

## 7 Watt LED Bulb - T8 Lamp - Ballast Compatible - 2 Foot Replacement or Upgrade for Fluorescent Light

### LEDT8-24-BLST

Please see last page for supporting documentation for this product(certificates, CAD files & drawings, IES files, wiring diagrams, etc).



#### LEDT8-24-BLST 7 watt T-series Ballast Compatible LED Tube

**Listing:** United States & Canada

**Lamp Type:** LED T8-Style Tube

**Base:** G13 Bi-Pin

**Dimensions:** 23.5"-L x 1.02"-OD

**Weight:** 0.45 lbs

**Voltage:** -

**Watts:** 7 watts

**Total Lumens:** 840

**Luminous Efficiency:** 120 Lm/W

**Lamp Life Expectancy:** 50,000+ Hours

**Color Temperature:** 4000k or 5000k

**Color Rendering Index:** >82.5

**Beam angle:** 140°

**Lighting Configuration:** Flood Pattern

**Lens:** Frosted

**Power Efficiency:** 90%

**Power Factor:** >0.98

**Ambient Temperature Rating:** -20°C to +45°C

**Materials:** Aluminum housing, polycarbonate lens

**Ingress Protection:** IP20

#### Quick Summary

Listed for United States and Canada

UL-1993

UL-1993 CLS

CAN/CSA C22.2 No 137

CAN/CSA C22.2 No 137 CLS

120 Lm/W efficiency

Certified to Canadian Standards

LEL Listed

80% Lumen Retention @ 50,000+ Hours

Internal Driver

Single End Powered

Ballast Compatible

#### Special Orders- Requirements

Contact us for special requirements

**Toll Free:** 1-800-369-6671

**Intl:** 1-214-616-6180

**E-mail:** [sales@larsonelectronics.com](mailto:sales@larsonelectronics.com)

**The LEDT8-24-BLST from Larson Electronics is 7 watt T-series LED tube lamp that is an excellent choice for upgrading existing T8 fluorescent lamp fixtures to LEDs as well as a direct replacement for our own LED light fixtures. This LED lamp is LEL listed, providing 120 lumens per watt for a total of 840 lumens per lamp. These T8 LED replacement lamps offer 50,000 hour lamp life, over twice that of T8 or T5HO fluorescent lamps, while offering impact and vibration resistance far exceeding traditional light sources. The LEDT8-24-BLST is equipped with a special driver that allows it to work with a fluorescent ballast and no need for ballast removal or wiring around the ballast and also works with no ballast at all. This 7 Watt T-series LED Bulb works with any T8 fluorescent light fixtures, can be configured for any T series fluorescent lamp fixture with G13 bi-pin tombstones or sockets, and requires no ballast for operation. To increase safety during installation and routine maintenance, these lamps are wired for single sided power**

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with internal integrated LED driver housed within the tube. Internally, you simply bring the black wire to one pin and the white wire to the other. The polycarbonate lens diffuses the light and makes this bulb ideal for food safe environments as there is no glass. The aluminum housing serves as a heat sink and provides rigidity and strength for this LED bulb.

In fluorescent light fixtures with electronic ballasts, the operator usually needs to bypass the ballast and wire the power directly to the LED tube (black wire to one pin and white wire to the other). That is not the case with the LEDT8-24-BLST model of lamps. These T-series LED tube lamps contain special drivers that allow them to work with fluorescent ballasts with no damage to the LED. Operators do not need to wire around the existing ballasts during installation which saves both time and money. However, they do not require a fluorescent ballast and work equally as well without a ballast at all. These LED fluorescent style bulbs are universal voltage and run directly off any voltage ranging from 100 volts to 277 volts AC 50/60 Hz. The internal LED driver is a "smart" driver, sensing the incoming voltage and adjusting accordingly to provide the current required by the lamp. This allows operators to simply wire the fixture to voltage within the 120-277V range, no modifications required. This includes commonly found voltages such as 120V 60Hz, 220V 50Hz, 240V 60Hz, and 277V 60Hz.

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[Click Photo to Enlarge](#)

[Click Photo to Enlarge](#)

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Unlike gas burning and arc type lamps that have glass bulbs, LEDs have no filaments or fragile housings to break during operation. Instead of heating a small filament or using a combination of gases to produce light, light emitting diodes (LEDs) use semi-conductive materials that illuminate when electric current applied and emitting light. With LED lights, there is no warm up time or cool down time before re-striking and provide instant illumination when powered on, adding to the reliability of LED technology. By nature, LED light sources run significantly cooler than traditional lamps, reducing the chance of accidental burns and increased temperatures due to heat emissions. This solid state design of light emitting diodes provides a more reliable, stable, durable, and energy efficient light source over traditional lighting.

