USLED
Always the Right Choice!

Project	Date

Catalog Number	Type

TDK

LED Troffer Retrofit Kit

Product Performance Summary

Lumen Output	**Up to 4,110 lumens**
Efficacy	**Up to 141 LPW**
CRI	**≥ 80 CRI**
Available CCT	**3500K, 4000K, 5000K or Tunable White (2700K-6500K)**
Warranty	**Ten-Year Warranty**

Product Overview

The TDK retrofit kit easily and efficiently converts existing fluorescent troffers to LED technology. The LED technology ensures long-term performance and will reduce energy consumption. By utilizing the existing fixture housing, the lensed kit comes completely assembled right out of the box to quickly perform the change out in minutes without disturbing the ceiling.

Key Features

- Completely assembled as a lensed kit to easily convert an existing fluorescent troffer to LED without disturbing the ceiling.
- Available in 1x4, 2x2 & 2x4 models.
- Designed for 1" wide T-bars.
- Optional integrated motion sensor with daylight harvesting (Smart Blu™).
- Industry leading 10-Year warranty.

Construction

- Housing is constructed of 22 gauge steel for exceptional durability.
- Pre-painted white finish is standard for the highest reflectance.
- Frosted ribbed acrylic lens is designed to maximize lumen output and minimize glare.
- Air return vents option available.

Electrical

- 120-277VAC input. [2]
- 0-10V dimming standard (Mark 7 interface).
- Operating temperature: -40°C to +40°C (-40°F to +104°F)

Optics

- Industry-leading LEDs with 3000K, 3500K, 4000K, and 5000K CCT (minimum 80 CRI).
- Tunable white option available.
- Lumen Maintenance >161,000 hours (L70) [1]

Mounting

- Lightweight and easy to install in standard T-Grid ceilings.
- Accessory kit available for 1/2" wide T-bars.
- Surface mounting optional with mounting kit accessory (sold separately).

Warranty

- Backed by US LED's industry-leading Ten-Year Warranty.

Product Applications

- Classrooms
- Conference Rooms
- Office Spaces
- Hallways/Corridors
- Industrial/Warehouses
- Convenience Stores
- Retail Areas
- Hospitals
- Health Care Facilities
- Commercial Spaces

Product Certifications

- CSA Listed
- Complies with UL1598 and CSA 22.2
- DLC Premium Listed
- Suitable for indoor damp locations
- RoHS compliant

Ordering Information

Example: TDK1-1-22-UNVL-25-1-50

TDK1								
Series	**Variant**	**Size**	**Input Voltage**	**Power**	**Driver**	**CCT**	**Battery Back-up**	**Air Return**
	1 Standard (No Controls)	**14** 1x4 **22** 2x2 **24** 2x4	**UNVL** 120-277V	**21** 21W **25** 25W **30** 30W **40** 40W **50** 50W	**1** Philips Driver 0-10V **2** iNFiNi Driver 0-10V	**30** 3000K **35** 3500K **40** 4000K **50** 5000K	**Blank** No Battery Back-Up **B** Integrated Battery Back-Up [3]	**Blank** No Venting **AR** Air Return Venting

TDK1								
Series	**Variant**	**Size**	**Input Voltage**	**Power**	**Driver**	**CCT**	**Battery Back-up**	**Air Return**
	1 Standard	**14** 1x4 **22** 2x2 **24** 2x4	**UNVL** 120-277V	**29** 29W	**3** Blu-Drive Driver	**T** 2700K-6500K	**Blank** No Battery Back-Up **B** Integrated Battery Back-Up [3]	**Blank** No Venting **AR** Air Return Venting

Accessories (Sold Separately)	
TDK-SMK-1-14	1x4 Surface Mount Kit
TDK-SMK-1-22	2x2 Surface Mount Kit
TDK-SMK-1-24	2x4 Surface Mount Kit
DW-14-GB	1x4 Drywall Flange Kit
DW-22TX	2x2 Drywall Flange Kit
DW-24TX	2x4 Drywall Flange Kit
TDK1-22-NGR	2x2 1/2" Wide T-Bar Kit
TDK1-24-NGR	1x4/2x4 1/2" Wide T-Bar Kit
TDK1-2XCA	2x2/2x4 - 2 ft. Lift Rail Kit for Earthquake Zones
TDK1-1XCA	1x4 - 1 ft. Lift Rail Kit for Earthquake Zones
ILB-CP10A-HE	Constant Power HighEfficiency LED Emergency Driver
ILB-CP12A	Constant Power LED Emergency Driver
IP710-LFZ	Leviton® Wall Control Dimmer

