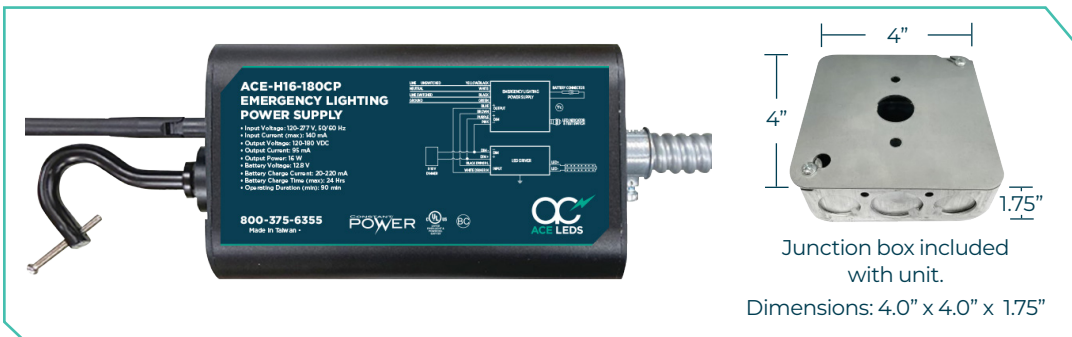


# ACE-H16-180CP Emergency Lighting Power Supply



## Primary Specifications:

Input Voltage	Input Current	Input Power Max	Output Voltage <sup>1</sup>	Output Current	Output Power	Emergency Operating Time	Ambient Operating Temperature	UL Listed for US and Canada
120-277 Vac 50/60 Hz	140 mA	8 W	120 to 180 Vdc	89 to 133 mA	16 W	90 minutes minimum	0 °C through 55 °C	UL and cUL (UL924) Emergency Lighting Power Supply



Wireless remote control test switch (RFI) sold separately.  
Model: 10221601-R

## Description:

The **ACE-H16-180CP** from AC Electronics is an emergency lighting power supply, optimized for high bay LED fixtures that enables the same LED fixture to be used for both normal and emergency operation. The **ACE-H16-180CP** contains a battery, a high-efficiency battery charger, control circuitry, and a high-efficiency emergency power supply. The emergency power supply has a dc output voltage and regulates power to maintain the total output power delivered by the **ACE-H16-180CP**. The **ACE-H16-180CP** is compatible only with LED drivers that incorporate an analog 0/1-10 Vdc dimming control function. The **ACE-H16-180CP** comes in a single metal enclosure with hardware optimized for high bay mounting of UFO type fixtures. An optional wireless remote control test switch is available for initiating periodic emergency lighting tests. The input of the **ACE-H16-180CP** connects to the unswitched AC line for charging the battery during normal mode and for monitoring for a power failure. The output of the

**ACE-H16-180CP** connects to the power input of the normal LED driver. The **ACE-H16-180CP** features a 0-10 Vdc analog dimming controller which is connected to the 0/1-10 Vdc dimming control input of a compatible LED driver. See the wiring diagram for details. In the event of a normal power failure, the **ACE-H16-180CP** switches to emergency-mode and supplies the LED driver with a dc voltage between 120 and 180 volts. The **ACE-H16-180CP** uses its 0-10 Vdc analog dimming controller to adjust the dimming signal fed to the compatible LED driver's dimming control input to regulate the power delivered to the LED driver at a constant 16 Watts for 90 minutes. When normal power returns, the **ACE-H16-180CP** returns to normal-mode. The **ACE-H16-180CP** does not interfere with the normal operation of the normal LED driver during normal-mode. The **ACE-H16-180CP** can be used in switched or unswitched fixture applications.

## Additional Specifications:

Surge protection: .....3 kVp  
 Maximum case temperature Tc: ..... 66 °C  
 Nominal battery voltage: .....12.8 V  
 Battery charge current: ..... 20 to 220 mA  
 Battery charge time: ..... 24 hrs.  
 Metal enclosure IP rating: ..... IP30  
 Wireless Remote-control distance: .....30 ft.  
 Weight ..... 4 lb  
 Dimensions: .....7.09 in L x 3.94 in W x 3.94 in H

<sup>1</sup>The emergency-mode output voltage operating range is 120 - 180 Vdc.

\*Warranty: 5 years based on a maximum case temperature of ≤ 60 °C, 3 years warranty based on a maximum case temperature of ≤ 66 °C

## Safety and Regulatory Compliance:

- UL Listed for both field and factory installation
- CEC Title 20 compliant: Certified in CA Title 20 Appliance Efficiency Database – Battery Charger
- EMI: Complies to FCC Part 15 class A
- RoHS compliant
- **WARNING!**: Risk of Electrical Shock! Do not connect battery connectors until installation is complete.

