American Electric Lighting®

ACP LED Series

Floodlight Luminaires

ACP LED Series

The reliable but affordable ACP LED Series from AEL® is the highest value LED flood available today for utilities and municipalities.

The ACP LED is the ideal solution for floodlighting applications with three models to choose from; the ACP0 (small), the ACP1 (medium), and the ACP2 (large). With energy savings exceeding 60% over HID alternatives and expected service life of over 20 years, ACP LED luminaires excel at meeting the challenges typically associated with floodlighting.

By combining robust mechanical design features with highly engineered LED engines and industry-leading optical expertise, this luminaire excels as a direct retrofit for both yoke and knuckle mount products. Also, the clean, crisp white LED light of the ACP LED improves visibility which can enhance safety and security in the space. A large portfolio of control options also provides a path to simplified control and asset management in both small and enterprise scaled applications.

At a Glance

Three models: ACP0 replaces 100-400 watt HID; ACP1 replaces up to 1,000 watt HID; ACP2 replaces up to 1,500 watt HID

60% minimum energy savings over HID and 50% maintenance savings

Mounting options include both yoke mount and tenon knuckle configurations

20+ year rated L70 driver for long system life

20kV/10kA surge protection is standard

Robust design with IP66 rating, 3G vibration rating, and a super durable paint finish exceeding 5,000-hour salt fog rating

Choice of color temperatures: 3000K, 4000K and 5000K

Segmented internal reflectors designed for superior field to beam ratios, uniformity, and spacing

Optical choices include 4X4, 5X5, 6X5, and 6x6 NEMA beam patterns

Tool-less entry and pre-wired three-stage terminal block improve access and reduce installation time

UL 1598 wet location listing standard

Digital DALI® D4i driver technology for enhanced controls and asset management capabilities

Embedded Controls include a variety of low-voltage options from DTL® or Cell Connect™ cellular technology

NEMA P7 or Zhaga receptacle options for additional DTL, nLight® or 3rd party controls or sensors

Typical Applications

Ports/Rail Facilities

Industrial Parks

Correctional Facilities

Military Bases

Water & Wastewater Facilities

Schools/Campuses

Substations

Parking Lots

ACP0 LED Small

ACP1 LED Medium

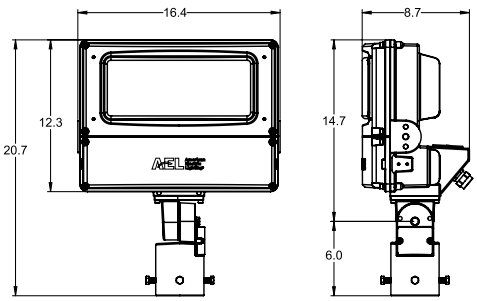
ACP2 LED Large

ACP0 LED

Small Floods

With the choice of six different LED packages, the ACP0 LED (small) offers lumen packages for direct replacement of 100-400 watt HID floods. The smaller form factor and extremely light 28 lb. weight make the IP66 rated ACP0 a more affordable but extremely versatile solution suited to a variety of applications.

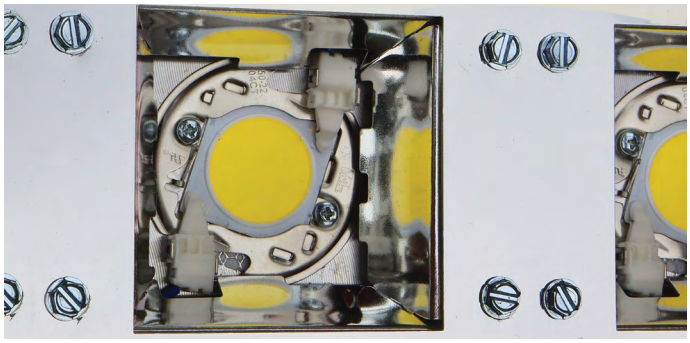
Beam patterns available in the ACP0 are 4x4, 5x5, 6x5 and 6x6. Yoke mounting is available in painted or galvanized steel configurations. The ACP0 comes with a variety of control options and optional DALI driver.



ACP0 LED
Maximum weight: 30lbs. Yoke
Maximum weight: 28lbs. Knuckle
Maximum E.P.A.: 1.89 sq ft

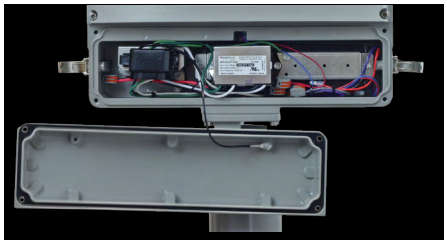
Design Features of the ACPO

Acuity Brands® cutting edge light engine design provides value through high performance, reduced operational costs and long system life. The segmented internal reflectors are designed to provide high lumens per watt with superior field to beam ratios, uniformity, and spacing.