1. US LED product 'Lifetimes' refer only to the LED light engine, not the power source, and are based on the Illuminating Engineering Society's TM21 Projected Lumen Maintenance methodology at a 25° C / 77° F ambient temperature. The lifetimes are solely meant to be a guide for expected LED degradation and not a warranty or predictive of their actual life, which can be affected by ambient temperatures and other factors.
2. Canadian 347VAC available upon request, but not DLC Listed.
3. Battery Back-Up Option [B] only available in 2x2 and 2x4 sizes.

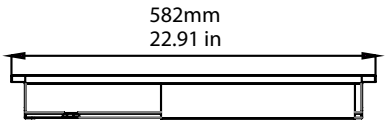
TDK
LED Troffer Retrofit Kit

USLED
Always the Right Choice!

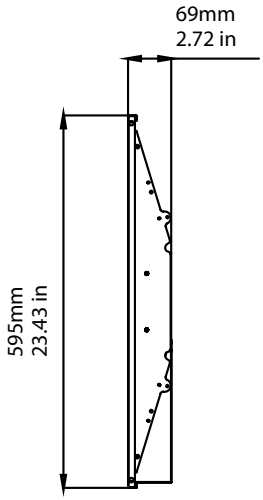
Dimensions

Model	Net Weight
1x4	9 lbs. (4.1kg)
2x2	8 lbs. (3.6kg)
2x4	13 lbs. (5.9kg)

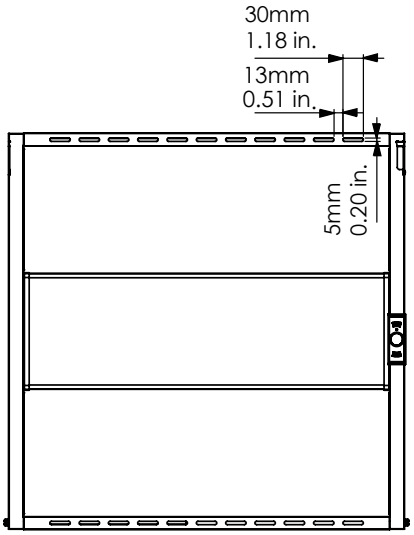
2x2 Model (Side View)



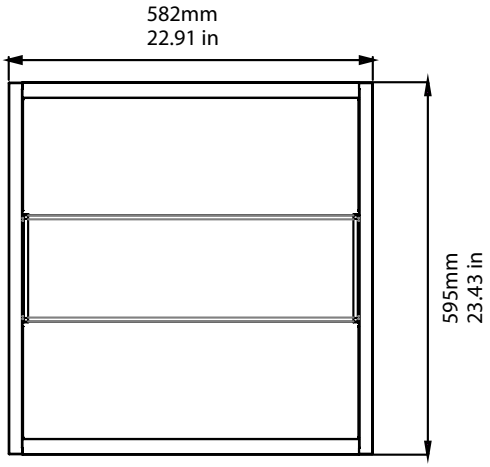
2x2 & 2x4 Models (End View)



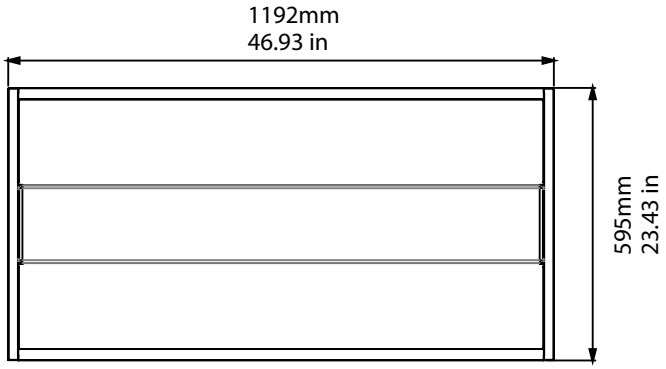
2x2 Model With Air Return Option (Bottom View)



