

CAST LED Perimeter Lighting



BEFORE



AFTER

For Fence Perimeters:
CAST LED Perimeter Fence Light
(CPL1)



For Building & Path Perimeters:
CAST LED Perimeter Wall Pack
(CPWP1)



BEFORE



AFTER

Up to 80% Savings in Material, Labor, & Energy

- Only 7-Watts per Light - Short Payback Period
- Safe Low-Voltage - Easily Attaches to Fence or Wall
- Kits Available for Perimeters up to 750 ft.
- Glare-Free Light for Security Personnel and Cameras

Cost-Effective, Energy-Efficient, & Simple!

Changing the way the world lights for security™



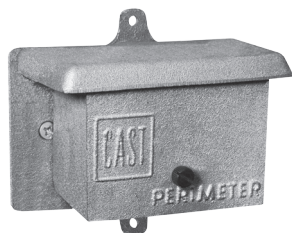
Old world craftsmanship. . . today's technology®

LED Perimeter Lighting



The CAST LED Perimeter Lighting System™

Fence & Building Perimeters & Pathways



CPWP1



CPL1

"The combination of low-wattage LED's and extremely wide voltage range allow lighting runs over 1,000 ft. per low-voltage wire."

Description:

CAST LED Perimeter Fence Light (CPL1)

A low-voltage security light powered by a reliable 24-volt power supply. Mounted on fence posts, these lights are simple and quick to install and consume a fraction of the energy of traditional perimeter lighting. Can also be used in any lighting application where long wire runs are required (such as wooded paths and piers).

CAST LED Perimeter Wall Pack Light (CPWP1)

Using the same LED array and driver as the Perimeter Fence Light, this compact Wall Pack is small enough to be used in niche areas, on posts, along alleys, under awnings - anywhere light is needed. It can be mounted flush on a surface or on a junction box.

Features for Both Luminaires:

- 24-volt system allows for fast, safe installation with considerable cost savings (for labor, materials, and energy) compared to 120-volt installation.
- Provides no-glare lighting of appropriate illuminance for security cameras and guards.
- Highest quality Cree LED's with an extended life.
- All components protected from dust and moisture - impervious to environmental damage.
- Cast aluminum alloy and galvanized steel construction - withstands physical abuse.
- Extremely wide input voltage range (from 12 to 24 volts) allowing long wire runs with acceptable voltage loss.
- A single 24v wire powers up to 60 lights to illuminate over 1,200 linear ft.
- Dark-sky compliant - full-cutoff fixtures do not contribute to light pollution and light trespass.

CAST LED Perimeter Fence Light
Winner of 7 Security & Lighting
Industry Awards



From the Judges:

"Never has so little light done so much work. We found this to be a simple, clean, efficient, energy-effective solution which could be used on nearly every property. It leverages the best benefits of LED - low voltage operation, optical efficiency, small size and long life for a truly robust security lighting solution."

- Lightfair 2012 Judges

Typical flood lighting is unreasonably expensive for long perimeters - The CAST System is affordable.

LED Perimeter Lighting Applications

CAST LED Perimeter Fence Lighting:

The CAST LED Perimeter Lighting System addresses a need that other lighting systems do not - an inexpensive, energy-efficient way to enhance visual security for extensive or remote property boundaries. It also fills the need for a portable lighting system for the military, temporary fence companies, event providers, and consumers.

Commercial and Municipal Properties:

Currently, commercial and municipal property perimeters are illuminated by general area lighting or security lighting - usually by high-pole-mounted or bracket-mounted luminaires. This approach works fairly well when perimeter fences are within areas adjacent to buildings or illuminated parking lots. It is, however, often the case that property perimeters extend beyond areas that require general area illumination. The CAST LED Perimeter Lighting System provides a highly energy-efficient and inexpensive way to illuminate these long fenced perimeters - applying illumination sufficient for security cameras and guards to detect the presence of intruders.



Typical perimeter fence lighting application.

Cost savings realized on several fronts:

- ▮ **Design:** One luminaire mounted on every 2nd or 3rd fence post - no need for extensive lighting plans.
- ▮ **Installation:** The run from the transformer to the fence can be buried without conduit at a depth of 6 inches (instead of 18 inches for higher voltages). At the fence wire can be attached directly to fence, or run through conduit.
- ▮ **Operation:** Because highly efficient LED illumination is focused only where it's needed (along the perimeter), energy costs are greatly reduced compared to general area lighting.
- ▮ **Maintenance:** Using Cree XTE LED's (L70: 36,300 hours), LED's are expected to perform optimally for 8 years or more. The LED driver also has extended life features (including surge and spike protection) to ensure continuous operation throughout the life of the LED. During this period, the only maintenance required would be occasional cleaning of the hardened-glass LED enclosure.

Special Commercial and Municipal Applications

- ▮ **Airports:** System illuminates long perimeter fences, enhancing security and aeronautical safety.
- ▮ **Energy Providers** (Power plants and Substations): System provides security for long perimeter fences in remote locations.
- ▮ **Public Parks, Residential Areas, Observatories:** Provides dark-sky compliant perimeter and path lighting in LZ-0 zones.

CAST LED Building Perimeter Lighting:

The CAST LED Perimeter Wall Pack Light (CPWP1) is a direct replacement for existing wall pack units or can be used as a low-cost way to add illumination to new or existing buildings and paths.

