

# LP600STU REDiTEST®

Universal EMERGENCY LIGHTING EQUIPMENT

# PHILIPS bodine

A Division Of Philips Electronics North America Corporation

**Specification grade;  
High lumen, low profile;  
For standard and high output T5/T8;  
Automatic code-compliant testing**

## Product Summary

### UL LISTED/C UL CERTIFIED

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

Single Pole

### 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)

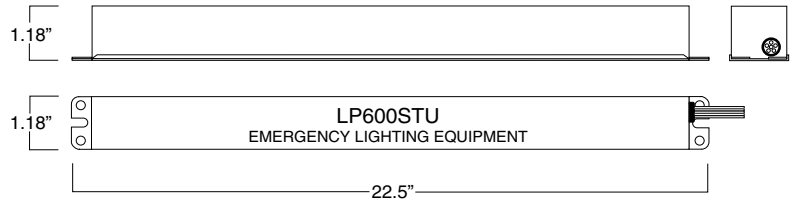
0°C to +50°C  
(32°F to 122°F)

### Dimensions

22.5" x 1.18" x 1.18"  
(572 mm x 30 mm x 30 mm)  
Mounting Center 22.1" (561 mm)

### Weight

3.3 lbs. (1.5 kg)



## APPLICATION

The REDiTEST® 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). 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 and, if selected, the audible alarm sounds. 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.

## UL, CSA and CODE COMPLIANCE

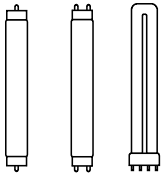
The LP600STU has been tested by Underwriters Laboratories in accordance with the standards set forth in UL 924, "Emergency Lighting and Power Equipment," and by the Canadian Standards Association (CSA) in accordance with the standards set forth in C22.2 No. 141, "Unit Equipment for Emergency Lighting." The LP600STU is UL Listed and CSA Certified for factory or field installation. Emergency illumination time exceeds the National Electrical Code (NEC), Life Safety Code (NFPA-LSC), National Building Code of Canada (NBC), National Fire Code of Canada (NFC) and UL 90-minute requirements.

## Specifiers Reference

Project \_\_\_\_\_ Type \_\_\_\_\_ Model No. \_\_\_\_\_  
Comments \_\_\_\_\_

L2000038

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## 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 multi-lamp AC ballast.

## SPECIFICATION

Emergency lighting shall be provided by using a standard fluorescent fixture equipped with a Philips Bodine REDiTEST® 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 22.5" x 1.18" x 1.18" galvanized steel case. A solid-state charging indicator light to monitor the charger and battery, a single-pole test switch 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 and CSA Certified for installation inside or on top of the fixture and shall be warranted for a full five years from date of purchase.

## WARRANTY

Model LP600STU is warranted for five (5) full years from date of purchase. This warranty covers only properly installed Philips Bodine emergency ballasts used under normal conditions. For the warranty period, Philips Emergency Lighting will, at its option, repair or replace without charge a defective emergency ballast, provided it is returned to the factory transportation prepaid and our inspection determines it to be defective under terms of the warranty. Repair or replacement, as stated above, shall constitute the purchaser's exclusive warranty, which does not extend to transportation, installation, labor or any other charges; nor does it apply to any equipment of another manufacturer used in conjunction with the emergency ballast.

Table 1 - Lamp Compatibility

LAMP DIAMETER (T8, T9, T10, T12)	BASE	WATTAGE (Length)	NO. of LAMPS (EMERGENCY)
T5/HO	Miniature Bipin	24-54 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
Long Compact	4-pin (2G11)	36-55 W	1

Table 2 - Initial Lumen Output

LAMP	LUMENS
FP54, F54T5/HO	1250
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
F48T8/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

*Partial listing of lamps operated.*

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