

## Gamma Lighting Controls

### Basic system information

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## INTRODUCTION

- Complete, full function, lighting control system
- Built on the robust and proven technology of KNX
- The right light - in the right location - at the right time
- Provides lighting levels precisely to meet occupant needs
- Maximize comfort and delivers superior energy savings
- Stand-alone lighting control, or
- Integrated building management control system
- Distributed control architecture
- Manage all aspects of your facility's lighting
- Occ sensors, daylight control, plug-load, shades & manual override



# Product descriptions

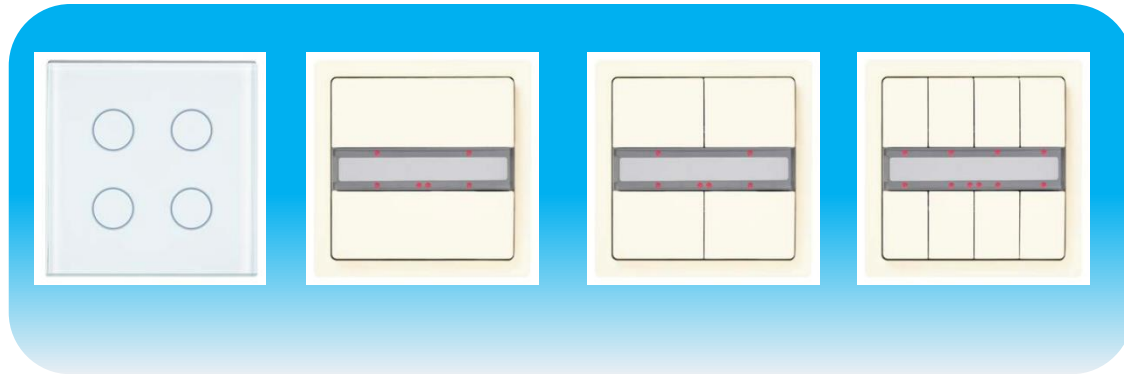
## Gamma inputs – HMI



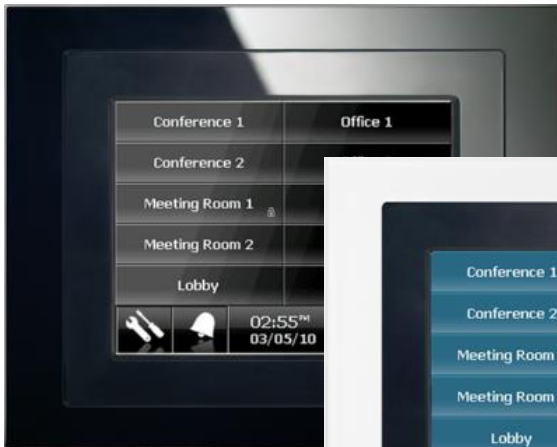
### Switch interfaces



### Switches



### Displays



### Touch panel



### Small HMIs



## *Product descriptions*

### **Gamma inputs – Sensors**

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**Occupancy Sensors**



**Brightness Sensor**



**Outdoor Sensors**

**Weather Station**

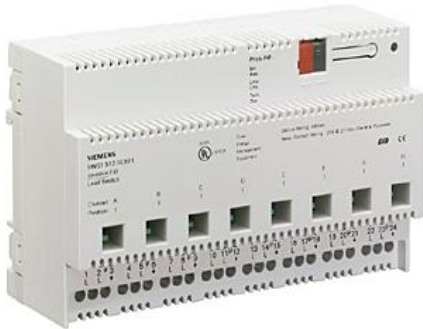


**Combo occupancy and brightness**



**Handheld remote**





### Load Actuator

8 Relays - 20A at 120/277VAC  
(15A at 347 VAC)



### Switch/Dim Actuator (0-10v Analog Dimming)

Up to 60 ballasts each circuit,  
depending on the ballasts, more if  
ON/OFF function not required



### DALI Controller

Up to 64 ballasts each  
circuit, depending on  
the ballasts.

Dali Twin = 128 Ballast

### Blind Controller

Controls up to four sets  
venetian blinds





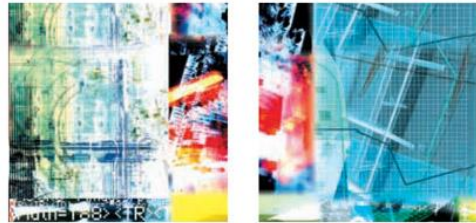
**Global, Open, non-Proprietary Standard**  
(requires Non-Proprietary implementation)

**ANSI/ASHRAE**

Approved the KNX technology as the US Standard ANSI/ASHRAE 135 in 2005.

**ISO/IEC**

Approved the KNX technology as the International Standard ISO/IEC 14543-3 in 2006.



