



EnForcer






EnForcer 100

Universal 100W Solid State Power Supply

- 120-277VAC input power
- Indoor or Outdoor enclosures to suit most applications
- 24VDC output for up to 4.1A (100W) load connection
- Integral short circuit and overload protection
- Class II power supply



Catalog Number

model	enclosure	option
		
EN100 - 100W	ID - Indoor	D - Dimming 0-10V
EN102 - 2x 100W	OD - Outdoor	EMR - Emergency
EN103 - 3x 100W		Backup-Remote (120V)

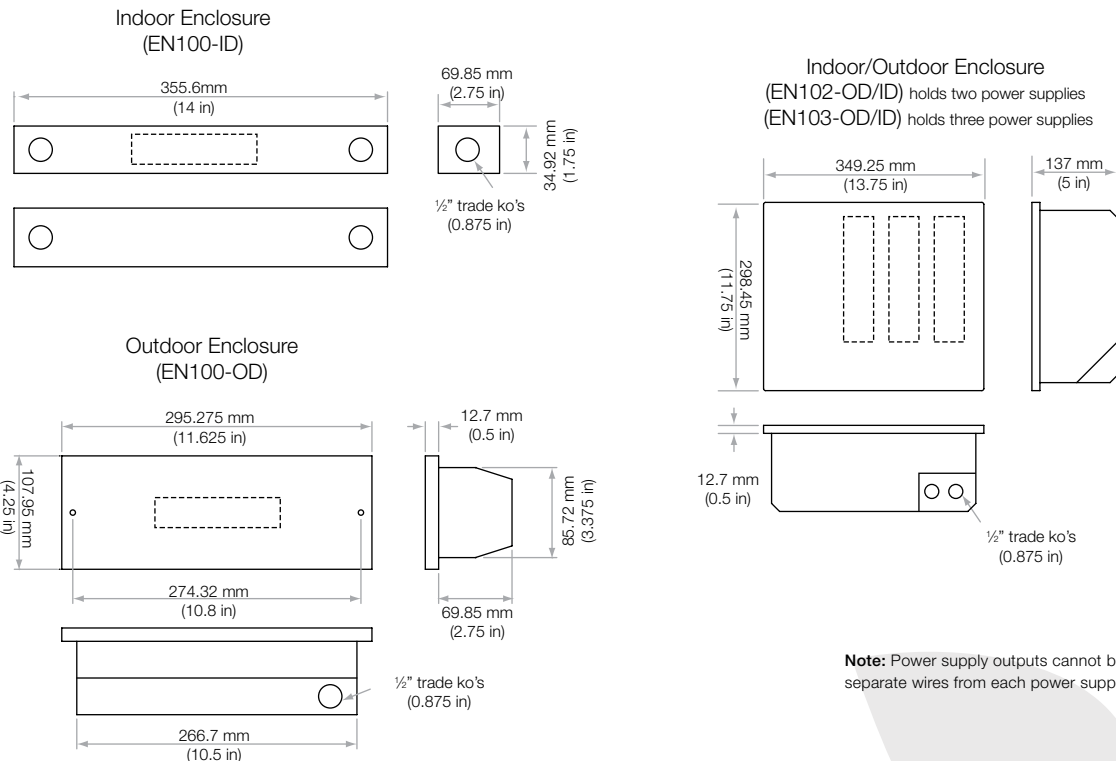
ΔFor 0-10V dimming applications, dimming option **must** be chosen on luminaire and power supply.

Note: Triac dimming not available. **EMR** option only available on **EN102**.

Specifications

item	specifications	details
Input	voltage	120-277VAC
	current	1.0-0.4 amps
	power factor	90% min.
	THD	20% max
Output	voltage	24 VDC
	current	4.1 amps max
	power	100 watts max
Features	safety agency	UL 1310 Class II
	IP rating	IP66 (outdoor only)
	protection	short circuit and overload
	EMI	FCC47 subpart 15, CISPR15 and CISPR22 Class A
	operating temperature	-40 to 40°C
Warranty	5 year limited warranty	See website for details

Dimensions



Construction - Indoor

Die formed heavy gauge aluminum indoor enclosure with six 1/2" trade size knockouts. Five stage preparation process that includes ion phosphate and standard TGIC super polyester powder coat.