Fluorescent lamps provide a full 360° beam coverage around the lamp. Since most fluorescent fixtures require directional lighting, reflectors have to be used to bounce the light back towards the intended target area for illumination. LED lamps, like the LEDT8-24-BLST are directional, which eliminates the need for back mounted reflectors and reduces wasted and lost light.

These are the second generation of our 7 watt LED tubes. Efficiency for this LED lamp is 120 lumens per watt, for a total of 840 lumens per bulb. We offer a choice of 4000K and 5000k color temperatures and frosted lenses. The LEDT8 series of LED lamps are designed for direct replacement of 4ft fluorescent fixtures with G13 bases for replacing four foot T8, T8 high output, T12, T12 high output, and T12 very high output fluorescent lamps. Additionally, these lamps can be used in fixtures that currently use a G5 to G13 adapter socket using T5 lamps. Please note, this tube is 47" in length and will not fit properly in fixtures designed to accept 45" T5 lamps without adapters.

**Ballast Compatible Design:** In fluorescent light fixtures with electronic ballasts, the operator usually needs to bypass the ballast and wire the power directly to the LED tube (black wire to one pin and white wire to the other). That is not the case with the LEDT8-24-BLST model of lamps. These T-series LED tube lamps contain special drivers that allow them to work with fluorescent ballasts with no damage

to the LED. Operators do not need to wire around the existing ballasts during installation which saves both time and money. However, they do not require a fluorescent ballast and work equally as well without a ballast at all. Ballast compatible LED lamps also handle heat better because they do not have an internal driver.

These LED fluorescent tube replacements can be used as upgrades or replacements to our own Larson Electronics.com explosion proof fluorescent lights, explosion proof paint spray booth lights as well as any other T5HO series light fixture the operator already has in house. They can be used as replacements in standard fluorescent light fixtures. Installation of ballast compatible LED lamps is the same process as replacing one fluorescent lamp with another. Operators simply swap the old fluorescent bulb with a compatible LED version.

**Ballast Compatible Bulb Considerations:** Some considerations must be taken into account when making the decision to update from fluorescent to LED lamps. While ballast compatible LED lamps are compatible with existing fluorescent ballasts with no need for any rewiring, they do still rely upon functioning ballasts to work. In other words, if the fluorescent ballast fails, the upgraded LED lamp will not emit light until the ballast is replaced.

Despite the downside of still relying on the fluorescent ballasts, ballast compatible LED lamp upgrades are still a great decision for operators looking to start small while working towards a full LED upgrade and all of the benefits LED lamps offer such as instant on functionality, longer lamp life expectancy, and lower power draws. Upgrading to ballast compatible LED bulbs offers all of those benefits without the cost of hiring an electrician to completely rewire the fixtures.

If you want to completely eliminate the headache of electronic ballasts and start a complete LED upgrade, Larson Electronics has you covered with our selection of non-ballast compatible LED lamps such as the [LEDT5HO-48-V2](#), [LEDT8-28W-V1](#), [LEDT8-24-V1](#), [LEDT8-36-V1](#), or [LEDT5HO-24-V2](#). Although these lamps do require rewiring, they offer the immense benefits of LED lamps once the upgrade is complete.

These LED fluorescent tube replacements can be used as upgrades or replacements to our own explosion proof fluorescent lights, explosion proof paint spray booth lights as well as any other T series light fixture the operator already has in house. We have specially designed these for our explosion proof light fixtures, however, they can be used as replacements in standard fluorescent light fixtures with no need to remove the ballasts or wiring around them.

At Larson Electronics, we do more than meet your lighting needs. We also provide replacement, retrofit, and upgrade parts as well as industrial grade power accessories. Our craftsmen can custom build any lighting system and/or accessories to fit the unique demands of your operation. A commitment to honesty, quality, and dependability has made Larson Electronics a leader in the lighting and electronics business since 1973. Contact us today at 800-369-6671 or message [sales@larsonelectronics.com](mailto:sales@larsonelectronics.com) for more information about our custom options tailored to meet your specific industry needs.

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## Frequently Asked Questions (FAQ)







**Warranty:** 12 Months

**Options:**

**LEDT8-24-BLST-Color Temp**

**Example: LEDT8-24-BLST-40K**

Color Temp	
4000K	-40K
5000K	-50K

Links (Click on the below items to view):

- [Canadian CEC Certificate \(Commonly referred to as CSA Certificate\)](#)
- [USA NEC Certificate \(Commonly referred to as UL Certificate\)](#)
- [HigResPic1](#)
- [HigResPic3](#)
- [HigResPic4](#)
- [HigResPic9](#)
- [Video1](#)
- [ISO 9001 Certification](#)
- [Business Certificate](#)
- [Shipping Time Map](#)