

### Type A & Type B Integrated







# Easily upgrade to LED

## from fluorescent.

Topstar's Hybrid LED T8 lamps have been designed and engineered for different kinds of applications. You can have the option of using them as Type A tube, working with existing electronic ballasts, or in a ballast bypass application as Type B tube. It is fully certified by UL on both modes. The innovative hybrid design helps you save the trouble in choosing tubes. And when there is compatibility problems associated with ballasts, you can simply connect the tube to line voltage, which allows you to keep using the same tube instead of repalcing it.

- UL Classified & DLC listed.
- 18W/32W 4ft fluorescent tube replacement
- Hybrid Mode: Electronic ballast compatible or Bypass
- Wide beam 325° light emitting area
- Reduces maintenance and replacement costs with longer lifespan
- Provides convenience with flexible installation options
- Reduces stock skus for distributors
- Bypass Mode: double-end or single-end connection minimizes labor and eliminates need for additional non-shunted sockets
- Operating Temperature: -20°C/-4°F to 45°C/113°F
- Power Factor >0.9, THD<20%, Non-Dimmable

### **Electrical and Technical Data (subject to change without notice)**

Ordering Code	Line \ Input Voltage	/oltage Appli Lamp Wattage	cation ** Initial Lumen	Ballast C Bare Lamp wattge	ompatible Ap System Wattage	plication *  ** Initial Lumen	Base	CRI	Color Temperature	Length	Beam Angle
L48T8-8YY-12P-G7R-HB	120~277V	13W	1900lm	12W	15.5W	1900lm	G13	80	4000K/5000K	48in	120°

- Data based on typical electronic ballast
- \*\* Initial Lumen value above are @ 5000K

#### **Installation Guide**

WARNING - Risk of fire or electric shock. LED Retrofit Kit installation requires knowledge of luminaire electrical systems. Installation should be performed only by a qualified electrician in accordance with the National Electrical Code and relevant local code.

WARNING - Risk of fire or electric shock. Install this kit only in the luminaires that have the construction features and dimensions shown in the photographs and/or drawings. WARNING - To prevent wiring damage or abrasion, do not expose wiring to edges of sheet metal or other sharp objects.

WARNING - Risk of fire or electric shock. Luminaire wiring and electrical parts may be damaged when drilling for installation of LED retrofit kit. Check for enclosed wiring and

- Disconnect power at the source before installation, inspection or removal. Do not simply switch off fixture.
- Not intended for use with emergency exit fixtures or emergency exit lights.
- Do not use if product is damaged.
- Suitable for use with non-shunted and shunted lamp holders.
- Do not make or alter any open holes in an enclosure of wiring or electrical components during kit installation.
- "This luminaire has been modified to operate LED lamps" shall be marked on the retrofit luminaire where readily visible by the user during normal maintenance including re-lamping.
- · Risk of fire or electric shock. Do not open or modify. No user serviceable parts inside.
- Installers should not disconnect existing wires from lamp holder terminals to make new connections at lamp holder terminals. Instead installers should cut existing lamp holder leads away from the lamp holder and make new electrical connections to lamp holder lead wires by employing applicable connectors.
- · SUITABLE FOR DAMP LOCATIONS. Suitable for use in wet locations when used in an outdoor-rated fixture. Not for use where directly exposed to the weather or water.
- Complies with Part 15 of FCC. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received including interference that may cause undesired operation.
- SUITABLE FOR "TYPE IC" OR "TYPE NON-IC" LUMINAIRES.
- No external weight or mechanical force should be applied to tube or components.
- THE RETROFIT ASSEMBLY IS ACCEPTED AS A COMPONENT OF A LUMINAIRE WHERE THE SUITABILITY OF THE COMBINATION SHALL BE DETERMINED BY UL
  OR AUTHORITIES HAVING JURISDICTION.