Construction - Outdoor

Die cast aluminum (white) outdoor enclosure with two 1/2" trade size knockouts. Enclosure is sealed for IP66 rating. Five stage preparation process that includes ion phosphate and standard TGIC super polyester powder coat. Outdoor fixtures can be surface or recess mounted.

Function - Emergency Battery Backup

The battery backup (**EMR**) can drive 25W of the 100W from one power supply in the **EN102** for 90 min. in the event of a power failure.

Note: Power supply outputs cannot be tied together. Run separate wires from each power supply to its corresponding load.



Enforcer 250 Series

Universal 280W Solid State Power Supply

- 120-240VAC input power
- Indoor or Outdoor enclosures to suit most applications
- 24VDC output for up to 12A (280W) load connection
- Dimming and RGB control options for maximum versatility
- Works with a wide range of controllers, including PC connectivity
- Integral short circuit and overload protection



Power Supplies

EnForcer 250 Series

Catalog Number

model



EN250i - Indoor
EN250x - Exterior

options



D - 0-10V Dimming
RGB - RGB

ΔFor 0-10V dimming applications, dimming option **must** be chosen on **luminaire** and **power supply**. For RGB applications RGB must be chosen on **luminaire** and **power supply**.

Note: Triac dimming not available.

Specifications

item	specifications	details
Input	voltage	120-240VAC
	current	2.5-1.2 amps
	power factor	95%
Output	voltage	24 VDC
	current	12 amps max
	power	280 watts max
Features	safety agency	UL 60950-1, TUV EN60950-1
	IP rating	IP66
	protection	short circuit and overload
	EMI	EN55022 (CISPR22) Class B
	operating temperature	-20 to 50°C
Warranty	5 year limited warranty	See website for details

Construction - Indoor

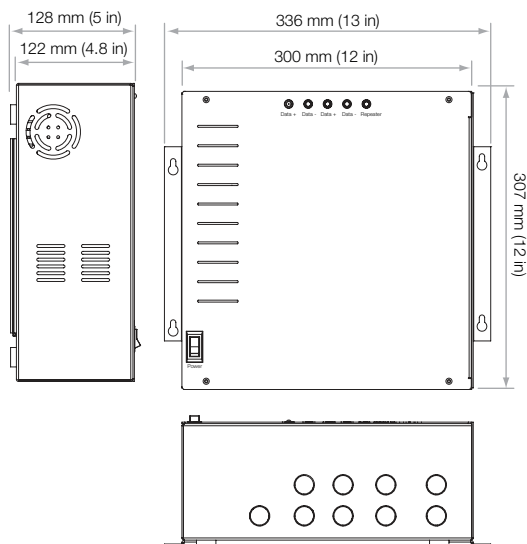
Die formed heavy gauge aluminum indoor enclosure with nine 1/2" trade size knockouts. Five stage preparation process that includes ion phosphate and standard TGIC super polyester powder coat.

Construction - Outdoor

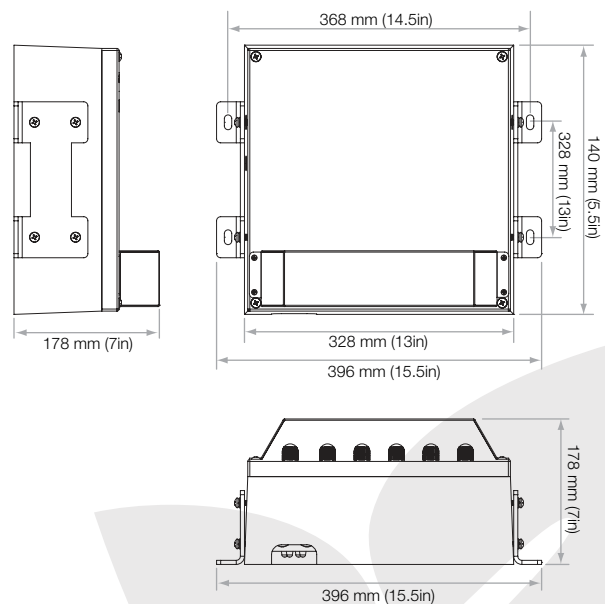
Die cast aluminum (white) outdoor enclosure, sealed for IP66 rating. Five stage preparation process that includes ion phosphate and standard TGIC super polyester powder coat. Outdoor fixtures can be surface or recess mounted. No additional data repeater needed.

