



High Efficiency

IOTA “HE” Series

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

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

Emergency Lighting Solutions
Certified for California Title 20
Requirements





What is California Title 20?

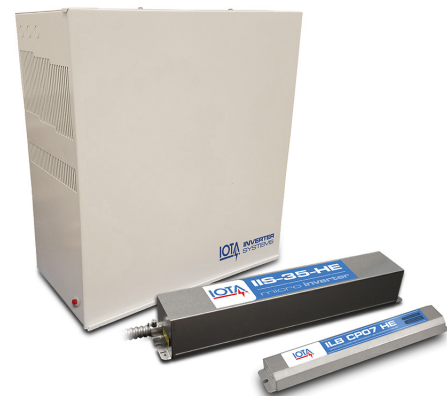
Recent efforts to promote more sustainable utility practices have resulted in the adoption of California Code of Regulations, Title 20, Sections 1601-1608. These regulations set appliance efficiency standards which restrict the sale of non-compliant product (including certain emergency lighting equipment) 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
ILBSL CP08 HE	8 Watts	120-277 VAC	10-60 VDC	Slim housing for narrow compartment spaces
ILBSL 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.

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 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

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
I320 HE	1350 Lumens	13W - 42W 4-Pin Rapid Start Twin, Triple, Quad Tube, 2D, Straight Compact Lamps and Select LED Retrofit Lamps
I4PT 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.

