

A CALL TO ACTION: SUSTAINABILITY AND NETWORKED CONTROLS



Did you know that lighting consumes close to 35% of all electricity used in US commercial buildings? Acuity highlights the importance of networked lighting controls when it comes to minimizing this energy impact and how the lighting industry can cut their contribution to CO2 emissions.

Networked controls reduces energy consumption by nearly half when compared to LED lighting without any controls. This jumps to 63% reduced energy if each fixture is capable of individual control! While energy codes often drive the adoption of networked controls in California, the adaptability of a networked system is a valuable asset over time. We all know the lifespan of commercial lighting has increased with LEDs, so the investment of controls anticipates a tenant's needs as they change. Networked controls lends a level of customization and flexibility worth the effort upfront, with benefits like trimming/scene control, multi-zone occupancy sensing, remote configuration, and HVAC integration. Based on Acuity's findings, we profit from networked controls just as much as our planet.

Click Here to Read More About **Sustainability and Networked Lighting Controls**

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WHAT IS DC2DC?

DC versus AC power

It's easiest to first understand that there are two methods of electrical current: direct current (DC) which flows in one direction, and alternating current (AC) which has power flowing back and forth.

DC is commonly sourced from generators like solar panels and also found in batteries. Modern technology like cell phones, laptops, and wireless headphones all use DC power because of the presence of batteries.



In comparison, AC is generated through mechanical generators like steam turbines and combustion engines. Traditional power plants currently feed AC to your house and most buildings, so anything connected to an electrical outlet are AC powered.

Most commercial projects require AC to DC electrical conversions because of power grids being AC. Acuity's DC2DC system looks to solar power as a new, sustainable solution for lighting with a bevy of additional benefits.

Advantages of DC2DC

Sustainability: The DC2DC platform allows PVC (photovoltaic or solar cell/panels) systems to smoothly integrate with DC-powered lighting systems. By keeping the infrastructure DC (wind/solar to the fixtures), this can maximize renewable energy usage and hit more sustainability goals within a company.

Energy Efficiency: Most buildings' electrical systems maintain AC to DC (or vice versa) power transformations, which typically cause anywhere from 5%-15% energy loss. Removing the need to convert power means a more efficient electrical system.

Plug-and-Play: Without the need for coils and coils of conduit, DC2DC can slash labor and materials budgets on jobs. As an example, Acuity removed **5.4 miles of conduit** on a hospital job that retrofitted to the DC2DC platform!

Simplification of Lighting Controls: Depending on the needs of a space, some can end up being controls dense with a large number of devices, switches, and zones. DC2DC provides the opportunity to reduce the number of controls components, allows for more zoning flexibility, and removes complicated wiring. To put it simply, DC2DC can declutter controls.

Easier on Retrofit Jobs: This isn't just a solution for new construction! Reconfiguring a space doesn't involve as much labor because all the fixtures and power are low voltage.

Learn more at Light! Design Expo





IMPROVED STRIP LIGHT FROM LITHONIA LIGHTING





Lithonia's Contractor LED Single Strip (CSS) light now has expanded options. With a reputation for versatility and ease of install, the CSS also suits most basic applications, from residential closets to workshops and warehouses. One of the top new features is the Switchable White and Adjustable Lumen technology, meaning one SKU can fill multiple fixture applications based on the design's needs.

Additional Features:

- Available in 4' and 8' lengths
- 3500K, 4000K, and 500K color temperatures, 80CRI
- Can be surface or suspension mounted with additional accessories
- Can be mounted continuously with included row aligner bracket
- Toolless entry and quick disconnects
- Optional SensorSwitch occupancy controls
 - Visible Light Programming (VLP) for standalone
 - Just One Touch (JOT) for wireless pairing with other JOT enabled fixtures
- Optional integrated emergency backup

Helpful Documents:

- Updated Brochure
- Spec Sheet
- Video
- FAQs



NLIGHT QUICK REFERENCE GUIDE

If you need a visual guide for all things nLight, they've got you covered! The newly updated **nLight Quick Reference Guide** covers all their top products, both wired and wireless. With a simple chart listing each product image, model name, CAD symbol, and description, specifying nLight is easy. You can even access additional resources, like typicals, BIM models, specification sheets, and energy code application guides. Click on one of the products below to explore the guide!