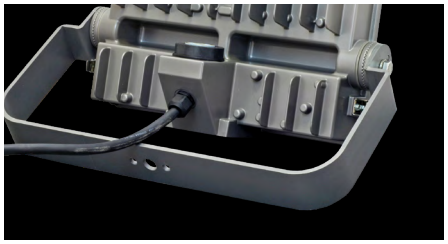
Advanced LED optics and glass cover

20kV/10kA Extreme surge protection to protect your LED investment

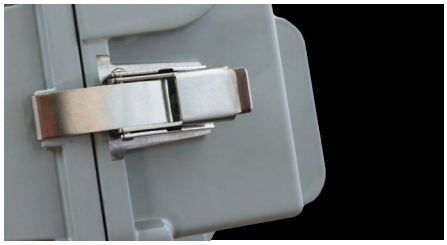


Easy access to all electrical components

Adjustable knuckle-mount option with wireway access door



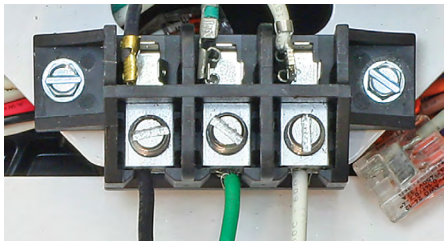
Adjustable yoke mount option available in painted steel or galvanized steel



Stainless steel latches option

Bottom visor option can be mounted upright or inverted

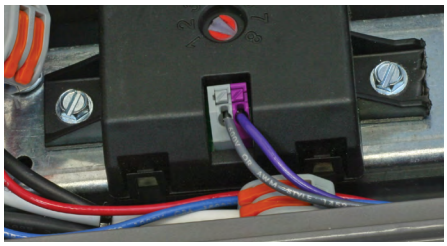
Full visor option for minimized light trespass and glare



Easy installation features such as pre-wired 3-stage terminal block

Stainless steel wire guard option

Polycarbonate vandal guard option



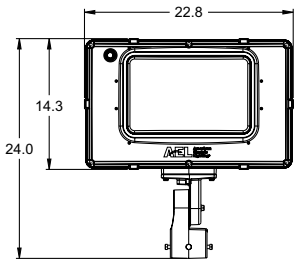
FAO module option for field-adjustable lumen output

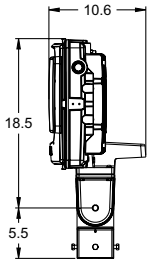
ACP1 & ACP2 LED

Medium and Large Floods

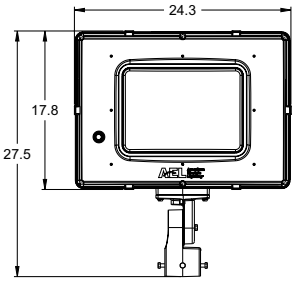
With the choice of five performance packages, the IP66 rated **ACP1** (medium) offers lumen packages for direct replacement of up to 1,000 watt HID floods. The **ACP2** (large) also offers five different performance packages, providing lumen packages replacing up to 1,500 watt HID floods.

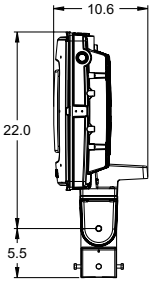
Beam patterns available in the ACP1 and ACP2 are 5x5, 6x5 and 6x6. Yoke mounting is available with galvanized or painted finish. They both are available with a variety of shielding options to control uplight and light trespass.





