

LED T8 Tubes

SPECIFICATION



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Introduction

Light Emitting Diode (LED) T8 Series saves energy and lasts a long life.

Environmentally Conscious

Energy efficient, lead free, and long life means fewer lamp replacements vs. standard halogen Bulb and incandescent light sources.

Outstanding Energy Efficiency

Compare to standard Incandescent light sources, LED Bulb Series are reducing energy consumption by 70%-80%. The lamps' optics concentrates light on the target, diminishing wasted extraneous light and increases the CBCP.

Long Life = Labor Savings

Delivers at least 70% of initial light output after at last 50,000 hours.

Various Colors

Cool White (6000-7000K)

Neutral White (4500-5000K)

Warm White (2800-3500K)

Excellent Color Rendering

Cool White: CRI > 70

Neutral White: CRI > 75

Warm White: CRI > 80

T8 with Transparent Lens

Features:

- 100-240 V AC / DC Input
- White color: 2500K~8000K Color Temperature
- Standard G13 Base



Applications:

- General Illumination
- Safety and Security
- Backlighting
- Sign and Decoration Lighting

General Dimensions			
Length	A	B	D
2 feet	589 mm	597 mm	Φ26 mm
3 feet	895 mm	902 mm	Φ26 mm
4 feet	1199 mm	1207 mm	Φ26 mm
5 feet	1500 mm	1507 mm	Φ26 mm
6 feet	1764 mm	1771 mm	Φ26 mm

Absolute Maximum Ratings			
Parameter	Rating	Unit	Condition
AC	100-240	V	Ta - 50°C (122°F)
Operating Temperature	-40 ~ +85 (-40 ~ 185)	°C (°F)	
Storage Temperature	-40 ~ +100 (-40 ~ 212)	°C (°F)	
Median Life Expectancy	50,000	Hours	
Median Life Expectancy	20,000	Hours	
Power Factor	≥0.97	%	
Color Rendering Index	Ra >75	%	

Optical Characters——Cool White (6000-8000K)

Part No.	Length	Power (W)	LED Quantity (3528 SMD LED)	Luminosity (lm)	Base	1M (LUX)	2M (LUX)	3M (LUX)
LVL-T8-2CW180-ET2	2 feet	12	180	1025	G13	365	95	40
LVL-T8-3CW240-ET2	3 feet	15	240	1280	G13	480	140	50
LVL-T8-4CW300-ET2	4 feet	18	300	1620	G13	550	140	65
LVL-T8-5CW384-ET2	5 feet	25	384	2140	G13	555	140	85
LVL-T8-6CW480-ET2	6 feet	29	480	2480	G13	850	215	96

Optical Characters——Daylight White (5000-6000K)

Part No.	Length	Power (W)	LED Quantity (3528 SMD LED)	Luminosity (lm)	Base	1M (LUX)	2M (LUX)	3M (LUX)
LVL-T8-2DW180-ET2	2 feet	12	180	1025	G13	365	95	40
LVL-T8-3DW240-ET2	3 feet	15	240	1280	G13	480	140	50
LVL-T8-4DW300-ET2	4 feet	18	300	1540	G13	550	140	65
LVL-T8-5DW384-ET2	5 feet	25	384	2140	G13	555	140	85
LVL-T8-6DW480-ET2	6 feet	29	480	2480	G13	850	215	96

Optical Characters——Neutral White (3500-5000K)

Part No.	Length	Power (W)	LED Quantity (3528 SMD LED)	Luminosity (lm)	Base	1M (LUX)	2M (LUX)	3M (LUX)
LVL-T8-2NW180-ET2	2 feet	12	180	953	G13	339	88	37
LVL-T8-3NW240-ET2	3 feet	15	240	1190	G13	446	130	47
LVL-T8-4NW300-ET2	4 feet	18	300	1432	G13	512	130	60
LVL-T8-5NW384-ET2	5 feet	25	384	1990	G13	516	130	79
LVL-T8-6NW480-ET2	6 feet	29	480	2306	G13	791	200	89

Optical Characters——Warm White (2500-3500K)

Part No.	Length	Power (W)	LED Quantity (3528 SMD LED)	Luminosity (lm)	Base	1M (LUX)	2M (LUX)	3M (LUX)
LVL-T8-2WW180-ET2	2 feet	12	180	882	G13	314	82	34
LVL-T8-3WW240-ET2	3 feet	15	240	1101	G13	413	120	43
LVL-T8-4WW300-ET2	4 feet	18	300	1324	G13	473	120	56
LVL-T8-5WW384-ET2	5 feet	25	384	1840	G13	477	120	73
LVL-T8-6WW480-ET2	6 feet	29	480	2133	G13	731	185	83