[www.knx.org](http://www.knx.org)

- More than 7000 certified products
- 402 **KNX** Manufacturers (Siemens, ABB, Schneider, Merten, CISCO, Crestron, Lutron etc)
- More than 302 training centers in 56 countries
- 11 accredited test labs
- 50,000+ Trained Partners (130 Countries)
- More than 112 KNX Scientific Partners
- More than 25 million installed products

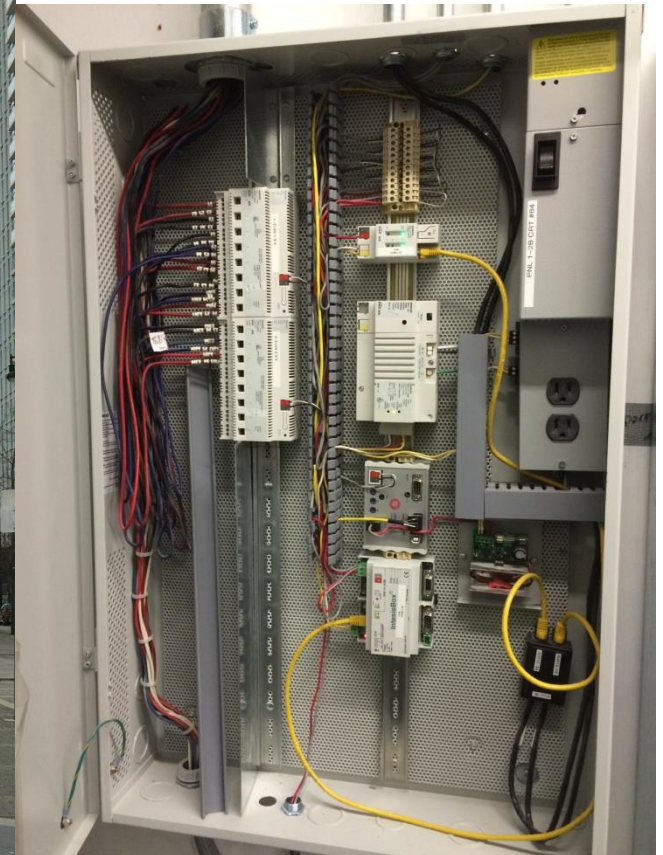
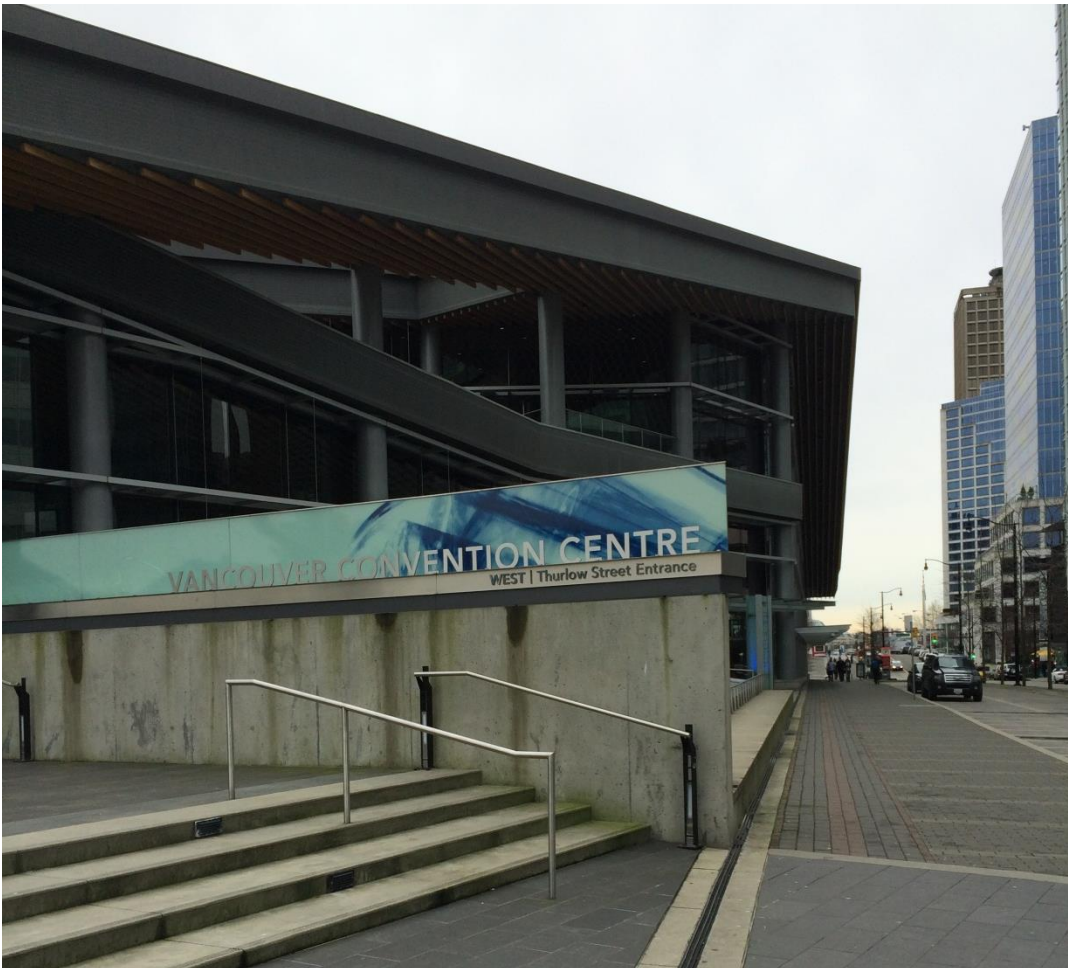
## Case Study 1 – Vancouver Convention Centre