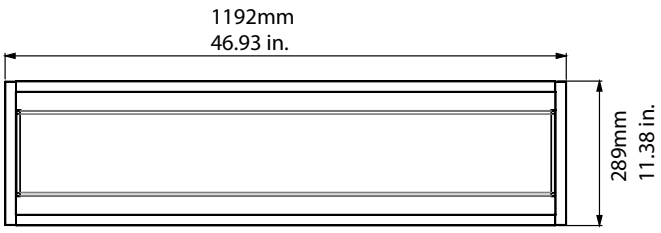
2x2 Model (Bottom View)



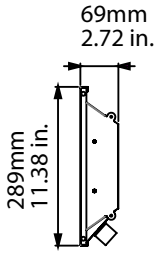
1x4 & 2x4 Models (Bottom View)



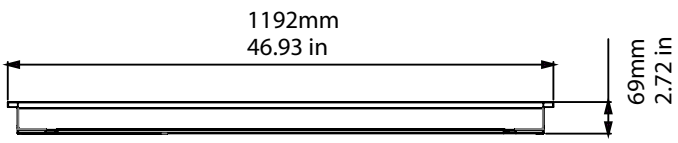
1x4 Model (Bottom View)



1x4 Model (End View)



2x4 Model (Side View)



TDK
LED Troffer Retrofit Kit

USLED
Always the Right Choice!

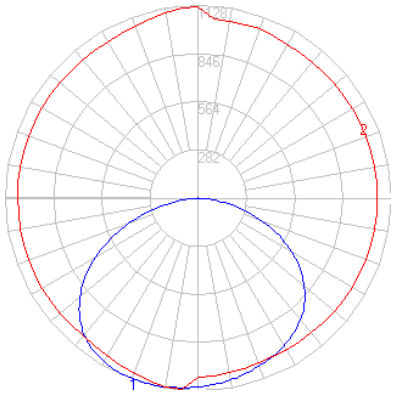
Performance Data

Luminaire Photometric Data

Model Number	**TDK1-1-24-UNVL-25-1-50**
Issue Date	**02/26/2019**
IESNA	**LM-63-2002**
Lamp	**LED**
Total Input Watts	**24.7**
Total Lumens	**3,520**
Efficacy	**143 LPW**
Spacing Criterion	**0°-180° = 1.28 | 90°-270° = 1.48**

Zonal Lumen Summary

Zone	Lumens	% Fixt
0-30	872.11	24.80
0-40	1444.16	41.00
0-60	2633.52	74.80
0-90	3518.30	100.00
0-180	3520.09	100.00



Model	System Level Power	Delivered Lumens	Efficacy	CCT	L70 Calculate Life	L85 Calculate Life
TDK1-1-14-UNVL-25-1-30	25.3W	3,220L	125 LPW	3000K	161,000 Hours	75,000 Hours
TDK1-1-14-UNVL-25-1-35	25.3W	3,230L	129 LPW	3500K	161,000 Hours	75,000 Hours
TDK1-1-14-UNVL-25-1-40	25.3W	3,390L	135 LPW	4000K	161,000 Hours	75,000 Hours
TDK1-1-14-UNVL-25-1-50	25.3W	3,320L	132 LPW	5000K	161,000 Hours	75,000 Hours
TDK1-1-14-UNVL-30-1-30	30.6W	3,760L	123 LPW	3000K	161,000 Hours	75,000 Hours
TDK1-1-14-UNVL-30-1-35	30.6W	3,870L	126 LPW	3500K	161,000 Hours	75,000 Hours
TDK1-1-14-UNVL-30-1-40	30.6W	3,910L	128 LPW	4000K	161,000 Hours	75,000 Hours
TDK1-1-14-UNVL-30-1-50	30.6W	3,980L	130 LPW	5000K	161,000 Hours	75,000 Hours
TDK1-1-22-UNVL-25-1-30	25.0W	3,160L	126 LPW	3000K	161,000 Hours	75,000 Hours
TDK1-1-22-UNVL-25-1-35	25.0W	3,250L	130 LPW	3500K	161,000 Hours	75,000 Hours
TDK1-1-22-UNVL-25-1-40	25.0W	3,260L	131 LPW	4000K	161,000 Hours	75,000 Hours
TDK1-1-22-UNVL-25-1-50	25.0W	3,330L	133 LPW	5000K	161,000 Hours	75,000 Hours
TDK1-1-22-UNVL-30-1-30	31.3W	3,880L	124 LPW	3000K	161,000 Hours	75,000 Hours
TDK1-1-22-UNVL-30-1-35	31.3W	3,990L	128 LPW	3500K	161,000 Hours	75,000 Hours
TDK1-1-22-UNVL-30-1-40	31.3W	4,040L	129 LPW	4000K	161,000 Hours	75,000 Hours
TDK1-1-22-UNVL-30-1-50	31.3W	4,110L	131 LPW	5000K	161,000 Hours	75,000 Hours
TDK1-1-24-UNVL-25-1-30	24.7W	3,370L	135 LPW	3000K	161,000 Hours	75,000 Hours
TDK1-1-24-UNVL-25-1-35	24.7W	3,320L	135 LPW	3500K	161,000 Hours	75,000 Hours
TDK1-1-24-UNVL-25-1-40	24.7W	3,330L	137 LPW	4000K	161,000 Hours	75,000 Hours
TDK1-1-24-UNVL-25-1-50	24.7W	3,520L	141 LPW	5000K	161,000 Hours	75,000 Hours
TDK1-1-24-UNVL-30-1-30	30.5W	3,680L	120 LPW	3000K	161,000 Hours	75,000 Hours
TDK1-1-24-UNVL-30-1-35	30.5W	3,800L	125 LPW	3500K	161,000 Hours	75,000 Hours
TDK1-1-24-UNVL-30-1-40	30.5W	3,830L	126 LPW	4000K	161,000 Hours	75,000 Hours
TDK1-1-24-UNVL-30-1-50	30.5W	3,910L	128 LPW	5000K	161,000 Hours	75,000 Hours

