

# bodine

## Emergency Driver

Linear Fluorescent

LP600STU



Project: \_\_\_\_\_  
Location: \_\_\_\_\_  
Cat.No: \_\_\_\_\_  
Type: \_\_\_\_\_  
Lamps: \_\_\_\_\_ Qty: \_\_\_\_\_  
Notes: \_\_\_\_\_

### Specifications

**UL LISTED for US and Canada**  
Factory or Field Installation  
(Indoor and Damp)

**Illumination Time**  
90 Minutes

**Initial Light Output**  
600 - 1325 Lumens @ 25°C

**Full Warranty**  
5 Years (NOT pro-rata)

**Universal Input Voltage**  
120 Through 277 VAC, 50 or 60 Hz

**AC Input Current**  
55 mA

**AC Input Power Rating**  
5.0 Watts

**Test Switch / Charging Indicator Light**  
Two-Wire Illuminated Test Switch (2W-ITS)\*

**Battery**  
High-Temperature, Maintenance-Free  
Nickel-Cadmium Battery  
7- to 10-Year Life Expectancy

**Battery Charging Current**  
150 mA

**Recharge Time**  
24 Hours

**Charging Indicator Light**  
LED

**Temperature Rating (Ambient)**  
0°C to +50°C (32°F to 122°F)

**Dimensions**  
21.5" x 1.18" x 1.18"  
(546.1 mm x 30 mm x 30 mm)  
Mounting Center 22.1" (561 mm)

**Weight**  
3.3 lbs. (1.5 kg)

Low-Profile for Space-  
Limited Fixtures

Automatic Code Compliant Testing  
Standard and HO T5 and T8 Lamps  
End-of-Lamp-Life Compatible

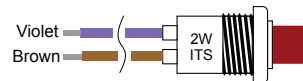
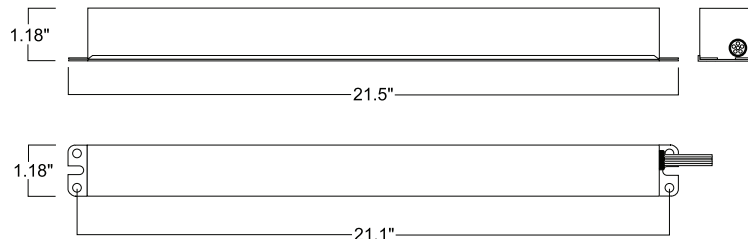
Product order number: LP600STUOCR (galvanized metal case)

### Benefits:

- Self-testing for automatic code-compliance
- Emergency mode lumen output up to 1325 lumens
- End-of-Lamp-Life Compatible
- Two-wire illuminated test switch - Class 2 Device
- Compatible with TLED lamps (see Table 1)

### Dimensions

21.5" x 1.18" x 1.18" (mounting center - 21.1")



An illuminated test switch/charging indicator light is provided.

\* The 2W-ITS is a Class 2 device.

# LP600STU Fluorescent emergency ballast, low-profile for space-limited fixtures

## Application

The LP600STU low-profile emergency ballast works in conjunction with a low-profile or standard-size AC ballast to convert T5 and T8 fluorescent fixtures into unobtrusive emergency lighting. The emergency ballast consists of a battery, charger and electronic circuitry in one compact case. The LP600STU can be used with one standard or high-output T5 or T8 lamp or one 4-pin long compact fluorescent lamp (see Table 1). Also operates Philips LED T8 Models: 9290002840, 9290002841, 9290002842, 9290002862, 9290008964, 9290008965. It is also compatible with most one-, two-, three- and four-lamp electronic, standard, energy-saving and dimming AC ballasts. If used in an emergency-only fixture, no AC ballast is necessary. The LP600STU is suitable for indoor and damp locations and for sealed & gasketed fixtures, including fixtures rated for wet locations. It is not suitable for air handling heated air outlets or wet or hazardous locations. For information about specific lamp and ballast compatibility, please contact the factory. Recommended applications include: emergency lighting for pendant, cove, recessed indirect/direct, surface-mount and architectural lighting commonly used in office, hospitality, healthcare, retail and educational facilities, as well as for international line voltages, drilling rigs where generators are the primary source of power and other applications requiring higher tolerance of line voltage variation or harmonic distortion.

