

# GRAFIK Eye® QS

A customizable light control system that adjusts lights and shades for any activity



GRAFIK Eye QS (75% of actual size)

# Benefits and applications

## What are the benefits?

### **Improve comfort and productivity**

- Ensures the right visual environment for any activity through simple, preset lighting scenes
- Increases employee productivity by 5-10% by giving them the ability to work in their preferred light level!

### **Save energy and comply with codes**

- Reduces lighting energy usage up to 60% with high-end trim, personal control, integral astronomic time clock, occupancy/vacancy and daylight sensing, and after-hours mode
- Cuts cooling and heating costs by up to 10% when using with Lutron shades
- Complies with ANSI/ASHRAE/IESNA Standard 90.1-2007, IECC, and California Title 24 energy codes
- Reduces greenhouse gases by eliminating unnecessary energy use

### **Simplify design and integration**

- Connects directly to Sivoia® QS wired or wireless shades, occupancy/vacancy and daylight sensors, keypads, and digital ballasts
- Includes astronomic timeclock without the need to connect to a third party device
- Integrates easily with A/V, HVAC, and other systems through RS232/Ethernet/CCI

### **Enhance flexibility and expandability**

- Digital programming is easily reconfigurable to meet the changing needs of a project or space
- Add components to grow the size and capabilities of the system



Conference Room



Hotel Ballroom

# Applications

## **Conference Room**

Create a multi-functional space that will allow for quick and easy transitions of the space and lighting. Preprogrammed lighting scenes for common room tasks enable intuitive use.

## **Hotel Ballroom**

Create the perfect ambiance to match the room's varying activities. Add in partition sensors to allow for quick and easy transitions of space and lighting with minimal interruptions.

## **Classroom**

Enhance the learning environment to improve performance and comfort. Integrate sensors to save energy and reduce maintenance costs.

## **Home Theater**

Make your home entertainment experience truly enjoyable by creating lighting scenes that fit with the room's core activities.

## **Other applications:**

- Restaurants
- Lecture halls
- Retail floor spaces
- Worship spaces



Classroom



Home Theater

# Key features

## Backlit zone buttons

Raise or lower each group of lights. LEDs indicate current light level for each zone.

## Multiple zones

Control up to 16 individual zones.

## Information display

Easily read energy savings, lighting levels, and time clock information.

## Backlit master override buttons

Temporarily raise and lower light levels of a complete scene.

## Create scenes

Backlit engravable buttons for selecting scenes, with or without shades. (changeable in the field)

## Control your shades

Backlit engravable shade control buttons. (changeable in the field)

## Time clock

Provides scheduling to meet energy code requirements. Includes after-hours mode option.

## Infrared remote control

Provides handheld control with a wireless remote.

## Wireless connections to:

- Sivoia® QS Wireless shades and drapery tracks
- Radio Powr Savr™ occupancy/vacancy sensors
- Pico® wireless controls
- Radio Powr Savr™ wireless daylight sensor

## Wired connections to:

- QS interfaces
- seeTouch® QS keypads
- Sivoia QS shades
- Contact closure functions
  - Occupancy sensors
  - Emergency interface
  - Afterhours enable
  - Timeclock enable
  - Lockout
- Wired IR

## EcoSystem\*:

- Up to 64 digital addressable ballasts
- Daylight sensors
- Occupancy/vacancy sensors

# Model comparison

## GRAFIK Eye® QS



Now with Clear Connect RF Technology™, GRAFIK Eye QS enables reliable communication with Lutron® light and shade control products in a space.

- Eliminates the need to run communication wiring to shades, sensors and additional GRAFIK Eye QS units
- Available in 3-, 4-, and 6-zone configurations
- Integral phase control dimmers provide control of incandescent/halogen, magnetic low-voltage, Lutron Tu-Wire® fluorescent dimming ballasts, and non-dimmed lighting loads
- Wired-only options available

## GRAFIK Eye QS with EcoSystem®

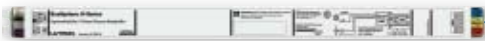


The GRAFIK Eye QS with EcoSystem combines the flexibility and scalability of the standard model with the additional benefit of an integral EcoSystem bus supply.