TDK
LED Troffer Retrofit Kit

Accessories

TDK-SMK-1-14 **1x4 Surface Mount Kit**
TDK-SMK-1-22 **2x2 Surface Mount Kit**
TDK-SMK-1-24 **2x4 Surface Mount Kit**

Overview

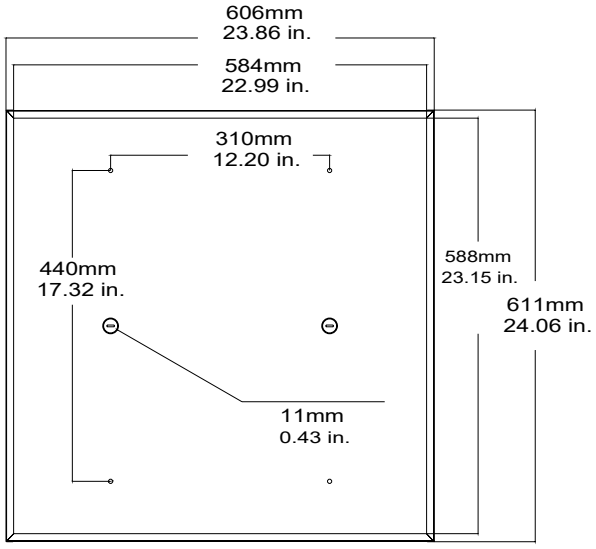
The TDK-SMK surface mount kits allow for US LED's TDK and TEG recessed lighting solutions to be field installed in plenum-less spaces. Designed for use on the surface of drywall or concrete ceilings, these surface mount kits are ideal for offices, educational facilities, healthcare facilities, and any other indoor applications where surface mount troffer installation is required. The TDK-SMK is available in 1x4, 2x2, or 2x4 configurations.

