

TX2L | TDXL2 Retrofit Kit

Sign Cabinet Lighting



TDXL2



Key Features

- Ultra-long life LED modules are designed to deliver unparalleled lighting performance while maximizing spacing inside the cabinet.
- LED modules are mounted on an aluminum extrusion to simplify installation.
- Single or double-sided options are available.

Electrical

- 24VDC input.
- 0-10V dimming available via controller accessory (sold separately).
- Operating temperature: -40°C to 55°C (-40°F to 131°F)

Mounting

- Aluminum extrusion designed to be installed into existing fluorescent sockets.
- Mounting set included with every extrusion. Set includes: (2) L-brackets, (2) Z-brackets, and round screws.

Construction

- Modules are IP66 rated to prevent penetration of dust and moisture.
- Single-sided dimensions: 3.30"x1.61"x0.157"
- Double-sided dimensions: 5.59"x1.57"x0.307"
- Custom extrusion lengths available for order. ²

Optics

- 170° beam angle for wide light distribution.
- Industry-leading LEDs with 3000K, 4000K, 5000K, & 6500K CCT (minimum 70 CRI).
- Lumen maintenance: 200,000 hours (L70) ¹

Warranty

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

Project _____ Date _____

Catalog Number _____ Type _____

Product Performance Summary

Lumen Output	Up to 6,400 lumens ²
Efficacy	Up to 160 LPW
CRI	≥ 70 CRI
Available CCT	3000K, 4000K, 5000K, and 6500K
Warranty	Ten-Year Warranty

Product Overview

For easy and quick retrofits, US LED offers the TX2L retrofit kit featuring TDXL2 modules and convenient aluminum extrusion. The TDXL2 modules are secured with stainless steel screws to a high-grade aluminum extrusion to avoid future corrosion. The extrusions include a joining connector piece and clips for easy mounting. TX2L retrofit kits are custom assembled in Houston, Texas, with choices of length and modules to accommodate specific projects.

Product Applications

- Single-Sided Sign Cabinets
- Double-Sided Sign Cabinets
- General Signage

Product Certifications

- UL Recognized (USA/Canada)
- Suitable for Wet Locations
- IP66 Rated



Ordering Information

TX2L						
Series	Variant	Voltage	# Sides	Modules Per Stick	Length	CCT
	1 Standard	24 24VDC	S Single Sided	1 1 Module/Stick	18 48"	W30 3000K
			D Double Sided	2 2 Modules/Stick	24 24"	W40 4000K
				3 3 Modules/Stick	30 30"	W50 5000K
				4 4 Modules/Stick	36 36"	W 6500K
				5 5 Modules/Stick	42 42"	
				6 6 Modules/Stick	48 48"	
				7 7 Modules/Stick	60 60"	
				8 8 Modules/Stick	64 64"	
					72 72"	
					84 84"	
					96 96"	
					108 108"	
					117 117"	
					120 120"	

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. Custom lengths available to order. See "Retrofit Kit Ordering Guide" table on page 3.

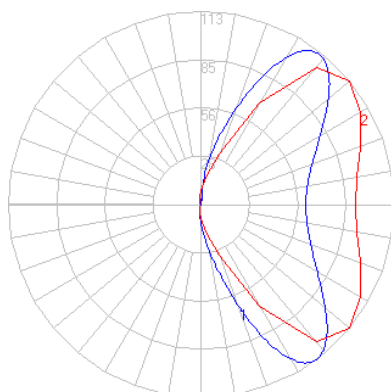
Example: TX2L-1-24-S-3-48-W30

TX2L TDXL2 Accessories	
PSB-1-24-96	US LED Class 2 Power Supply 24V 96W IP66 Rated
PS2-1-NA	Life Extender Power Supply Enclosure Natural Galvanized
04-000165-48	48" TX2L Extrusion
04-000165-72	72" TX2L Extrusion
04-000165-96	96" TX2L Extrusion
06-000035	Extrusion Joiner Bracket
TX1XL-Kit	Extrusion Mounting Kit: L-Brackets, Z-Brackets, and Screws Included

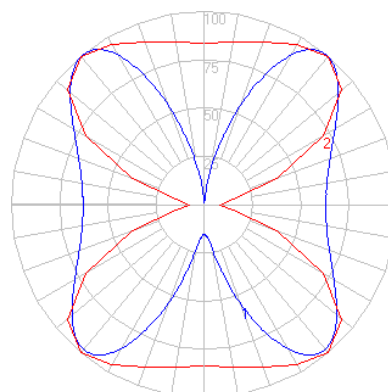
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Performance Data