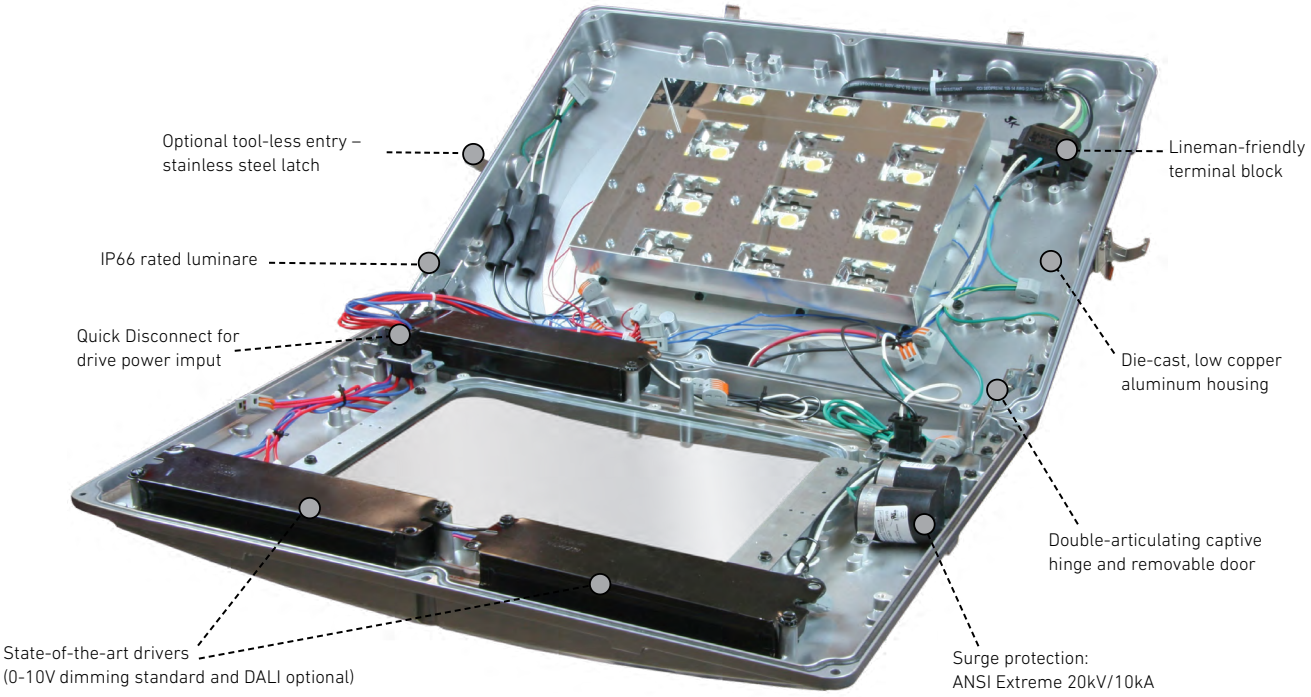
ACP1 LED
Maximum weight: 54lbs.Yoke
Maximum weight: 45lbs. Knuckle
Maximum E.P.A.: 3.0 sq ft.

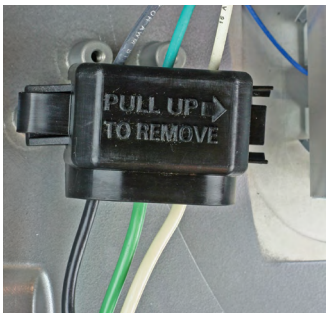




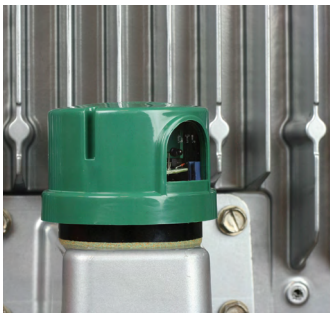
ACP2 LED
Maximum weight: 80lbs. Yoke
Maximum weight: 71lbs. Knuckle
Maximum E.P.A.: 3.8 sq ft

Design Features of the ACP1 and ACP2



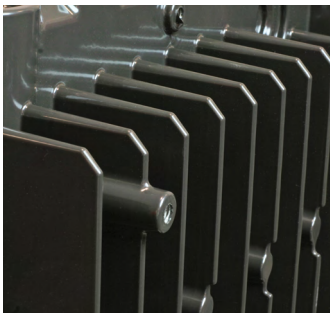


Prewired 3-stage terminal block for simplified installation

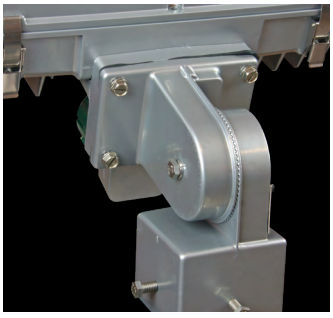


Photocontrol receptacle (3-pin standard with 7-pin option)

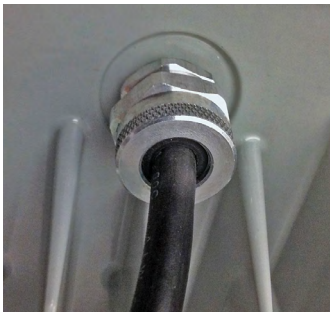
Stainless steel latches for simple, tool-less access



