

High Efficiency

IOTA "HE" Series

- Emergency LED Drivers
- Emergency Inverters
- Emergency Ballasts for Fluorescent and LED Retrofit
- ALCR Solutions

Emergency Lighting Solutions
Certified for California Title 20
Requirements



IOTA High Efficiency Solutions provide certified performance to meeting California Title 20 energy requirements, in addition to promoting overall building and facility energy efficiency.





What is California Title 20?

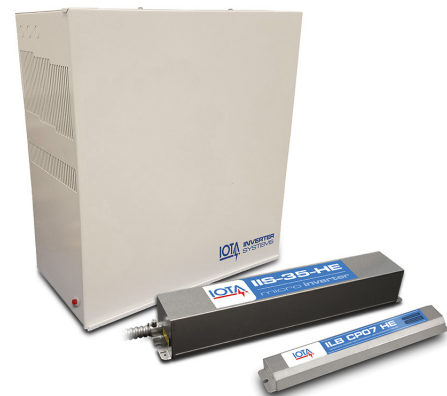
Recent efforts to promote more sustainable utility practices have resulted in the adoption of California Code of Regulations, Title 20, Sections 1601-1608. These regulations set appliance efficiency standards which restrict the sale of non-compliant product (including certain emergency lighting equipment) within the state of California. To comply, products must be certified and appear in the California Energy Commission's Modernized Appliance Efficiency Database System (MAEDBS).



Which IOTA emergency lighting products are affected?

As a general rule, IOTA products that incorporate a battery charging system are regulated by the California Energy Commission in California Code of Regulations, Title 20. This includes **Emergency LED Drivers, Emergency Fluorescent Ballasts, and Emergency Mini and Micro Inverters.**

IOTA Central Inverter products are exempt from California Title 20 regulations due to the complexity of complying with test procedures outlined in the standards. The IOTA ETS family of ALCR devices do not contain a battery charger system, and therefore are not regulated by California Title 20.



How do I identify IOTA products that meet California Title 20 energy efficiency requirements?

IOTA uses the descriptor "HE" (for "high-efficiency") in the product model name to easily identify product that meets California Title 20 energy efficiency requirements. **See the next pages for a list of IOTA "HE" models.**



IOTA products that meet California Title 20 energy efficiency requirements will also be identified on the product label with the "Circle BC" mark. Additionally, a statement may be found on the product specification sheet and installation manual that the IOTA product is listed in the Modernized Appliance Energy Efficiency Database System (MAEDBS).

Certified Product Markings

IOTA products that are certified in the California MAEDBS will include the "Circle BC" marking on the product label to indicate the product is a registered "small battery charger." Other egress lighting equipment, such as exit signs, may be marked with a "Circle E" icon.



Emergency LED Drivers

IOTA's "HE" series of Emergency LED Drivers feature a high efficiency design to help meet California Title 20 energy efficiency requirements. These models are UL or cUL Listed for field or factory installation, and most models feature Constant Power performance for non-diminishing emergency egress lighting. See iotaengineering.com for full product details.



Standard Models for Indoor/Architectural Applications

| Model | Output Wattage | Input Voltage | Output Voltage | Additional Features |
|--------------------------|----------------|---------------|----------------|---|
| ILB CP05 HE | 5 Watts | 120-277 VAC | 10-60 VDC | Flexible conduit or no flex mounting options |
| ILB CP07 HE | 7 Watts | 120-277 VAC | 10-60 VDC | Flexible conduit or no flex mounting options |
| ILB CP10 HE | 10 Watts | 120-277 VAC | 10-60 VDC | Flexible conduit or no flex mounting options |
| ILB CP10 HE SD | 10 Watts | 120-277 VAC | 10-60 VDC | Automatic monthly/annual testing, flex/no flex options |
| ILB CP10 HE AELR | 10 Watts | 120-277 VAC | 10-60 VDC | Automatic monthly/annual testing w/ wireless reporting via STAR |
| ILBLP CP10 HE SD | 10 Watts | 120-277 VAC | 15-55 VDC | Reduced profile enclosure, Automatic monthly/annual testing |
| ILBLP CP15 HE SD | 15 Watts | 120-277 VAC | 20-55 VDC | Reduced profile enclosure, Automatic monthly/annual testing |
| ILB CP20 HE | 20 Watts | 120-277 VAC | 20-60 VDC | Single or dual-flex mounting options |
| ILB CP20 HE SD | 20 Watts | 120-277 VAC | 20-60 VDC | Automatic monthly/annual testing, single or dual-flex options |
| Lithonia Lighting® LEM04 | 4 Watts | 120-277 VAC | 20-50 VDC | Flexible conduit or no flex mounting options |
| Lithonia Lighting® LEM08 | 8 Watts | 120-277 VAC | 20-50 VDC | Flexible conduit or no flex mounting options |

High Voltage Output for High Bay or Industrial Applications

| Model | Output Wattage | Input Voltage | Output Voltage | Additional Features |
|---------------------|----------------|---------------|----------------|---|
| ILB CP20 HE HV | 20 Watts | 120-277 VAC | 50-200 VDC | Single or dual-flex mounting options |
| ILBLP CP20 HE SD HV | 20 Watts | 120-277 VAC | 55-200 VDC | Reduced profile enclosure, Automatic monthly/annual testing |
| ILB CP20 HE AELR HV | 20 Watts | 120-277 VAC | 50-200 VDC | Automatic monthly/annual testing w/ wireless reporting via STAR |
| ILBLP CP30 HE SD HV | 30 Watts | 120-277 VAC | 55-250 VDC | Reduced profile enclosure, Automatic monthly/annual testing |