## Operation

During normal operation, the LP600STU constantly monitors battery voltage. When AC power fails, the LP600STU immediately switches to the emergency mode, operating one lamp at a reduced lumen output for a minimum of 90 minutes. When AC power is restored, the emergency ballast

automatically returns to the charging mode and, using a patented circuit, delays AC ballast operation for approximately three seconds to prevent false tripping of the AC ballast end-of-lamp-life shutdown circuits. During automated testing, the LP600STU simulates an AC power failure, causing the emergency ballast to switch to emergency mode and conduct a discharge test to monitor battery voltage and discharge current. If the LP600STU detects a problem, the status indicator light flashes. When testing is complete, the LP600STU returns to the charging mode. The LP600STU automatically tests emergency lighting for 30 seconds every 30 days and 90 minutes once a year.

## Installation

The LP600STU does not affect normal fixture operation and may be used with either a switched or unswitched fixture. If a switched fixture is used, an unswitched hot must be connected to the emergency ballast. The emergency ballast must be fed from the same branch circuit as the AC ballast. The LP600STU may be installed inside or on top of the fixture. Installation is not recommended with fixtures where the ambient temperature may fall below 0°C.

## Emergency Illumination

Depending on the wattage and type of lamp selected, the LP600STU produces 600 to 1325 lumens initial emergency light output. During emergency operation, one lamp is illuminated, even if installed with a multilamp AC ballast.

## Specification

Emergency lighting shall be provided by using a standard fluorescent fixture equipped with a Bodine LP600STU low-profile self-testing/

self-diagnostic fluorescent emergency ballast. Electronic circuitry shall be self-testing in design and automatically test emergency lighting for a minimum of 30 seconds every 30 days and 90 minutes once a year. An embedded microcontroller will continuously monitor the battery voltage. The emergency ballast, using a patented circuit, shall delay AC ballast operation for approximately three seconds to prevent false tripping of AC ballast end-of-lamp-life shutdown circuits. The LP600STU shall consist of a high-temperature, maintenance-free nickel-cadmium battery, charger and electronic circuitry contained in one 21.5" x 1.18" x 1.18" galvanized steel case. A solid-state charging indicator light to monitor the charger and battery, a 2W-ITS and installation hardware shall be provided. The emergency ballast shall be capable of operating one \_\_\_\_\_ fluorescent lamp at \_\_\_\_\_ lumens (see Table 2) initial emergency light output in the emergency mode for a minimum of 90 minutes.

It shall be suitable for indoor and damp locations and for sealed & gasketed fixtures, including fixtures rated for wet locations. The LP600STU shall have universal input voltage (120 through 277 Vac, 50 or 60Hz), 5 Watts of input power and an 21.0 Watt-hour battery capacity and shall exceed emergency standards set forth by the current NEC. The emergency ballast shall be UL Listed for the US and Canada for installation inside or on top of the fixture.

## Warranty

Model LP600STU is warranted for five (5) full years from date of purchase. Please see detailed warranty information on our web site.

**Table 1 Lamp Compatibility**

LAMP DIAMETER (T8, T9, T10, T12)	BASE	WATTAGE (Length)	NO. of LAMPS (EMERGENCY)
T5/HO	Miniature Bipin	14-54 W (2'-4')	1
T5	Miniature Bipin	14-28 W (2'-4')	1
T8/HO	Bipin	44 W (4')	1
	Recessed DC	44-55 W (4'-5')	1
T8	Bipin	17-40 W (2'-5')	1
LED T8 InstantFit	Bipin	14.5W (4')	1
Long Compact	4-pin (2G11)	36-55 W	1

**Table 2 Initial Lumen Output**

LAMP	LUMENS
	1 Lamp
FP54, F54T5/HO	250
FP39, F39T5/HO	1125
FP24, F24T5/HO	725
FP28, F28T5	1250
FP21, F21T5	1025
FP14, F14T5	750
F17T8	650
F25T8	750
F32T8, (4')	1100
F40T8 (5')	1325
F40T8/HO (4', 44 W)	1100
F60T8/HO (5', 55 W)	1275
PL-L 50W, F50BX/RS, FT55DL	1050
PL-L 40W/RS, F40/30BX, FT40DL/RS	925
PL-L 36W, F39/36BX, FT36DL	900
Philips LED T8 InstantFit	575