External heat sink provides excellent thermal transfer

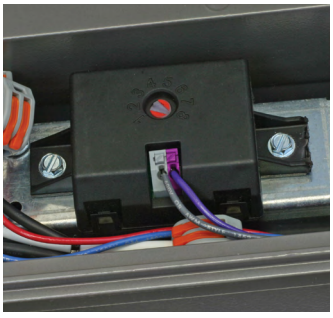


Tenon mount provides factory pre-wired to knuckle wiring chamber



Factory pre-wired cord assembly and cord grip for yoke mount

Wraparound yoke mounting options in galvanized steel or durable paint finish

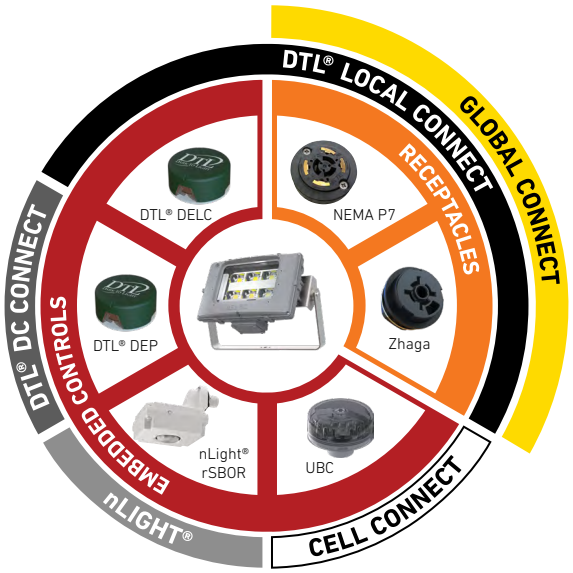


FAO module option for field-adjustable lumen output

Lighting control made simple, safe and secure

AEL has enhanced the ACP LED family, heralding a new era of smart technology in flood and large area lighting. The ACP family now leverages next generation controls built around emerging standards in drivers, LED technology, optical advancements and most importantly, simplified but powerful user interfaces.

Redesigned to incorporate intelligent D4i driver technology and low-voltage DC control platforms, it is now available with your choice of five categories of control options that are cost-effective, simple to use and highly customizable, while driving down operational costs.



	Dusk to Dawn	Dimming	Scheduling	Embedded Occupancy Sensor	Remote Control	Asset Management	Networked Controls	Sensors	Monitoring
DTL DC Connect	✓								
nLight	✓	✓	✓	✓	✓		✓		
DTL Local Connect	✓	✓	✓		✱	✓			
Global Connect	✱	✱	✱		✱	✱	✱	✱	✱
Cell Connect	✓	✓	✓		✓	✓	✓	✱	✓

✱ Capabilities with P7 & Zhaga receptacles are obtained through a variety of DTL or 3rd party plug-in control nodes and sensors.

D4i and Zhaga technology

The ACP family now provides interoperability with Dexal D4i driver technology. D4i is the DALI® standard for intelligent IoT-ready luminaires. D4i is about the network inside the luminaire (driver, sensor, control) and it ensures interoperability between all components. D4i defines a feature set that is supported by the driver and accessed via DALI-2 protocol. Note that per ANSI C137.4 the committee for lighting systems has adopted the D4i standard for roadway products.

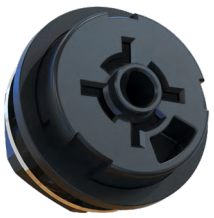
POWER - D4i takes care of power supply requirements inside luminaires:

- D4i drivers with on-board bus power supply - Power available for DALI bus and some control devices
- D4i includes 24V auxiliary power supply for higher-power requirements - e.g., city-wide wireless transceivers
- Eliminates components, simplifies designs

DATA - D4i includes LED drivers with smart data capabilities:

- D4i drivers can store and report data for:
  - Enhanced asset tracking
  - Performance monitoring (energy usage, diagnosis & maintenance)
- Data storage in DALI memory banks - standardized format & locations
- Benefits include automated commissioning, asset tracking, accurate point-of-use billing, predictive maintenance etc.

Zhaga is an interconnect standard defined by the Zhaga Consortium to support D4i. The Zhaga standard defines 4-pin, low voltage plugs, receptacles, and housings that provide 2-wire DC power and DALI messaging. Zhaga receptacles provide a standardized electro-mechanical connection point for devices, enabling multi-vendor support for controls and sensors. These are intended primarily to be used for DC photocontrols and sensors and can be mounted on top or bottom of lighting fixture.