**5-Year USA-Backed Warranty\***  
 See complete AC Warranty information for details

For questions or to place an order contact us at [oemsales@aceleds.com](mailto:oemsales@aceleds.com) or 800-375-6355 or your local WPG Americas Sales representative at [inquiry@wpgamericas.com](mailto:inquiry@wpgamericas.com) or 888-WPG8881

## Features, Benefits, and Applications:

- Constant output power: Maintains constant emergency light levels over the full 90-minute runtime and over the output voltage range
- Includes input over voltage surge protection, output short circuit, open circuit, and over-voltage protection, as well as over-temperature protection for improved reliability
- Two-wire universal input: Reduces wiring errors and reduces installation time and complexity
- Includes a miniature illuminated test switch status indicator
- An optional wireless remote control test switch (RFI) is sold separately, model 10221601-R. This wireless remote is for initiating periodic emergency lighting tests remotely. The remote comes with an ON/OFF slider switch on the side, as well as two buttons: TEST and CHARGE. Press the TEST button to place the unit into emergency mode. End the test by pressing the CHARGE button, which places the unit back into charge mode.
- Suitable for indoor and damp locations.
- Compatible with 0/1-10 Vdc dimming
- Metal enclosure with high bay mounting hooks and hanger hardware for hanging in-line with UFO lighting fixture

Lead Lengths					
Black	37.8"	Green	37.8"	Purple	37.8"
White	37.8"	Blue	37.8"	Pink	37.8"
Yellow/Black	37.8"	Brown	37.8"	Battery Connector	37"
Green	37.8"	Purple	37.8"		

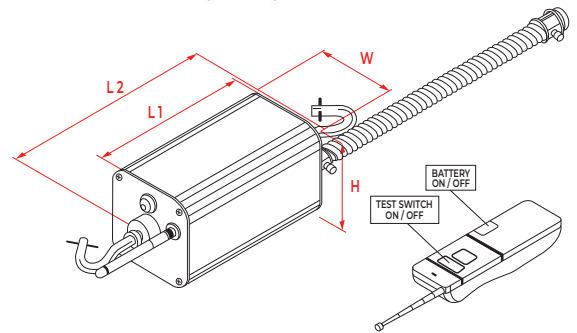
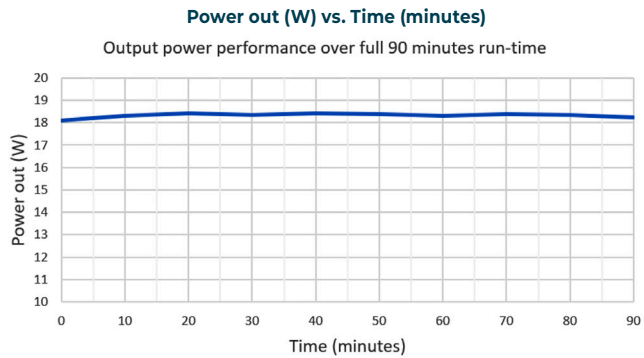
## INSTALLATION:

The **ACE-H16-180CP** Emergency Lighting Power Supply may be used with either a switched or unswitched fixture. An unswitched (constant hot) lead must be connected to this Emergency Lighting Power Supply to allow the battery to charge properly and to maintain a charge when normal AC power is available. This Emergency Lighting Power Supply must not be installed where the ambient temperature is not within the specified range. The **ACE-H16-180CP** Emergency Lighting Power Supply comes in a single metal enclosure with an illuminated test switch status indicator. An optional wireless remote

## Specifications:

Emergency lighting shall be provided by using the **ACE-H16-180CP** Emergency Lighting Power Supply. The **ACE-H16-180CP** shall contain a battery, a high-efficiency battery charger, control circuitry, a high-efficiency two-wire universal input converter (120 through 277 Vac), and a high-efficiency emergency power supply, all contained in a single metal enclosure optimized for high bay UFO lighting fixtures. A miniature illuminated test switch status indicator shall be provided for the purposes of performing periodic testing and indicate status change of the battery and battery-charger. An optional wireless remote control test switch (RFI) shall also be available, which can be used for initiating periodic emergency lighting tests remotely. The **ACE-H16-180CP** shall contain a LiFePO<sub>4</sub> battery with

## Performance:



Dimensions / Weight			
Length (L1)	7.09"	Height (H)	3.94"
Length (L2)	8.27"	Weight	4 lb
Width (W)	3.94"		