- Direct connection to Lutron digital fluorescent ballasts and LED drivers
- Available in 6-, 8-, and 16-zone configurations
- Wired-only options available



# Conference room



## **NEW EcoSystem® H-Series ballasts**

cost-effective, digitally addressable 1% dimming ballasts that work with wired and wireless sensors and controls—ideal for any application, both retrofit and new construction



## **NEW Radio Powr Savr™ wireless daylight sensor**

wireless sensor gradually dims lights in response to the amount of available daylight



## **Sivoia® QS Wireless shades**

automated window shades move quietly to eliminate glare and reduce heating and cooling costs



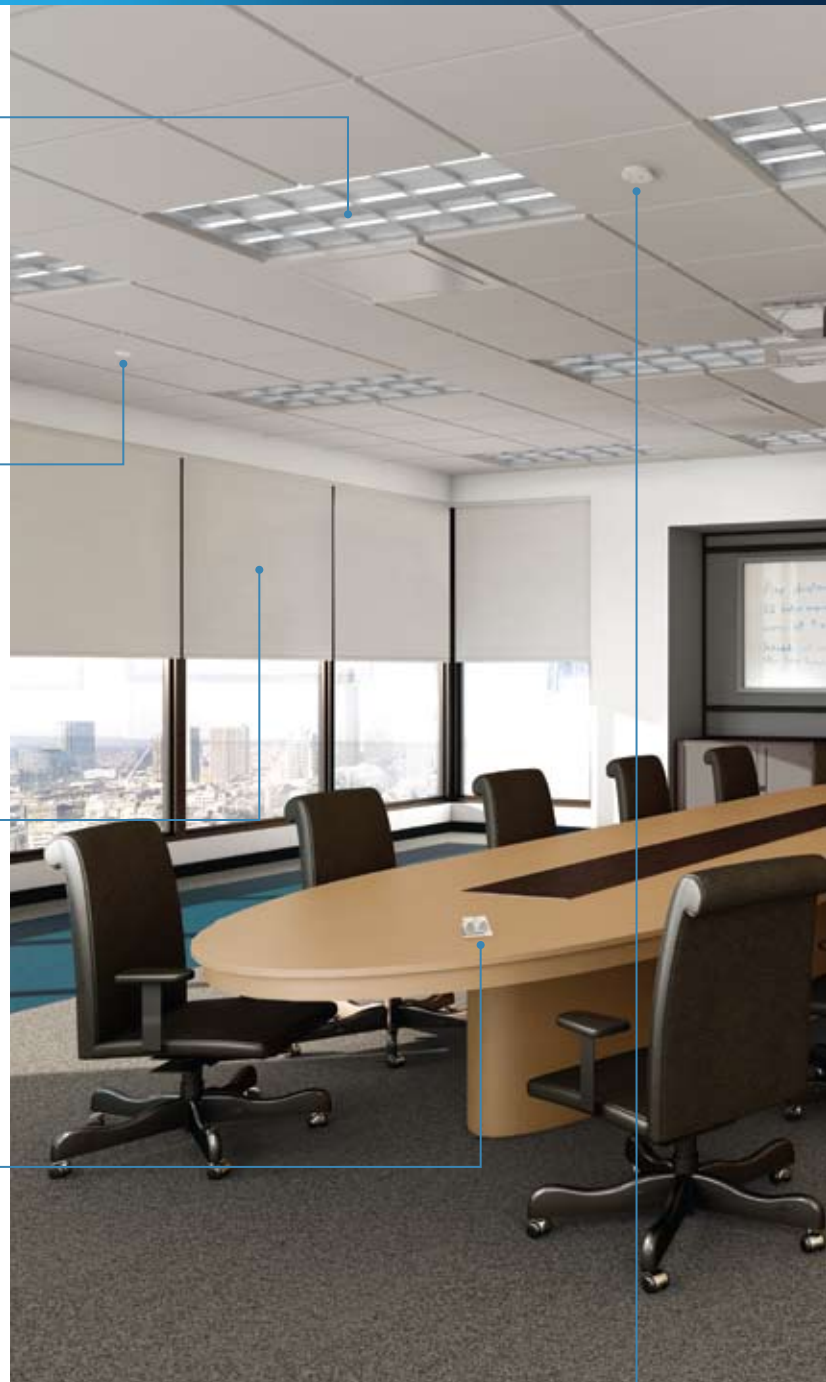
## **NEW Pico™ wireless controls**

tabletop, handheld, or wall-mount controls that adjust lights or shades from anywhere in the room



## **RS 232/ Ethernet Interface**

provides integration with third-party touch screens, A/V equipment, HVAC, building management systems and other digital equipment.