- Built for the 2010 Winter Olympics, Vancouver Convention Center has the most sophisticated lighting controls and the highest flexibility for future modifications.
- The DALI system allows for dimming of compact fluorescent lamps individually and obtaining each lamp's life cycle information.
- Has over 2,100 DALI ballasts, totaling more than 10,350 control points.

# Vancouver Convention Center Prior to the Olympics

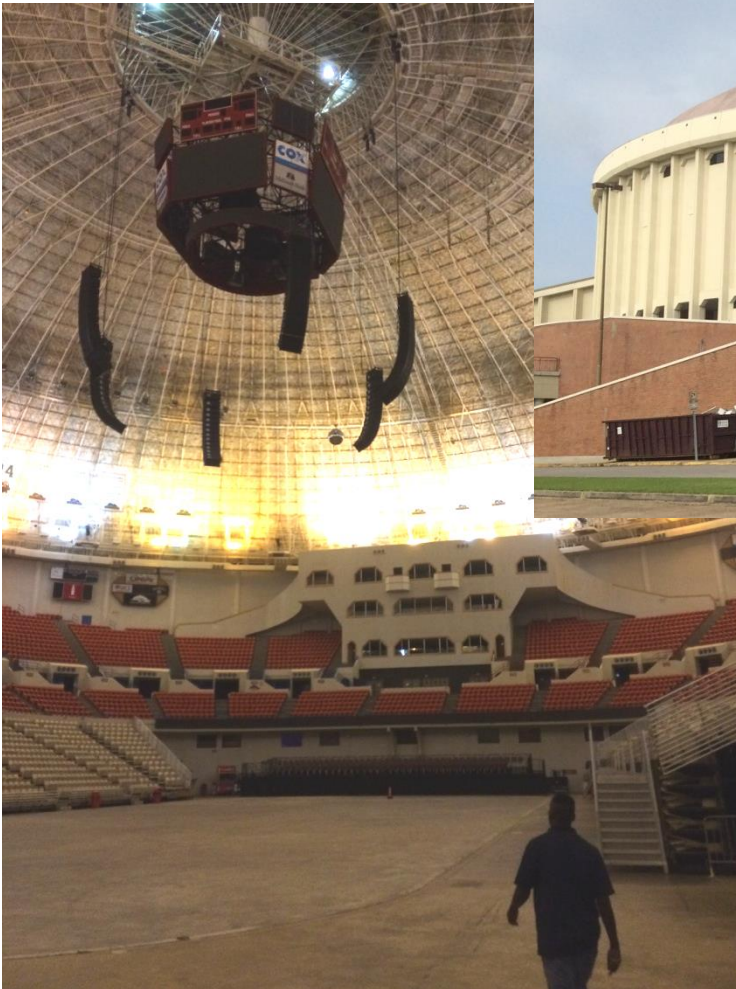
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# Cajun Dome - Lafayette, LA Arena & Convention Center

**SIEMENS**



Converted entire facility adding Touch screens and manual control



# APPLICATIONS

## **Education/Universities** have multiple buildings

- Evolving campus construction, mix of old and new
- Changing needs over time
- Classrooms, sports facilities, public spaces, dorms, libraries
- Value a single source provider

## **Commercial/Offices** are chronically over-lit and under-controlled

- Owners looking to reduce energy bill
- Tenants expecting more and better control

## **Hospitals, Hospitality, Commercial/Industrial**

- Building have high performance needs and specialized spaces.
- Institutional / Assembly – Convention centers, Stadiums, Warehouses
- Government Gamma devices are in GSA and meet TAC requirements

Thank you for your interest in Gamma Lighting

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Chicago, Illinois Cloud Gate – the “BEAN” in Grant Park