LED Troffer Retrofit Kit



Key Features

- · An aesthetically pleasing LED recessed troffer ideal for new construction or retrofit applications; 1x4 and 2x4 models.
- Designed for 1" wide T-bars.
- Optional integrated motion sensor with daylight harvesting (Smart Blu™).
- BAA-compliant model available.

Electrical

• 120-277VAC input. 2

Ordering Information

- 0-10V dimming standard (Mark 7 interface).
- Operating temperature: -40°C to +40°C $(-40^{\circ}F \text{ to } +104^{\circ}F)$

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).

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.

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

Warranty

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

Project

Date

Catalog Number

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.

Product Applications

- Classrooms
- Conference Rooms
- Office Spaces
- Hallways/Corridors

- Convenience Stores Retail Areas
- Hospitals
- · Health Care Facilities
- Industrial/Warehouses Commercial Spaces

Product Certifications

- CSA Listed
- Complies with UL1598 and CSA 22.2
- Suitable for indoor damp locations
- **BAA/TAA Compliant**
- · RoHS compliant









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

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	Variant	Size In		Input Voltage		Power		Driver		ССТ		EM Back-up		Air Return		Compliance
1	Standard	14	1x4	UNVL	120-	21	21W	1	Philips	30	3000K	Blank	None	Blank	None	BAA Buy-American
(No Controls)			2x4	277V		25	25W		0-10V	35	3500K	BU		AR Air Return	Act Compliant 4	
						30	30W	2	iNFiNi	40	4000K		Back-Up ³		venting	
						40	40W		0-10V	50	5000K					
						50	50W									
	Variant	s	Size	Input	Voltage	P	ower		Driver		ССТ	ЕМ	Back-up	Air	Return	Compliance
1	Standard	14	1x4	UNVL	120-	29	29W	3	Blu-	т	2700K-	Blank	None	Blank	None	BAA Buy-American
		24	2x4		277V				Drive Driver		6500K	BU	Integrated Battery Back-Up ³	AR	Air Return Venting	Act Compliant
	1	Variant 1 Standard (No Controls) Variant	Variant Standard (No Controls) Variant Standard 14 24 Variant Standard 14	1 Standard (No Controls) 24 2x4 2x4	Variant Size Input 1 Standard (No Controls) 24 2x4 Variant Size Input 1 1x4 UNVL	Variant Size Input Voltage	Variant Size Input Voltage Property 1 Standard (No Controls) 24 2x4 2x4 2x4 2x4 2x5 30 40 50	Variant Size Input Voltage Power	Variant Size Input Voltage Power	Variant Size Input Voltage Power Driver	Variant Size Input Voltage Power Driver	Variant Size Input Voltage Power Driver CCT	Variant Size Input Voltage Power Driver CCT EM	Variant Size Input Voltage Power Driver CCT EM Back-up	Variant Size Input Voltage Power Driver CCT EM Back-up Air	Variant Size Input Voltage Power Driver CCT EM Back-up Air Return

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 777° 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. Canadian 347VAC available upon request, but not DLC Listed.

Battery Back-Up Option [B] only available in 2x4 sizes.

BAA-compliant TDK in-stock configurations are subject to change at any time. Please contact our customer service team for the most recent list of stocked configurations.

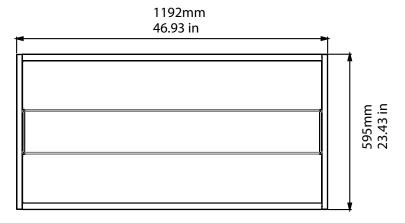




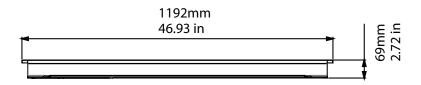
Dimensions

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

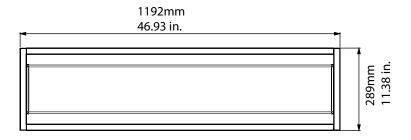
1x4 & 2x4 Models (Bottom View)



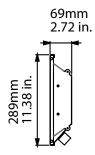
2x4 Model (Side View)



1x4 Model (Bottom View)



1x4 Model (End View)







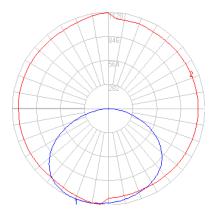
Performance Data __

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	ССТ	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
TDK1-1-24-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





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.



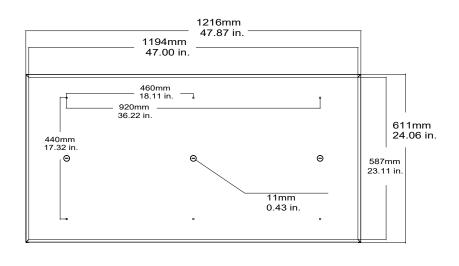


Specifications

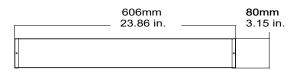
2x2 (Top View)

606mm 23.86 in. 584mm 22.99 in. 310mm 12.20 in. 7 440mm 17.32 in. 9 9 9 11mm 0.43 in.

2x4 (Top View)



2x2 (Side View)



2x4 (Side View)

 1216mm 47.87 in.	80mm 3.15 in.





Accessories

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

Overview

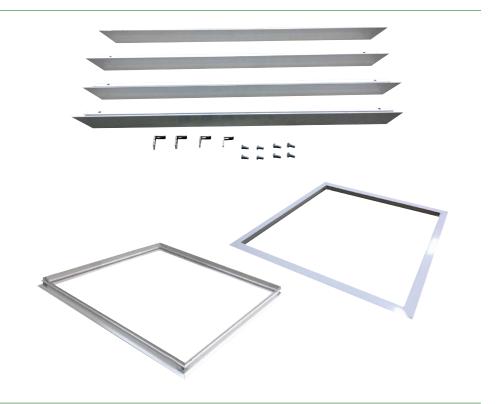
Drywall flange kits act as T-Bar frames to support recessed troffer luminaires in wood, drywall, or plaster ceilings. From the room side, flange kits mimic the appearance of T-Bars in a baked white enamel finish.

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

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.







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.



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.