Dimensions

EN250i



EN250x



Guidelines for Determining SSL Power Supply Parameters

Below is a list of SSL linear products, and their power requirements per foot. Be aware that although SSL products can operate as low as 20VDC, they will draw more current to compensate for the lower voltage. SSL recommends fixtures be operated from 20-24VDC.

SSL product	watts/foot	amps(24V)	amps(22V)	amps(20V)
BaseLine	9	0.375	0.409	0.450
BaseLine25	10	0.417	0.455	0.500
ExtremeLine	24	1.000	1.091	1.200

When current passes through a wire, some voltage is lost. How much is lost depends on the amount of current, wire gauge and the length of the wire chosen. Below is a table containing the length of a pair of wires that will drop 1 volt with the corresponding load connected at the far end.

Load Watts	50	100	150	200	250
Amps @ 24 V	2.08	4.17	6.25	8.33	10.42
16 GA	60	30	20	15	12
14 GA	95	75	32	24	20
12 GA	150	75	50	38	30
10 GA	240	120	80	60	48

The table above is for one continuous run of wires. If fixtures are connected at various points along the run, additional losses will occur at the connections points. Therefore, it is suggested that power supplies **only** be loaded from 75% to 90% of their capacity.

Power Supply	Rated Power	Maximum Recommended Load
Enforcer 100	100 Watts	75 to 90 Watts
Enforcer 250	280 Watts	210 to 250 watts

Guidelines to a reliable and trouble-free SSL Power Supply installation:

1. Mount the power supplies as close to the fixtures and possible.
2. Do not exceed the maximum recommended load for the power supplies.
3. Use the largest (lowest number) wire gauge possible.
4. Minimize the number of wire nut splices. Ensure that the splice connections are secure.
5. Always check voltage at the luminaire before final installation.

If using power supplies other than SSL:

The use of power supplies other than SSL power supplies requires written approval from factory.

Begin Installation

1. Determine Power Supply Requirements

Determine which power supply to use and how many of them will be sufficient to drive the luminaire.

2. Determine Wire Gauge Needed

Determine the wire gauge needed to connect the power supply to the load based on the supply load and the distance between power supply and luminaires using the **Power Supply Parameters**.

3. Installation and Connection

Install fixtures in their desired location. Run AC wires to the power supply input. Connect the output of the supply to the fixtures as shown below.

Wire Detail



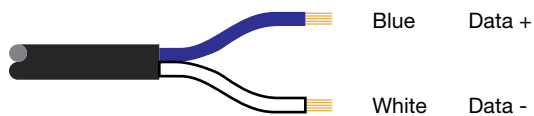
- Monochrome fixtures are supplied with a two conductor cord, requiring a 24VDC power supply.



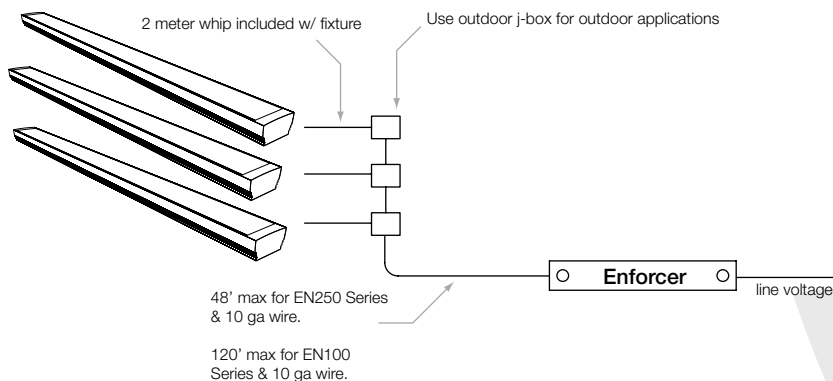
- Dimmable monochrome fixtures are supplied with a three conductor cord, requiring a 24VDC power supply and a 0-10VDC dimming signal.