Key Features

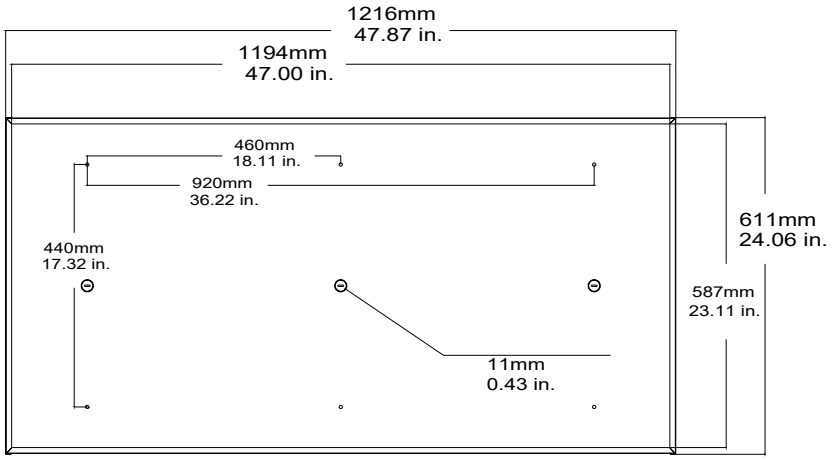
- Surface mounted kits that facilitate easy installation of recessed troffers in non-plenum spaces.
- Available in 1x4, 2x2, or 2x4 configurations.
- Multiple knockouts offer flexible location for power feed.
- Extruded aluminum construction with white powder coat finish ensures maximum protection against potential rust.
- Formed edges are smooth for safe handling while installing.
- Mounting holes provided for surface mounting to the ceiling.

Specifications

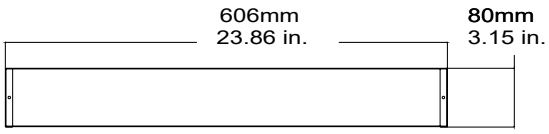
2x2 (Top View)



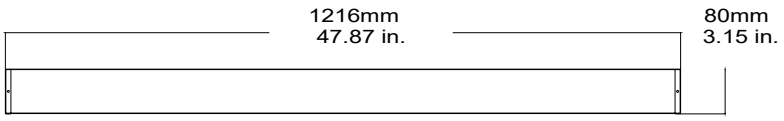
2x4 (Top View)



2x2 (Side View)



2x4 (Side View)

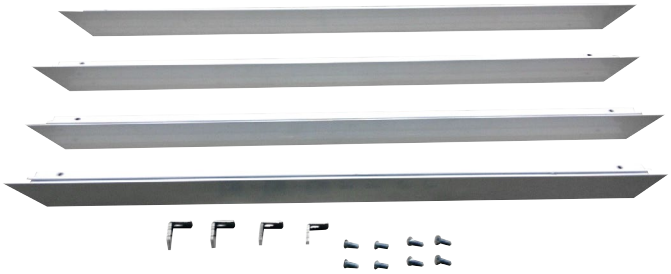


TDK
LED Troffer Retrofit Kit

USLED
Always the Right Choice!

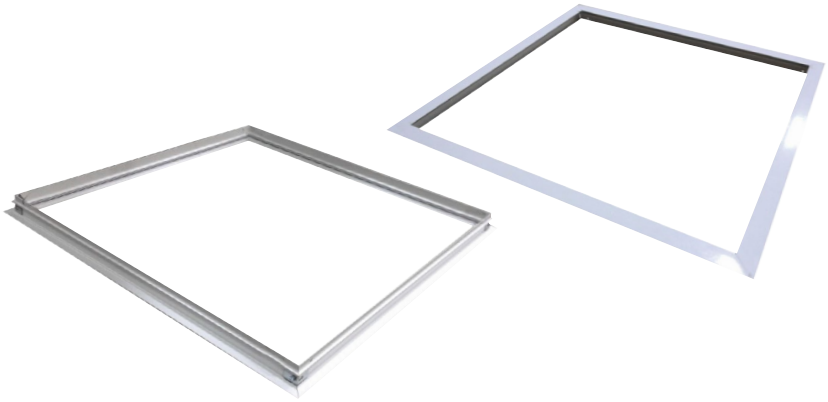
Accessories

DW-14-GB **1x4 Drywall Flange Kit**
DW-22TX **2x2 Drywall Flange Kit**
DW-24TX **2x4 Drywall Flange Kit**



Overview

Drywall flange kits act as T-Bar frames to support recessed troffer luminaires in wood, drywall, or plaster ceilings. From the room side, flange kits mimic the appearance of T-Bars in a baked white enamel finish.