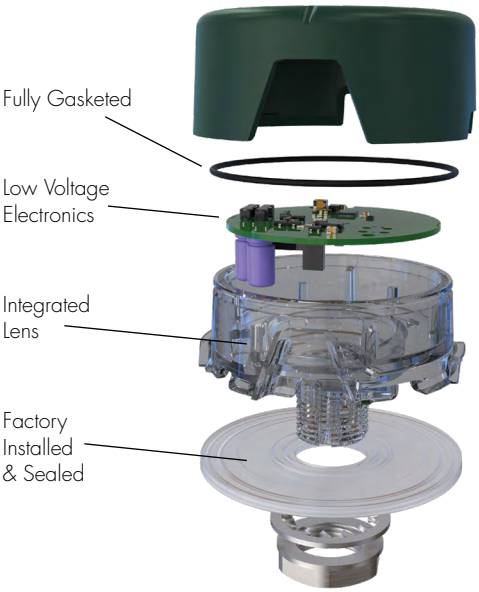
Explore Your Options for Controls & Asset Management

DTL Local Connect: Simple, Secure, Affordable

DTL Local Connect™ controls were designed to make the ACP the most simplistic and cost-effective solution possible for floodlighting control and asset management. From the embedded DELC node to intuitive software apps, the Local Connect solution will reduce installation time and hassle at a fraction of the cost of much larger 3rd party control systems.

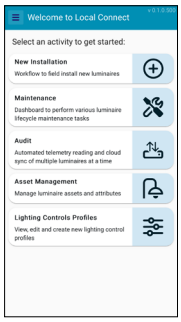
With a rated 20-year system life, Local Connect simplifies installation and commissioning using point-to-point Bluetooth® wireless technology. It provides easy to use inventory management tools and local control with 24-hour profiles.

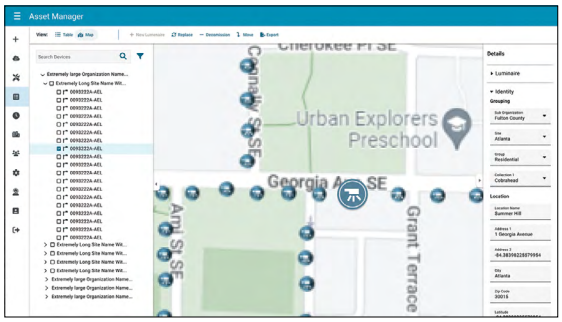
- Simplified wireless installation process
- Variety of maintenance features
- Flexible site attribute management
- Maintain multiple custom control profiles



Mobile App and Web Portal

The power and simplicity of the Local Connect solution is enabled by factory preloading luminaire attributes along with customer specific information. At time of install, luminaire asset data is wirelessly synced to the Local Connect cloud via the installer's mobile device. The information can then be easily accessed through the powerful app or through a web browser, allowing for full lifecycle asset management.





DC Connect
Embedded Dusk-to-Dawn

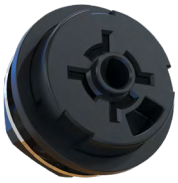
DC Connect™ is the greatest value for simple and reliable dusk-to-dawn control with a design that greatly reduces common failure points and water ingress experienced in field-installed photocontrols. Utilizing this low-voltage embedded control simplifies installation and reduces inventory hassles and operating costs.

DEP
Embedded
Node

Global Connect
A World of Possibilities

Global Connect™ offers the greatest levels of flexibility and scalability in luminaire configuration options for networked controls, sensors and asset management. These configurations have been designed to meet NEMA industry standards and Zhaga certifications for receptacles. A wide variety of NEMA P7 and Zhaga receptacle configurations are available with DTL and third-party devices for use with the Global Connect solution.

NEMA
Receptacles



Zhaga
Receptacles

nLight Wireless
A World of Possibilities

The ACP Series is also available with wireless networked embedded controls from nLight for area/site applications which enables dusk-to dawn, switching, dimming and scheduling.

rSBOR
Control
& Sensor

Cell Connect Cellular Controls

Cell Connect™ is a networked photocontrol with cellular communication. It provides digital switching, precise dimming, and revenue grade metrology. Cell Connect is D4i compliant and leverages embedded D4i drivers to communicate real-time data to UbiVu, a cloud-based asset management system.

UBC
Embedded
Node

Visit americanelectriclighting.com to learn more!