TDXL2-1-S-24-W
Luminous Intensity Distribution



TDXL2-1-D-24-W
Luminous Intensity Distribution

Part Number	# Sides	# Modules	CCT	System Level Power	Delivered Lumens	Efficacy	L70 Calculated Life
TX2L-4-24-S-3-48-W	Single-Sided	3 Qty.	6500K	7.5W	1,200	160 LPW	200,000 Hours
TX2L-4-24-S-4-48-W	Single-Sided	4 Qty.	6500K	10.0W	1,600	160 LPW	200,000 Hours
TX2L-4-24-D-3-48-W	Double-Sided	3 Qty.	6500K	15.0W	2,400	160 LPW	200,000 Hours
TX2L-4-24-D-4-48-W	Double-Sided	4 Qty.	6500K	20.0W	3,200	160 LPW	200,000 Hours

For all available configurations and corresponding performance data, refer to the Retrofit Ordering Guide on page 3.

Spacing Charts

Double Face Sign Cabinet Spacing Chart

Distance From Face	22"-36"	20"	18"	16"	14"	12"	10"	8"	6"
Multiple Row Spacing	24"	22"	20"	18"	16"	14"	12"	8"	6"
Module-To-Module Spacing	15"	15"	15"	15"	15"	15"	15"	15"	12"

Single Face Sign Cabinet Spacing Chart

Distance From Face	11"-18"	10"	9"	8"	7"	6"	5"	4"	3"
Multiple Row Spacing	24"	22"	20"	18"	16"	14"	12"	8"	6"
Module-To-Module Spacing	15"	15"	15"	15"	15"	12"	12"	10"	7"

Power Supply & Loading Specifications

	Direction	Minimum # of Modules	Maximum # of Modules
PSB-1-24-96 Power Supply	Single-Sided Modules	4 Qty.	36 Qty.
	Double-Sided Modules	2 Qty.	18 Qty.

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Retrofit Kit Ordering Guide

	Part Number	Available CCT	Number of Modules	Nominal Length	Lumens Per Extrusion	Watts Per Extrusion	Number of Extrusions Per 96W PS	Calculated L70 Lifetime
SINGLE-SIDED	TX2L-1-24-S-1-18-WXX	3000K 4000K 5000K 6500K	1 qty.	18 in.	400	2.5W	36 qty.	200,000 Hours
	TX2L-1-24-S-2-24-WXX		2 qty.	24 in.	800	5.0W	18 qty.	
	TX2L-1-24-S-2-30-WXX		2 qty.	30 in.	800	5.0W	18 qty.	
	TX2L-1-24-S-2-36-WXX		2 qty.	36 in.	800	5.0W	18 qty.	
	TX2L-1-24-S-3-42-WXX		3 qty.	42 in.	1,200	7.5W	12 qty.	
	TX2L-1-24-S-4-48-WXX		4 qty.	48 in.	1,600	10.0W	9 qty.	
	TX2L-1-24-S-4-60-WXX		4 qty.	60 in.	1,600	10.0W	9 qty.	
	TX2L-1-24-S-4-64-WXX		4 qty.	64 in.	1,600	10.0W	9 qty.	
	TX2L-1-24-S-5-72-WXX		5 qty.	72 in.	2,000	12.5W	7 qty.	
	TX2L-1-24-S-6-84-WXX		6 qty.	84 in.	2,400	15.0W	6 qty.	
	TX2L-1-24-S-6-96-WXX		6 qty.	96 in.	2,400	15.0W	6 qty.	
	TX2L-1-24-S-7-108-WXX		7 qty.	108 in.	2,800	17.5W	5 qty.	
	TX2L-1-24-S-8-117-WXX		8 qty.	117 in.	3,200	20.0W	4 qty.	
	TX2L-1-24-S-8-120-WXX		8 qty.	120 in.	3,200	20.0W	4 qty.	
DOUBLE-SIDED	TX2L-1-24-D-1-18-WXX	3000K 4000K 5000K 6500K	1 qty.	18 in.	800	5.0W	18 qty.	200,000 Hours
	TX2L-1-24-D-2-24-WXX		2 qty.	24 in.	1,600	10.0W	9 qty.	
	TX2L-1-24-D-2-30-WXX		2 qty.	30 in.	1,600	10.0W	9 qty.	
	TX2L-1-24-D-2-36-WXX		2 qty.	36 in.	1,600	10.0W	9 qty.	
	TX2L-1-24-D-3-42-WXX		3 qty.	42 in.	2,400	15.0W	6 qty.	
	TX2L-1-24-D-4-48-WXX		4 qty.	48 in.	3,200	20.0W	4 qty.	
	TX2L-1-24-D-4-60-WXX		4 qty.	60 in.	3,200	20.0W	4 qty.	
	TX2L-1-24-D-4-64-WXX		4 qty.	64 in.	3,200	20.0W	4 qty.	
	TX2L-1-24-D-5-72-WXX		5 qty.	72 in.	4,000	25.0W	3 qty.	
	TX2L-1-24-D-6-84-WXX		6 qty.	84 in.	4,800	30.0W	3 qty.	
	TX2L-1-24-D-6-96-WXX		6 qty.	96 in.	4,800	30.0W	3 qty.	
	TX2L-1-24-D-7-108-WXX		7 qty.	108 in.	5,600	35.0W	2 qty.	
	TX2L-1-24-D-8-117-WXX		8 qty.	117 in.	6,400	40.0W	2 qty.	
	TX2L-1-24-D-8-120-WXX		8 qty.	120 in.	6,400	40.0W	2 qty.	