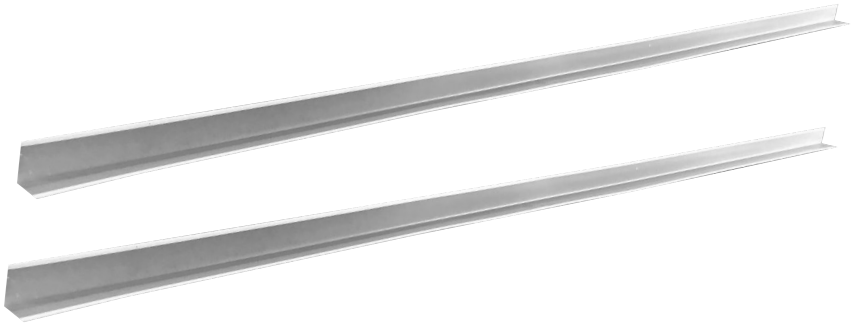
Key Features

- 22 gauge steel, pre-painted white finish.
- All kits include: (2) side flanges, (2) end flanges, (4) corner brackets, and (8) thread cutting screws.

Specifications

- 1x4 Rough Opening: 48.66” x 12.74”
- 2x2 Rough Opening: 24.66” x 24.66”
- 2x4 Rough Opening: 48.66” x 24.74”

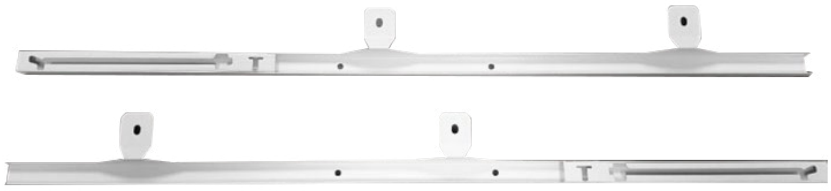
TDK1-NGR-24 **1x4/2x4 1/2” Wide T-Bar Kit**
TDK1-NGR-22 **2x2 1/2” Wide T-Bar Kit**



Overview

1/2” wide T-Bar brackets are designed to support recessed troffer luminaires on narrow (1/2” wide) T-Grids. Simple to install with 1/2” long sheet metal screws (not included).

TDK1-2XCA **2 ft. Lift Rail Kit for Earthquake Zones (2x2/2x4)**
TDK1-1XCA **1 ft. Lift Rail Kit for Earthquake Zones (1x4)**



Overview

The TDK1-2XCA-KIT and TDK1-1XCA-KIT are designed to allow you to attach an old fluorescent fixture to the T-Grid for added security as required by some local codes.

TDK
LED Troffer Retrofit Kit

USLED
Always the Right Choice!

Accessories

ILB-CP10A-HE - Constant Power High-Efficiency LED Emergency Driver

Overview

The ILB-CP10-HE from IOTA Engineering is a UL Listed LED emergency driver for field or factory installation that allows the same LED fixture to be used for both normal and emergency operation. In the event of a power failure, the ILB-CP10-HE switches to the emergency mode and operates the existing fixture for 90 minutes. The unit contains a battery, charger, and converter circuit in a single enclosure and is available in different mounting configurations for individual fixture requirements. The ILB CP10-HE will operate an LED array load at 10 watts with constant power at a rated output voltage of 10V-60V.

Key Features

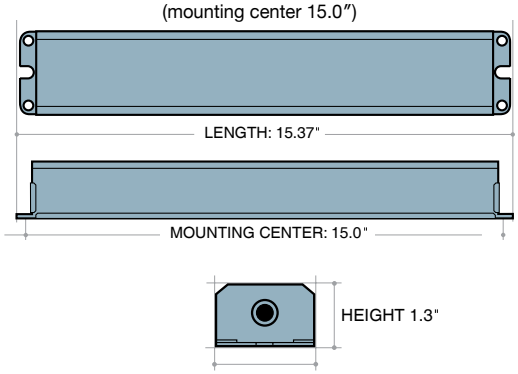
- High-efficiency performance meets CA T20 battery charger efficiency standards.
- UL Listed (UL924/UL1310) for factory and field installations.
- Patented constant power design maintains illumination throughout the 90-minute runtime with no light degradation.
- Two-wire universal AC input.
- Output Class 2 compliant.
- Six mounting configurations available.
- Long life high temperature Ni-Cad battery.
- Includes single-piece TBTS test switch and charge indicator accessory kit.
- Meets or exceeds all NEC, IBC, and Life Safety Code Emergency Lighting requirements.