Slim/Narrow Profile for Linear Fixtures

| Model | Output Wattage | Input Voltage | Output Voltage | Additional Features |
|---------------------|----------------|---------------|----------------|--|
| ILBLSL CP08 HE | 8 Watts | 120-277 VAC | 10-60 VDC | Slim housing for narrow compartment spaces |
| ILBLSL CP10 HE | 10 Watts | 120-277 VAC | 10-60 VDC | Slim housing for narrow compartment spaces |
| ILBLP CP10 HE SD N | 10 Watts | 120-277 VAC | 15-55 VDC | Automatic monthly/annual testing |
| ILBLP CP10 HE SD NP | 10 Watts | 120-277 VAC | 10-60 VDC | Automatic monthly/annual testing, Poke-in connection terminals |
| ILBLP CP15 HE SD N | 15 Watts | 120-277 VAC | 20-55 VDC | Automatic monthly/annual testing |

Solutions for Extreme/Demanding Environments

| Model | Output Wattage | Input Voltage | Output Voltage | Additional Features |
|-------------------------|----------------|---------------|----------------|--|
| ILBDW CP10 HE SD FBS | 10 Watts | 120-277 VAC | 15-55 VDC | IP-66 rated enclosure, NSF food/beverage safe |
| ILBDW CP15 HE SD FBS | 15 Watts | 120-277 VAC | 20-55 VDC | IP-66 rated enclosure, NSF food/beverage safe |
| ILBDW CP20 HE SD HV FBS | 20 Watts | 120-277 VAC | 55-200 VDC | IP-66 rated enclosure, NSF food/beverage safe |
| ILB CP18 HE CW | 18 Watts | 120-277 VAC | 20-58 VDC | Cold weather performance, single/dual lead acid battery styles |
| ILB CP18 HE CW LP64 | 18 Watts | 120-277 VAC | 20-58 VDC | Cold weather performance, configurable lithium battery |

High Voltage Input (HVOLT) for 347 or 480 VAC Applications

| Model | Output Wattage | Input Voltage | Output Voltage | Additional Features |
|---------------------|----------------|---------------|----------------|---|
| ILBHI CP10 HE SD | 10 Watts | 347-480 VAC | 15-55 VDC | Automatic monthly/annual testing |
| ILBHI CP15 HE SD | 15 Watts | 347-480 VAC | 20-55 VDC | Automatic monthly/annual testing |
| ILBHI CP20 HE SD HV | 20 Watts | 347-480 VAC | 55-200 VDC | Automatic monthly/annual testing, High voltage output |
| ILBHI CP30 HE SD HV | 30 Watts | 347-480 VAC | 55-250 VDC | Automatic monthly/annual testing, High voltage output |

Emergency Inverters

IOTA's "HE" series of Emergency Inverters provide auxiliary AC line power to the designated emergency circuit/fixture, enabling full light output in emergency conditions, and confident compatibility with LED, fluorescent and incandescent loads. The high efficiency design of the IIS "HE" series Emergency Inverters allow them to meet California Title 20 energy efficiency requirements. See iotaengineering.com for full product details.

Emergency Micro Inverters



| Model | Output Wattage | Additional Features |
|-----------|----------------|---|
| IIS 35 HE | 35 Watts | Single flexible conduit for installation next to the fixture. |

Emergency Mini Inverters



| Model | Output Wattage | Additional Features |
|---------------|----------------|-----------------------------------|
| IIS 125 HE CG | 125 Watts | Ceiling grid mounting style |
| IIS 125 HE SM | 125 Watts | Surface mounting style |
| IIS 250 HE DR | 250 Watts | 0-10 dimming relay leads |
| IIS 550 HE | 550 Watts | 0-10 dimming relay leads |
| IIS 750* | 750 Watts | 3 Zone emergency lighting control |

*Full part number: IIS 750 127/277 90M HE SD 3ZONE DR3 AI SC

What about Central Inverters?

IOTA Central Inverter products are exempt from California Title 20 regulations due to the complexity of complying with test procedures outlined in the standards. Most IIS Central Inverter models may be used in California applications.

Emergency Ballasts for LED Retrofit or Fluorescent Applications

Select IOTA emergency ballasts deliver AC current to operate either Fluorescent or LED retrofit tube lamps. These specific models are certified in the MAEDBS database for CA Title 20 requirements. See iotaengineering.com for full product details.



| Model | Initial Lumen Output | Lamps Operated |
|----------|----------------------|---|
| I1320 HE | 1350 Lumens | 13W - 42W 4-Pin Rapid Start Twin, Triple, Quad Tube, 2D, Straight Compact Lamps and Select LED Retrofit Lamps |
| I14PT A | 250-400 Lumens | Select 4-Pin LED Retrofit Lamps |

Emergency ALCR Devices

IOTA Emergency ALCR devices are not regulated by California Title 20 and therefore are not registered in the Modernized Appliance Efficiency Database System.

IOTA's ALCR (automatic load control relay) devices provide enhanced energy savings by allowing on/off or 0-10V controls to be used on emergency fixtures or circuits. Since these products do not contain an internal battery, they fall outside the scope of CA Title 20 requirements. See iotaengineering.com for full product details.



| Model | Maximum Switching Current | Input Voltage | Additional Features |
|----------|---------------------------|---------------|---|
| ETS DR | 3 Amps | 120-277 VAC | Includes 0-10V Dimming Relay Leads |
| ETS20 | Up to 20 Amps | 120-277 VAC | Optional Trigger Device Control |
| ETS20 DR | Up to 20 Amps | 120-277 VAC | Optional Trigger Device Control, Includes Two Sets of 0-10V Dimming Relay Leads |

Visit iotaengineering.com for more product resources and information on IOTA "HE" series models.