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Accessories

PSB-1-24-96 US LED 24V/96W Power Supply

Overview

The PSB 24V is a high-performance, Class 2 power supply unit intended for use with LED lighting in outdoor signage applications. It is designed to withstand moisture with an IP66 environmental rating and is RoHS compliant. The PSB is engineered to speed up installation and ensure reliable operation long term.

Key Features

- For use in outdoor signage applications
- 24VDC, Class 2 power supply
- 90-305VAC input voltage
- Complies with UL 879, UL 8750, UL 1310 and CSA 22.2
- Complies with FCC 47CFR Part 15
- Same loading as prior model PSA-24-100
- IP66 rated housing



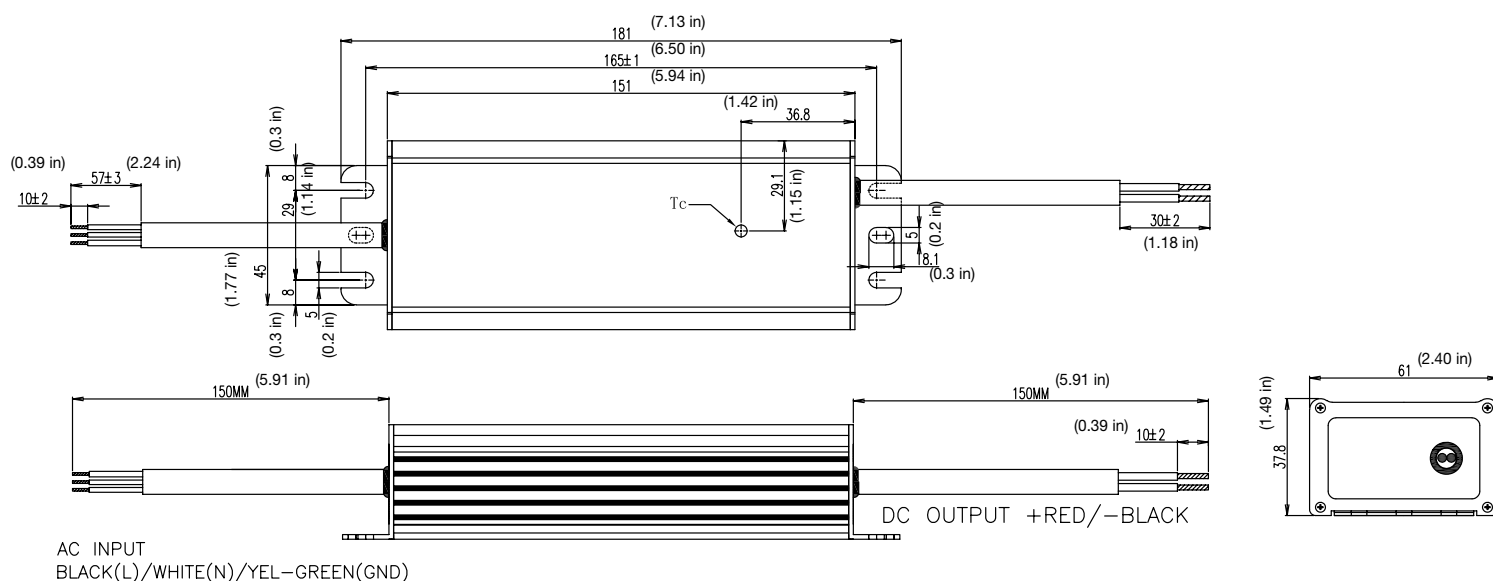
Electrical

- Input voltage: 90-305VAC (120V/1.05A), (230V/0.56A), (277V/0.50A)
- Output voltage: 24VDC
- Output current: 4.0A
- Output power: 96W max
- Operating temperature: -30°C to +50°C (-30°F to +122°F)

Construction

- Weight: 1.5 lbs. (0.68kg)
- 10 ct. package quantity
- Housing designed for high thermal capability

Dimensions



TX2L | TDXL2 Retrofit Kit

