding change in light level



Visible steps

Visible steps in light level while adjusting the slider



Flicker

Small changes in light intensity



Drop-out

Light turns off unexpectedly

Designed for performance and reliability

Lutron's best-in-class product features:

Feature	Benefit
Smooth, continuous, and consistent dimming	No drop-outs at low end or flicker during dimming
Less than 0.3W standby power at 240V with the 50W driver and less than 0.5W standby power at 240V with the 35W driver	Exceeds IEC requirements
SELV output that is conveniently remote mountable up to 18m*	Flexibility to install driver in fixture or in panel
Designed for 10 years of operating lifetime (50,000 hours)	Reliability and confidence in your LED control solution
Sophisticated software algorithms maintain a 0.95 power factor at 220V–240V	Reduce overall power-system loss and demand charges on your power system
Power failure protection memory	Lights turn on to the last level after a power failure rather than a pre-set level
Digital inputs are miswire protected up to 240V	Eliminates costly damage to fixture due to contractor wiring mistakes
Tested to survive 4000V surge	Protects the fixture in regions that are prone to lightning strikes
Patented thermal fold-back protection	Reduces power output to protect driver and fixture if installed incorrectly

* See specification sheet for model-specific remote mount distances

Select the right driver for your application

5-Series 35W driver

- Ideal for downlights and appropriate for any low wattage LED luminaire
- Constant current reduction dimming for LEDs up to 35W
- Can be remote mounted up to 15m away from fixture
- Fits standard 60mm ceiling cutouts
- Lutron LED drivers are prequalified with LED modules from major manufacturers such as Osram, Philips, GE, Citizen, Bridgelux, and Cree. Contact Lutron for a list of prequalified modules.
- Control terminals protected from 240V mis-wire
- Fast turn-on time <100ms from electronic off
- Meets DALI standard



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Model Number	Maximum Power (Watts)	Rated Output Current (Amps)	Compatible Load Voltage Range at Rated Output Current	Typical Efficiency at Maximum Power
LDE53E1CRN-RA070	20 to 35W	0,700A	27,7 to 50,0V	87%
LDE53E1CRN-JA105	20 to 35W	1,050A	18,8 to 33,3V	85%
LDE53E1CRN-LA140	18 to 35W	1,400A	12,9 to 25,0V	87%
LDE52E1CRN-PA050	12 to 25W	0,500A	24,0 to 50,0V	85%
LDE52E1CRN-FA070	12 to 25W	0,700A	16,4 to 35,7V	85%
LDE52E1CRN-MA105	12 to 25W	1,050A	11,0 to 23,8V	84%
LDE52E1CRN-KA140	13 to 25W	1,400A	9,3 to 17,9V	83%
LDE51E1CRN-GA035	8 to 18W	0,350A	22,2 to 51,4V	83%
LDE51E1CRN-NA050	8 to 15W	0,500A	15,0 to 30,0V	80%
LDE51E1CRN-QA070	7 to 15W	0,700A	10,0 to 21,4V	80%

5-Series 50W driver

- Ideal for linear pendants, linear recessed, and troffer fixtures
- Constant current reduction dimming for LEDs up to 50W
- Standard T5 ballast size
- Can be remote mounted up to 18m away from fixture
- 0.3W typical standby power
- Control terminals protected from 240V miswire
- Fast turn-on time <100ms from electronic off
- Meets DALI standard



Dimensions

Length: 359 mm

Width: 30 mm

Height: 25 mm

Samples available
July 17, 2014

How to build a model number: EcoSystem® 5-Series

LDE55E1CMN-UAxxx

example: LDE55E1CMN-UA070

For further assistance selecting your model number, contact our LED Centre of Excellence at LEDs@lutron.com

Current Level (for Constant Current):

070 = 0,70 A; 071 = 0,71 A . . . 133 = 1,33 A

You can specify the EcoSystem 5-Series LED Driver for use with fixtures under 35W.

Contact us at **LEDs@lutron.com** to request your fixture/driver combination.

For further details on our LED Control Centre of Excellence visit us on the web at **www.lutron.com/LED**.

FREEPHONE: 0800 282 107
Tel. +44(0)20 7702 0657
Email: lutronlondon@lutron.com
www.lutron.com/europe