T8 with Frosted Lens

Features:

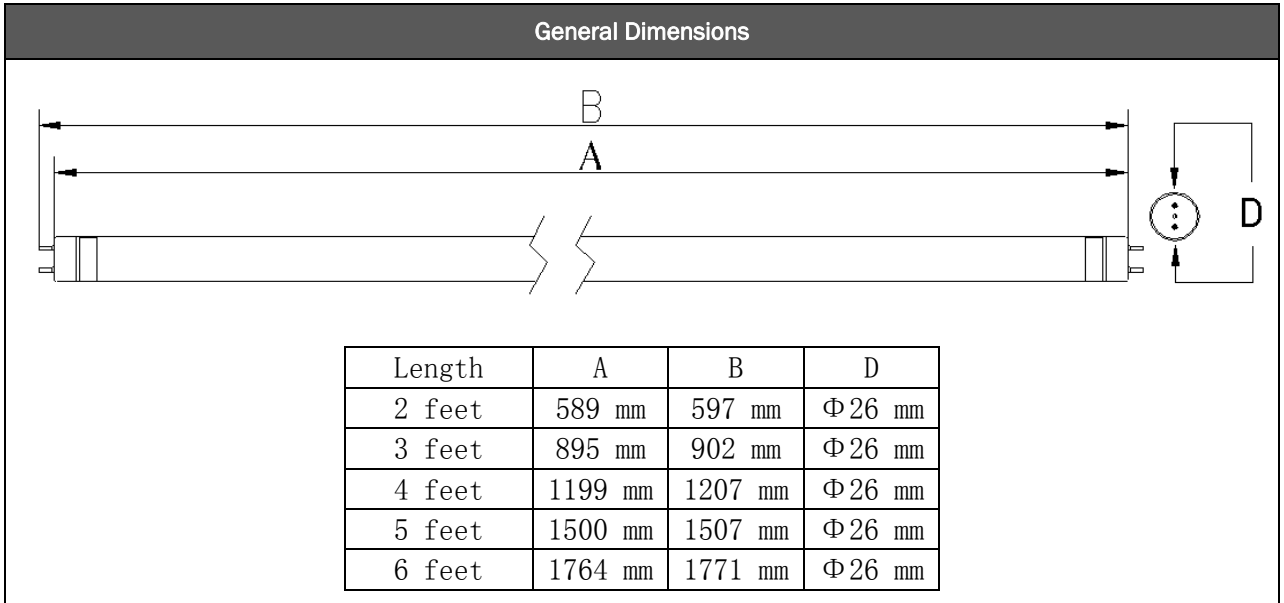
- 100-240 V AC / DC Input
- White color: 2500K~8000K Color Temperature



- Standard G13 Base

Applications:

- General Illumination
- Safety and Security
- Backlighting
- Sign and Decoration Lighting



Absolute Maximum Ratings			
Parameter	Rating	Unit	Condition
AC	100-240	V	Ta - 50°C (122°F)
Operating Temperature	-40 ~ +85 (-40 ~ 185)	°C (°F)	
Storage Temperature	-40 ~ +100 (-40 ~ 212)	°C (°F)	
Median Life Expectancy	50,000	Hours	
Median Life Expectancy	20,000	Hours	
Power Factor	≥0.97	%	
Color Rendering Index	Ra > 75	%	

Optical Characters — Cool White (6000-8000K)								
Part No.	Length	Power (W)	LED Quantity (3528 SMD LED)	Luminosity (lm)	Base			
						1M (LUX)	2M (LUX)	3M (LUX)
LVL-T8-2CW180-EF2	2 feet	12	180	965	G13	325	80	35
LVL-T8-3CW240-EF2	3 feet	15	240	1200	G13	410	105	45
LVL-T8-4CW300-EF2	4 feet	18	300	1510	G13	440	110	56

LVL-T8-5CW384-EF2	5 feet	25	384	2010	G13	710	180	79
LVL-T8-6CW480-EF2	6 feet	29	480	2335	G13	675	165	89

Optical Characters——Daylight White (5000-6000K)								
Part No.	Length	Power (W)	LED Quantity (3528 SMD LED)	Luminosity (lm)	Base	1M (LUX)	2M (LUX)	3M (LUX)
LVL-T8-2DW180-EF2	2 feet	12	180	965	G13	325	80	35
LVL-T8-3DW240-EF2	3 feet	15	240	1200	G13	410	105	45
LVL-T8-4DW300-EF2	4 feet	18	300	1450	G13	440	110	56
LVL-T8-5DW384-EF2	5 feet	25	384	2010	G13	710	180	79
LVL-T8-6DW480-EF2	6 feet	29	480	2335	G13	675	165	89