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Accessories

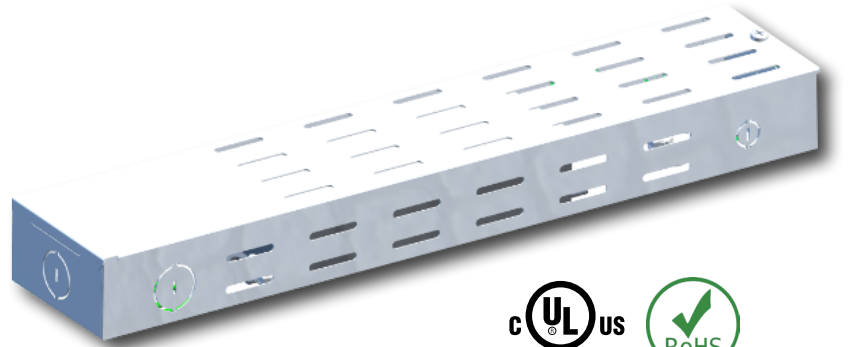
PS2-1-WT Life Extender Power Supply Enclosure | White

PS2-1-BK Life Extender Power Supply Enclosure | Black

PS2-1-NA Life Extender Power Supply Enclosure | Natural Galvanized

Overview

The PS2 is a multi-purpose power source Box used in LED lighting ranging from signage to commercial and industrial applications. The PS2 is designed to simplify installation of LED drivers and wire connections, all enclosed within one box. It's available as a UL Listed enclosure or as a junction box and LED driver combo. The enclosure is designed for indoor (dry/damp) locations and meets electrical code requirements. It has knockouts on both sides of the enclosure to accommodate all of the input and output connections.



Key Features

- Engineered for use with signage lighting, commercial lighting, and industrial lighting applications.
- Available as a UL Listed enclosure or as a junction box and LED driver combo.
- Suitable for air handling spaces.
- Complies with UL 879, UL 8750, UL 1310, and CSA 22.2
- Rated for indoor (dry/damp) locations.