## **Radio Powr Savr™ wireless occupancy and vacancy sensor**

wireless sensor provides energy savings by ensuring lights are off when rooms are unoccupied



Lutron solutions do more than just control the light in a space. With the right design strategies, they can save substantial amounts of energy, reduce operating costs, and improve productivity.

## Energy-saving strategies

- ▶ High-end trim<sup>2</sup> (20% lighting)
- ▶ Occupancy or vacancy sensing<sup>3</sup> (15% lighting)
- ▶ Daylight harvesting<sup>4</sup> (15% lighting)
- ▶ Personal dimming control<sup>5</sup> (10% lighting)
- ▶ Controllable window shades<sup>6</sup> (10% AC)
- ▶ Timeclock scheduling\* (variable)

## Potential lighting energy savings

# 60%

\* When scheduling is used without occupancy sensing or vacancy sensing, 15% energy savings can be expected.

Sources can be found on back cover.



**NEW GRAFIK Eye® QS Wireless with EcoSystem** customizable preset light control with built-in timeclock that allows users to adjust the lights and shades for any task and save energy at the touch of a button



**NEW Hi-lume® A-Series LED driver** the world's first LED drivers to offer smooth, continuous 1% dimming for virtually any LED fixture—whether it requires constant current or constant voltage

# Key components system diagram



**GRAFIK Eye® QS with EcoSystem®** includes wired and wireless connections to control lights, shades, and energy usage automatically or with the touch of a button

- A** Low-voltage QS Link power and communications (4-conductor)
- B** Communications (2-conductor digital link)
- C** Wireless RF Communication

## QS link



**Quantum®** provides total light management for an entire building



**Sivoia® QS smart panel power supply**



**Sivoia QS shades** reduce glare and solar heat gain for increased comfort, productivity, and energy savings, while preserving exterior views



**seeTouch® QS keypads** control lights and shades at the touch of a button

Additional QS devices



**QS RS-232/Ethernet interface** allows for seamless integration with A/V, HVAC, and building management systems



**QS input/output device** provides integration with third-party equipment requiring contact closure input/output



**QS DMX interface** provides integration with LEDs and theatrical equipment

Third-party devices



## EcoSystem



### Hi-lume® 3D digital addressable ballasts

provide architectural dimming to 1%



### EcoSystem digital addressable ballasts

dim linear lamps to 10% and CFLs to 5%



### Wired occupancy/vacancy sensor



### Wired daylight sensor



### EcoSystem H-Series digital addressable ballasts

provide architectural dimming to 1%



### Hi-lume A-Series LED drivers

provide high-performance dimming of energy-efficient LEDs—architectural dimming to 1%

Up to 64 digital addressable ballasts or drivers

## Wireless RF communication



### NEW Radio Powr Savr™ wireless occupancy/vacancy sensor

automatically turns lights on/off or dims based on room occupancy/vacancy



### NEW Pico® wireless control

handheld, tabletop, or wall-mount versions available to control lights and shades from anywhere in the space



### NEW Radio Powr Savr wireless daylight sensor



### Sivoia QS wireless panel power supply



### Sivoia QS wireless shades

reduce glare and solar heat gain for increased comfort, productivity, and energy savings, while preserving exterior views