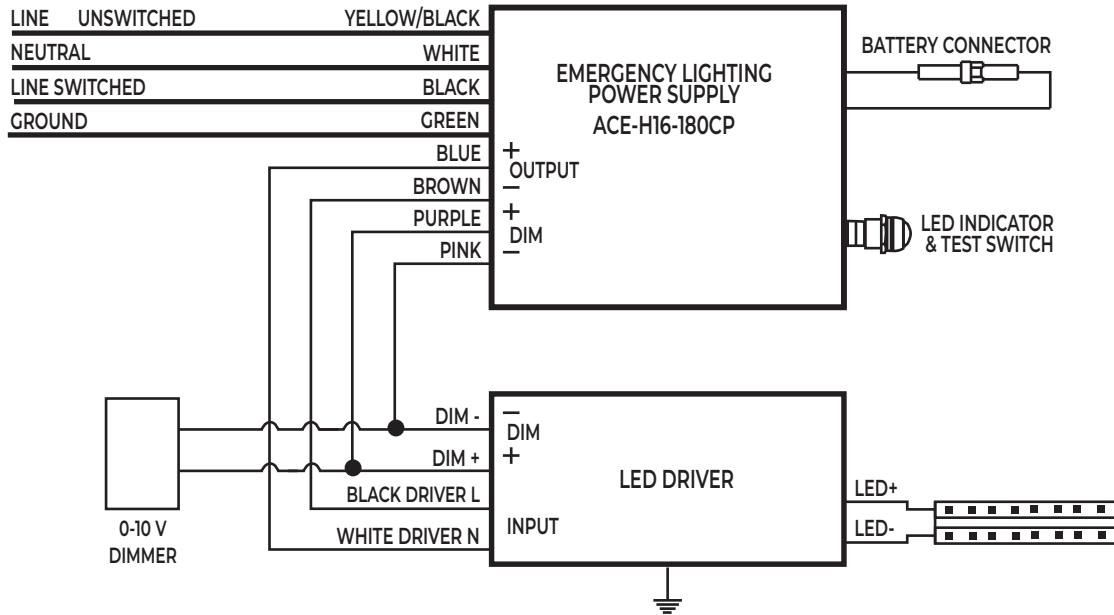
control test switch (RFI) is sold separately, model 10221601-R which can be used for initiating periodic emergency lighting tests remotely. The maximum remote mounting distance to the LOAD is 18 feet using 18 AWG wire. The Emergency Lighting Power Supply metal case should be grounded. The **ACE-H16-180CP** is optimized for UFO lighting fixtures and comes with high bay mounting hooks and hanger hardware for hanging in-line with UFO lighting fixtures. The **ACE-H16-180CP** is compatible only with LED drivers that incorporate an analog 0/1-10 Vdc dimming control function.

a nominal voltage of 12.8 V and 3300 mAh capacity. The **ACE-H16-180CP** Emergency Lighting Power Supply shall be capable of delivering a constant power of 16 Watts over an output voltage range of 120 – 180 V for a minimum of 90 minutes. The **ACE-H16-180CP** shall have a maximum of 8 Watts input power and shall comply with emergency standards established by the current NEC and shall meet CEC Title 20 (California Energy Commission) efficiency standards. The **ACE-H16-180CP** shall comply with part 15 of the FCC Rules. The **ACE-H16-180CP** shall be UL Listed for field or factory installation. The **ACE-H16-180CP** is suitable for indoor and damp locations.

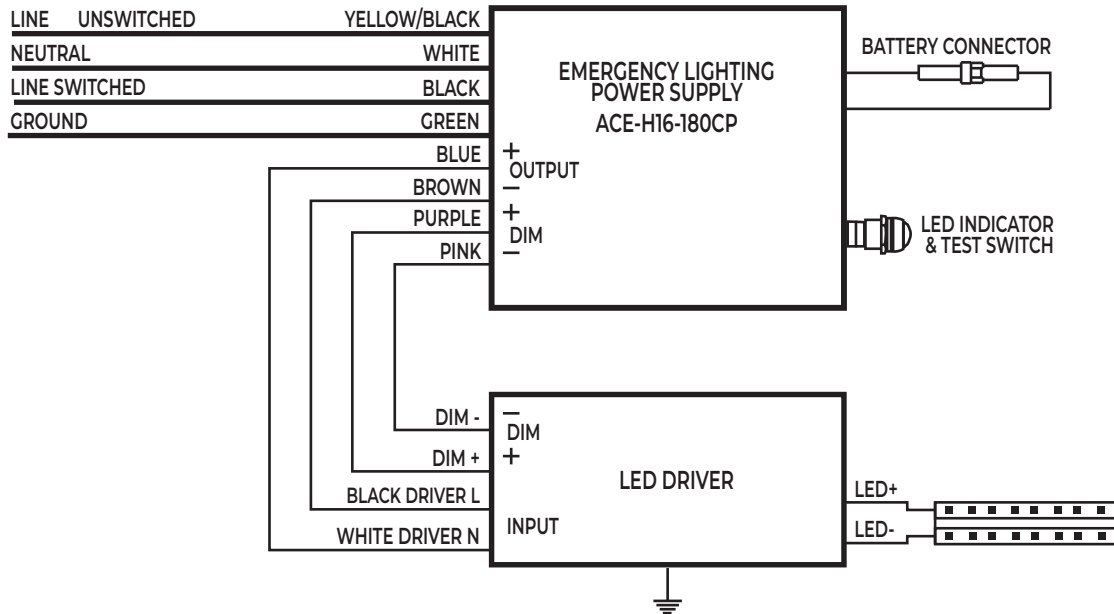
For questions or to place an order contact us at [oemsales@aceleds.com](mailto:oemsales@aceleds.com) or 800-375-6355 or your local WPG Americas Sales representative at [inquiry@wpgamericas.com](mailto:inquiry@wpgamericas.com) or 888-WPG8881

## Wiring Diagrams:

### Wiring Diagram with 0-10 Vdc Dimmer



### Wiring Diagram without 0-10 Vdc Dimmer



**Note:** For unswitched fixture applications, connect the switched line to the unswitched line.

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