nLight Wired

Wired Daylight Sensors

Product Image	Model Name	CAD Symbol	Description
	nCM PC RJB	®	Low Voltage Ceiling Mount Sensor; On/Off Photocell
	nCM ADCX RJB	0	Low Voltage Ceiling Mount Sensor; Automatic Dimming Control Photocell
	nRM PC	3	Low Voltage Recess Mount Sensor; On/Off Photocell
	nRM ADCX	8	Low Voltage Recess Mount Sensor; Automatic Dimming Control Photocell
	nIO PC KIT	PC KIT	Outdoor On/Off Photocell Kit

Wired Load Controllers

Product Image	Model Name	CAD Symbol	Description
	nPP16 EFP	nP 16	Power/Relay Pack; 16 Amp
	nPP16 D EFP	160	Power/Relay Pack; 16 Amp; 0-10V Dimming
	nPP16 DS EFP	nP 16 DS	Power/Relay Pack; 16 Amp; 0-10V Dimming via Side Slot
	nPP16 ER EFP	₹P ER	Power/Relay Pack; 16 Amp; Emergency Loads
	nPP16 D ER EFP	160 ER	Power/Relay Pack; 16 Amp; 0-10V Dimming; Emergency Loads
	nPP16 DS ER EFP	16 PS	Power/Relay Pack; 16 Amp; 0-10V Dimming via Side Slot; Emergency Loads
	nPP20 PL	150 PL	Plug Load (Receptade) Power Pack; 20 Amp
4	nSPS PCD 2W	PSP 2W	Secondary Pack; Forward Phase Control Dimming; 2-Wire
	nSP5 PCD 3W	ēSP 3₩	Secondary Pack; Forward Phase Control Dimming; 3-Wire
	nSP5 PCD MLV	esp MLV	Secondary Pack; Forward Phase Control Dimming; Magnetic Low Voltage
	nSP5 PCD ELV 120	255 F126	Secondary Pack; Reverse Phase Control Dimming; 120VAC; Electronic Low Voltage
	ARP INTENCOS NLT SFCR MVOLT SC SM (DTC)	ARP FCR 08 MVOLT	Relay Panel; 8 Field Configurable Relays; 120-277VAC; Screw Cover Surface Mount; Optional - Digital Time Clock
	ARP INTENC16 NLT 16FCR MVOLT SC SM (DTC)	ARP EXBLT	Relay Panel; 16 Field Configurable Relays; 120-277VAC; Screw Cover Surface Mount; Optional - Digital Time Clock
	ARP INTENC32 NLT 32FCR MVOLT HLK SM (DTC)	SE KVOLT	Relay Panel; 32 Field Configurable Relays; 120-277VAC; Hinge-Locking Surface Mount; Optional - Digital Time Clock
	ARP INTENC48 NUT 48FCR MVOLT HLK SM (DTC)	ARP FCR 48 MVOLT	Relay Panel; 48 Field Configurable Relays; 120-277VAC; Hinge-Locking Surface Mount: Optional - Digital Time Clock

















PUBLIC SCHOOLS GRANTED ENERGY IMPROVEMENTS WITH IIJA

In November 2021, the **Infrastructure Investment and Jobs Act** ("IIJA") was signed into law, offering \$500 million in grants to K-12 public schools to make improvements toward energy efficiency and renewable energy solutions. Acuity addressed some **Frequently Asked Questions** about IIJA and how it affects future lighting projects. See if your project qualifies!

How does a project qualify as a public school?

There must be a consortium of at least two organizations: a local educational agency, and then either a school, a non-profit organization, a for-profit organization, or community partners that have the knowledge to assist the school with energy improvements.

Is it competitive? How can I stand out in my application?

Yes! Certain factors will prioritize grant proposals. Sites that are in need of renovation, repair, and improvement, as well as the amount of children who are served free or reduced price lunch will make the project more competitive. Other helpful criteria includes: lack of funds to address improvements, inability to raise funds in the community, the education agency's ability to maintain the school in good condition after improvements are made, and how much the energy efficiency and and safety benefits the site will see.

Does this only impact public schools?

No, the Infrastructure Investment and Jobs Act covers energy-efficient upgrades to public and government facilities, like airports, roadway, and transit. It also includes grants for electric vehicle charging and fueling infrastructure, which could include lighting and controls for these sites. All applicable infrastructure funding available under IIJA is available at **Build.gov.**

When will funding be available?

As early as 2022, though this may be spread out over the next 5 years.