# Available colors to coordinate with any décor

## Architectural matte finishes



White  
(WH) **f, s, b**



Ivory  
(IV) **f, s, b**



Beige  
(BE) **f, s, b**



Almond  
(AL) **f, s, b**



Lt. Almond  
(LA) **f, s, b**



Gray  
(GR) **f, s, b**



Brown  
(BR) **f, s, b**



Black  
(BL) **f, s, b**

## Anodized aluminium finishes



Clear  
(CLA) **f, s**



Black  
(BLA) **f, s**



Brass  
(BRA) **f, s**

## Architectural metal finishes



Bright Brass  
(BB) **f, s**



Bright Chrome  
(BC) **f, s**



Bright Nickel  
(BN) **f, s**



Satin Brass  
(SB) **f, s**



Satin Chrome  
(SC) **f, s**



Satin Nickel  
(SN) **f, s**

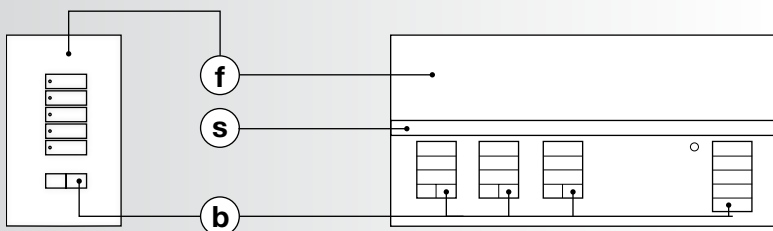


Antique Brass  
(QB) **f, s**



Antique Bronze  
(QZ) **f, s**

## Color option guide



seeTouch® QS

GRAFIK Eye® QS

- f** faceplate color option
- s** stripe color option
- b** button color option

**Satin Color® matte finishes**



Hot  
(HT) **f, s**



Merlot  
(MR) **f, s**



Plum  
(PL) **f, s**



Turquoise  
(TQ) **f, s**



Terracotta  
(TC) **f, s**



Greenbriar  
(GB) **f, s**



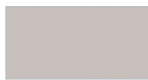
Bluestone  
(BG) **f, s**



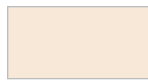
Mocha Stone  
(MS) **f, s**



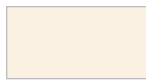
Sea Glass  
(SG) **f, s**



Taupe  
(TP) **f, s, b**



Eggshell  
(ES) **f, s, b**



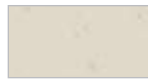
Biscuit  
(BI) **f, s, b**



Goldstone  
(GS) **f, s**



Desert Stone  
(DS) **f, s**



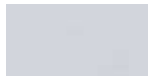
Stone  
(ST) **f, s**



Limestone  
(LS) **f, s**



Snow  
(SW) **f, s, b**



Palladium  
(PD) **f, s**



Midnight  
(MN) **f, s**



Sienna  
(SI) **f, s**



Use the GRAFIK Eye QS Design Tool to design a system or customize a control unit. Adjust colors and engraving to visualize the control unit before purchasing.

[www.lutron.com/grafikqsdesigntool](http://www.lutron.com/grafikqsdesigntool)

# Sources

- 1 Energy Information Administration, 2003 Commercial Buildings Energy Consumption Survey, released September 2008.
- 2 California energy study. <http://www.energy.ca.gov/efficiency/lighting/VOLUME01.PDF>
- 3 IESNA 2000 Proceedings, Paper #43: An analysis of the energy and cost savings potential of occupancy sensors for commercial lighting systems. "Occupancy sensor savings range from 17% to 60% depending upon space type and time delay settings."
- 4 US Department of Energy. How to Select Lighting Controls for Offices and Public Buildings. Claim: 27% potential savings using daylight harvesting.
- 5 IESNA 2000 Proceedings, Paper #34: Occupant Use of Manual Lighting Controls in Private Offices. "Giving the occupant manual switching and dimming provided a total of 15% added savings above the 43% achieved by motion sensors."
- 6 Lutron commissioned simulation by T.C. Chan Center for Building Simulation and Energy Studies, University of Pennsylvania, September 2008.



[www.lutron.com/grafikeyeqs](http://www.lutron.com/grafikeyeqs)

Lutron Electronics Co., Inc.  
7200 Suter Road  
Coopersburg, PA 18036-1299

World Headquarters 1.610.282.3800

Barcelona | Beijing | Berlin | Chicago | Dubai | Hong Kong | London | Los Angeles | Madrid |  
Mexico City | New York | Paris | São Paulo | Shanghai | Singapore | Tokyo | Toronto

Technical Support Center 1.800.523.9466  
Customer Service 1.888.LUTRON1

© 08/2010 Lutron Electronics Co., Inc. | Made and printed in the U.S.A. | P/N 367-1603 REV B