Specifications

Input Voltage.....(Universal) 120-277VAC, 50/60Hz
Input Rating (120V/277V).....3.7 Watts (max)
Output Voltage[1] .....10-60VDC Class 2 Compliant
Output Current.....1.0A (@10VDC) - 0.16A (@60VDC)
Output Power.....10 Watts (constant)
Max. AC Driver Output Current.....3Adc
Power Factor .....≥ 0.9 at 120VAC[2]
Surge Protection.....Meets ANSI/IEEE C62.41.2-2002
Emergency Operation.....90 minutes
Operating Temp.....0° to 55° C
THD .....< 20%
Battery.....High Temp Nickel-Cadmium
24 Hour Recharge
7-10 Year Life Expectancy
Weight.....(-A, -R) 4.0 lbs.
(-B, -TM) 3.5 lbs.
(-J, -R-J) 3.75 lbs.
Certifications .....cUL Listed for factory and field installation
CA T20 Appliance Efficiency Database

1. Max. output voltage in emergency mode is 58.5 VDC with a + tolerance of 1.5 volts
2. PF ≥ 0.85 at 277VAC

ILB-CP10-HE-A: 15.37″ x 2.24″ x 1.30″
(mounting center 15.0″)



Emergency Lumen Performance - ILB-CP10-HE

Approx. Luminaire Efficacy	Minute 1	Minute 45	Minute 90
100 lm/W	1000	1000	1000
110 lm/W	1100	1100	1100
120 lm/W	1200	1200	1200
130 lm/W	1300	1300	1300

TDK
LED Troffer Retrofit Kit

USLED
Always the Right Choice!

Accessories

ILB-CP12A - Constant Power LED Emergency Driver

Overview

The ILB-CP12 from IOTA Engineering is a UL Listed and Classified LED emergency driver that allows the same LED fixture to be used for both normal and emergency operation. In the event of a power failure, the ILB-CP12 switches to the emergency mode and operates the existing fixture for 90 minutes. The unit contains a battery, charger, and converter circuit in a single can and is available in different mounting configurations for individual fixture requirements. The ILB-CP12 will operate an LED array load at 12 watts with constant power at a rated output voltage of 10V-60V.

Key Features

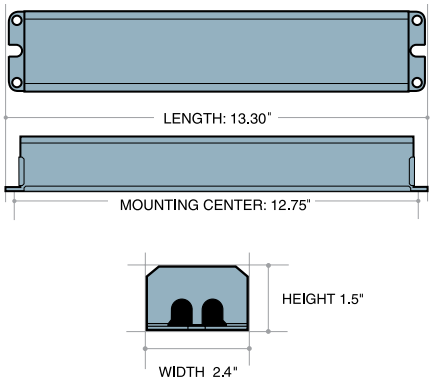
- UL Listed (UL924/UL1310) for factory and field installations.
- Patented constant power design maintains illumination throughout the 90-minute runtime with no light degradation.
- Two-wire universal AC input.
- Output Class 2 compliant.
- Six mounting configurations available.
- Long life high temperature Ni-Cad battery.
- Includes single-piece TBTS test switch and charge indicator accessory kit.
- Meets or exceeds all NEC, IBC, and Life Safety Code Emergency Lighting requirements.

Specifications

Input Voltage.....(Universal) 120-277VAC, 50/60Hz
Input Rating (120V/277V).....3.7 Watts (max)
Output Voltage[1] .....10-60VDC Class 2 Compliant
Output Current.....1.2A (@10VDC) - 0.2A (@60VDC)
Output Power.....12 Watts (constant)
Max. AC Driver Output Current.....3Adc
Power Factor .....≥ 0.9
Emergency Operation.....90 minutes
Operating Temp.....0° to 55° C
THD .....< 20%
Battery.....High Temp Nickel-Cadmium
24 Hour Recharge
7-10 Year Life Expectancy
Weight.....(-A, -R) 4.0 lbs.
(-B, -TM) 3.5 lbs.
(-J, -R-J) 3.75 lbs.
Certifications .....cUL Listed and classified for factory and field installation

1. Max. output voltage in emergency mode is 58.5 VDC with a + tolerance of 1.5 volts

ILB-CP12-A: 13.3″ x 2.375″ x 1.5″
(mounting center 12.75″)



Emergency Lumen Performance - ILB-CP12

Approx. Luminaire Efficacy	Minute 1	Minute 45	Minute 90
100 lm/W	1200	1200	1200
110 lm/W	1320	1320	1320
120 lm/W	1440	1440	1440
130 lm/W	1560	1560	1560