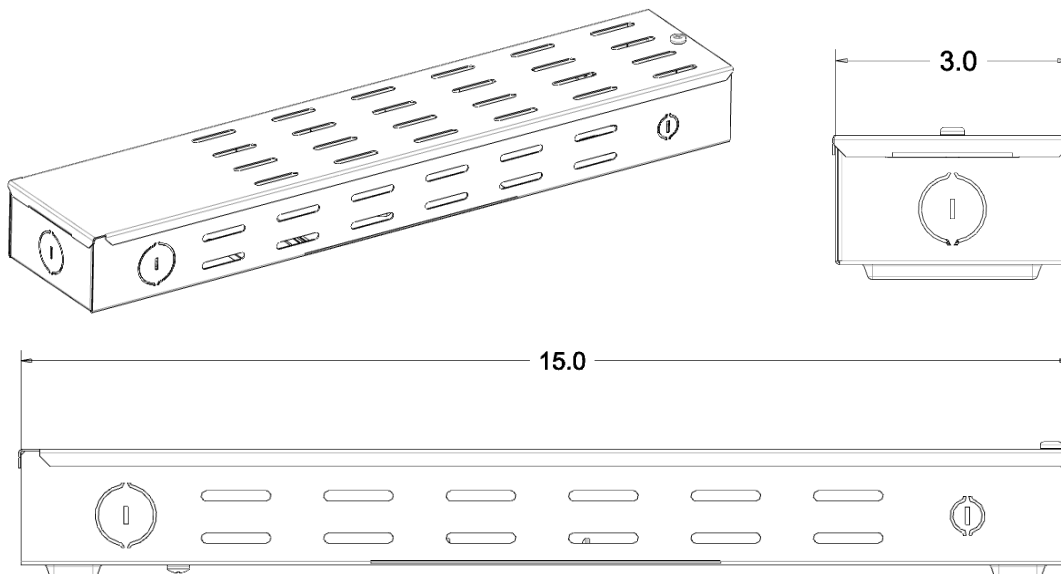
Construction

- Robust 24-gauge steel housing protects components from harsh environments.
- Ventilation on three sides of the enclosure optimize thermal management.
- Housing is protected by a corrosion resistant powder coat finish.
- Dimensions: 15 in. X 3 in. X 1.63 in.
- Weight: 1.30 lbs.

Mounting

- Suitable for cabinet or surface mounting use.
- Consult factory for additional mounting options.

Dimensions



TX2L | TDXL2 Retrofit Kit

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Accessories

04-000165-48 48" TX2L Extrusion

04-000165-72 48" TX2L Extrusion

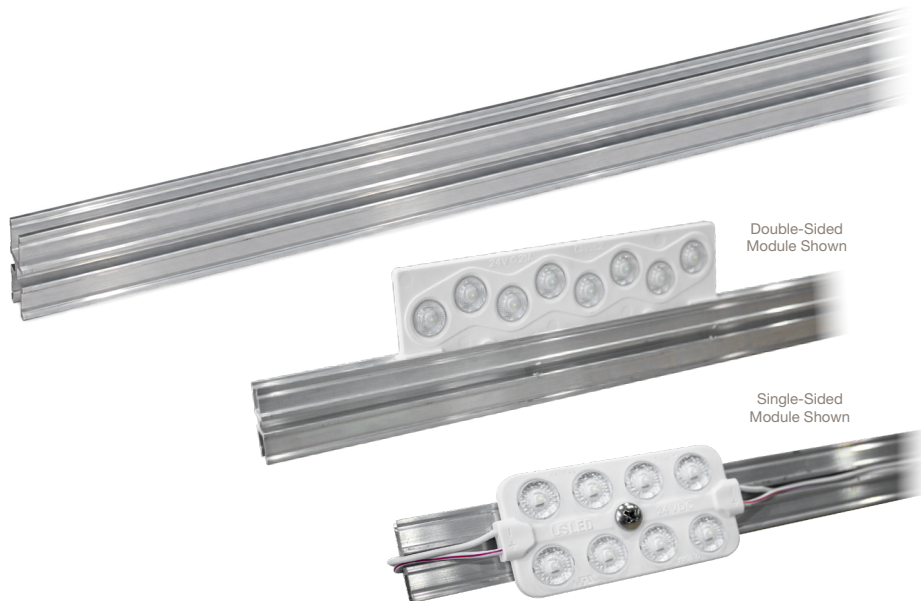
04-000165-96 48" TX2L Extrusion

Overview

US LED's aluminum extrusion provides a modular, precision-shaped mounting platform for quickly and easily installing US LED TDXL2 modules in new or retrofit sign applications. Its durable aluminum construction supports fast assembly, consistent module placement, and a clean, secure installation.

Key Features

- Available in 48", 72", and 96" standard lengths.
- Custom lengths available (consult factory).
- Durable, lightweight aluminum construction.
- Precision-shaped profile designed for fast, consistent TDXL2 module installation.
- Modular design helps simplify assembly and reduce overall installation time.



06-000035 Extrusion Interconnect Joiner Bracket

TX1XL-Kit Extrusion Mounting Kit With Hardware

Overview

The TX1XL-Kit provides the complete hardware needed to securely mount US LED aluminum extrusions for sign lighting applications. Each kit includes (2 qty.) L-Brackets, (2 qty.) Z-Brackets, and (4 qty.) round mounting screws for easier installation. A separate Joiner Bracket is available to interconnect extrusions when necessary.