- RGB fixtures are supplied with two, two conductor cords, requiring a 24VDC power supply and RGB data signal.



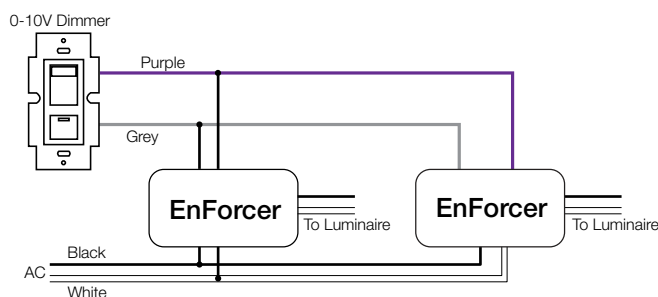
General Wiring Diagram



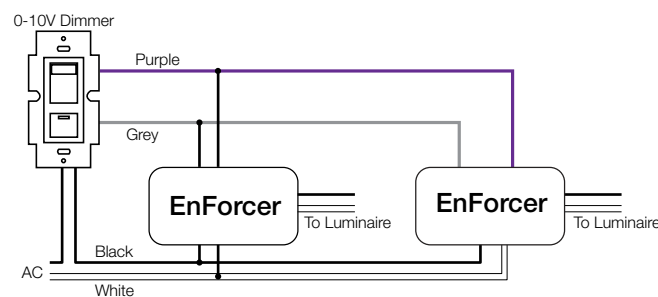
Component Selection for Outdoor / Indoor Applications

1. Select and obtain a 0-10V dimmer. For a list of approved dimmers, please visit <http://www.solidstateluminaires.com>.
Note: Conventional Triac, SCR, or ELV dimmers will not work.
2. For dimming applications, the dimming option **must** be ordered for both the **luminaire** and **power supply**.
3. Connect the dimmer to the power supply in one of the three configurations found below. Refer to the instructions provided by the dimmer manufacturer for specific wire colors. Below are three alternate 0-10V dimming applications.

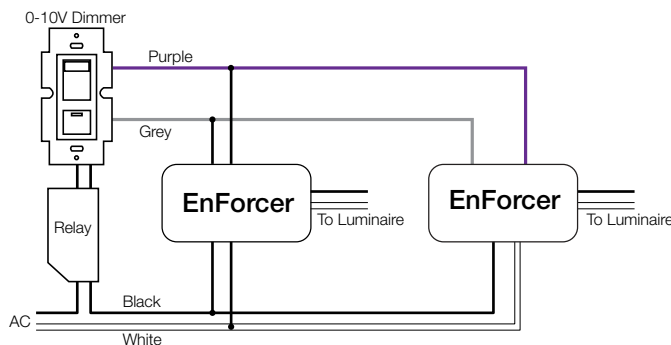
Note: The purple and grey 0-10V control wires are Class II signal wires and must not come in contact with the AC line voltage or permanent damage will occur to the dimmer, power supply, and the luminaire. The signal wires from one 0-10V dimmer can control 40 or more power supplies. Refer to the instructions provided by the dimmer manufacturer for maximum number of power supplies.



Note: Although light level can be dimmed to minimum, the power supply and the luminaire will always be on unless another switch (timer/occupancy sensor) is used.



Note: When switched off, the dimmer will remove AC power from the supplies. The maximum number of power supplies is limited by the power rating of the dimmer used.



Note: When the dimmer is switched off, the relay will remove AC power from the supplies. The maximum number of power supplies is increased by the use of the relay.