Cost savings realized on several fronts:

- ▮ **Design:** One luminaire mounted every 10 to 30 ft. providing illumination more targeted than traditional wall packs.
- ▮ **Installation:** Luminaires can be mounted flush on walls or posts, or can be mounted to single-gang electrical junction boxes. Installation is simple and fast.
- ▮ **Operation:** Same 7-watt LED array as with Perimeter Fence Light - replaces 75-watt to 150-watt wall pack units.
- ▮ **Maintenance:** Same high-performance durable driver with built-in protections as with Perimeter Fence Light.

LED Fence and Wall Pack Lights for Temporary Lighting:

Custom kits and systems that install, breakdown, and transport quickly and easily:

- ▮ **Construction Companies:** For temporary lighting on site.
- ▮ **Law Enforcement:** To secure crime and accident scenes.
- ▮ **Aid and Relief Stations:** For area lighting in temporary outdoor facilities.
- ▮ **Event Providers:** To provide security and crowd lighting for outdoor events.



CAST Wall Pack used to provide low-cost security in building alley

Specifications

Sustainability & Replaceability

Sustainability: CAST fixtures are designed for a lifetime of use. Cast-metal components are sand-cast in CAST Lighting's own foundry that incorporates trimmings into new product. Nothing is discarded.

Replaceability and Upgradability: All parts of the CAST LED Perimeter Lights are replaceable and upgradeable. Should the LED array or driver fail, then the body or base can be replaced or repaired in the field without special tools or training. New technology can be incorporated into the fixture in the future.

Operational Features

Ambient Temperature Range (Operating): -40°C to +55°C

Thermal Management: Passive thermal transfer through integrated components in physical contact with thermal pads and luminaire components.

Component Selection: No electrolytic capacitors in drive circuit; all components rated for high temperatures and long life.

Surge & Spike Protection: Voltage suppression for transient spikes, prolonged protection for voltages over 40V.

Moisture Protection: Conformally coated LED board sealed under borosilicate glass dome; fully encapsulated driver in thermally conductive epoxy.

Electromagnetic Interference Prevention: Configurations and components to ensure compliance with FCC Class B Conducted & Radiated.

Dimming: Units are not dimmable.

Mounting, Control, and Security Options

Mounting: CPL1: Fence Light primarily designed to attach to top of fence posts up to 3" diameter; Offset Bracket (CPLOSB) available for situations where CPL1 must be mounted below fence top or for other offset needs. **CPWP1:** Mounting tabs at top and bottom used for flush mounting on wall or other surface; mounting holes in back plate align with standard mounting tabs on singly gang junction box.

Control: 24-volt (300VA or 600VA) CAST Perimeter Lighting Transformers (CPT300, CPT600, E1CPT300 and E1CPT600) have built-in manual timers that can be combined with optional photocells (CTPC) or external control units to tie into existing control system.

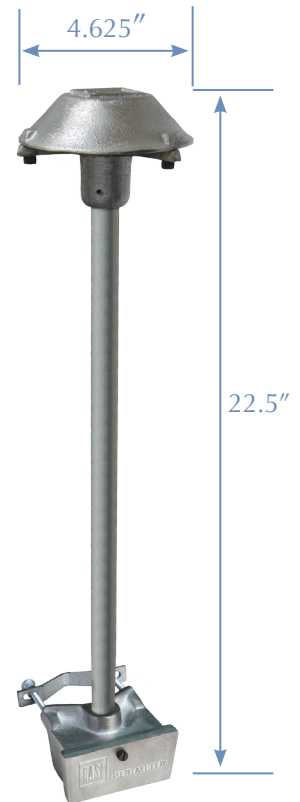
Security: Vandal-proof hardware and hard-wired security line through conduit can deter theft of luminaires and alert owners via security system. Call for options.

Dimensions & Construction

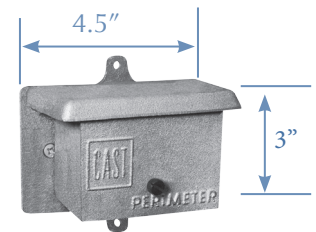
LED Perimeter Fence Light (CPL1) 22.5" tall x 4.625" wide. Eurometal hat, vase, and base; galvanized steel stem; aluminum saddle bracket; stainless steel bolts; borosilicate glass LED enclosure.

LED Perimeter Wall Pack Light (CPWP1) 4.5" wide x 3" tall x 3" deep (matches plate size of single-gang electrical junction box). Eurometal body; borosilicate glass LED enclosure; stainless steel hardware.

Fixture Lead Wires (All): (2) 4" Tin-Coated Marine-Grade #20 AWG wires for connections to be made inside luminaire junction box. Parallel crimp connectors included.



CPL1



CPWP1

Photometric & Electrical Data

Name (Model #)	Light Source	Color Temp (CCT) (°K)	Color Rendering Index (CRI)	Lumen Maintenance (L70) (Hrs)	Input Voltage (V)	Input Current (A)	Input Power (W)	Power Factor (pf)	Apparent Power (VA)	Array Lumens (LM)	Luminaire Lumens (Lm)	Maximum Candela (CBCP)
LED Perimeter Fence Light (CPL1)*	(3) Cree XTE Array	4,500°K Neutral White	75	36,300	12-24 AC/DC P.I.	0.38	7.0	0.82	8.5	512	265	90
LED Perimeter Wall Pack Light (CPWP1)											490	166

IESNA Cut-Off Classification: Full-Cutoff (0% above Nadir); Dark-Sky Compliant (MLO) for reduction of light pollution and light trespass

*Higher power versions of CPL1 available: Call for details.

Listings & Certifications

All CAST LED Lights: Conform to: UL Std's. 1838 & 8750; CE; Certified to CAN/CSA Stds C22.2 No. 250.0 & C22.2 No. 250.13. Suitable for wet locations. FCC Class B Conducted and Radiated. RoHS