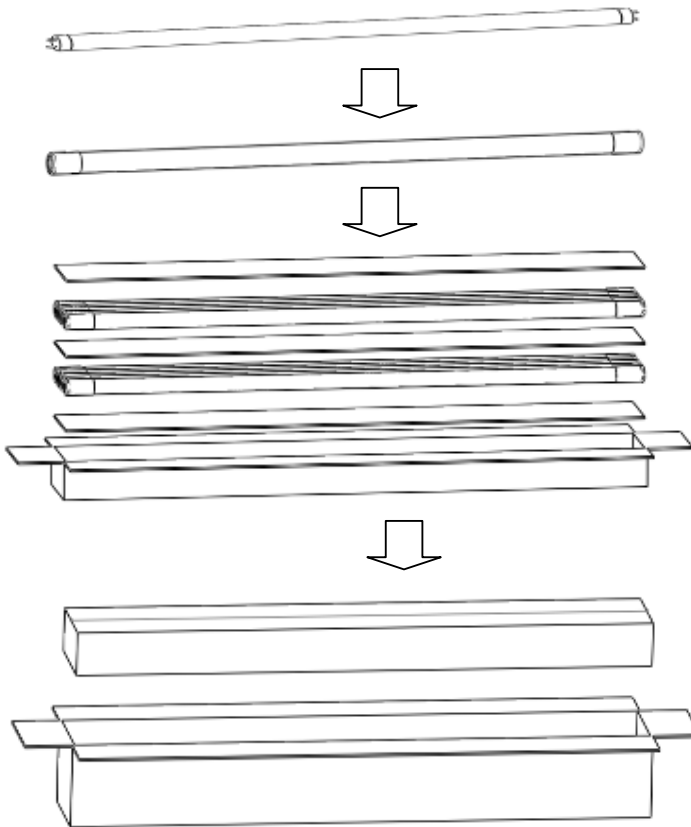
Optical Characters——Neutral White (3500-5000K)								
Part No.	Length	Power (W)	LED Quantity (3528 SMD LED)	Luminosity (lm)	Base	1M (LUX)	2M (LUX)	3M (LUX)
LVL-T8-2NW180-EF2	2 feet	12	180	897	G13	302	74	33
LVL-T8-3NW240-EF2	3 feet	15	240	1116	G13	381	98	42
LVL-T8-4NW300-EF2	4 feet	18	300	1349	G13	409	102	52
LVL-T8-5NW384-EF2	5 feet	25	384	1869	G13	660	167	73
LVL-T8-6NW480-EF2	6 feet	29	480	2172	G13	628	153	83

Optical Characters——Warm White (2500-3500K)								
Part No.	Length	Power (W)	LED Quantity (3528 SMD LED)	Luminosity (lm)	Base	1M (LUX)	2M (LUX)	3M (LUX)
LVL-T8-2WW180-EF2	2 feet	12	180	830	G13	280	69	30
LVL-T8-3WW240-EF2	3 feet	15	240	1032	G13	353	90	39
LVL-T8-4WW300-EF2	4 feet	18	300	1247	G13	378	95	48
LVL-T8-5WW384-EF2	5 feet	25	384	1729	G13	611	155	68
LVL-T8-6WW480-EF2	6 feet	29	480	2008	G13	581	142	77

Packing

Weight & Size				
Length (feet)	Unit weight (Kg)	Q'ty (pcs/package)	Packing weight (Kg)	Packing size (mm)
2	0.14	40	15	680*470*229
3	0.3	20	12	990*245*272
4	0.4	20	15	1295*245*272

5	0.5	20	19	1595*245*272
6	0.6	20	22	1865*245*272



1 pcs LED tube in a paper tube

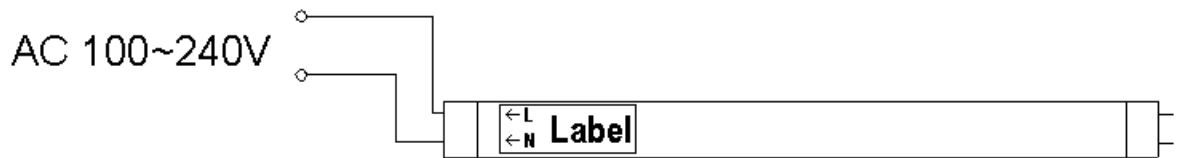
10 pcs tubes in an inner box

2 boxes in a carton



Installation

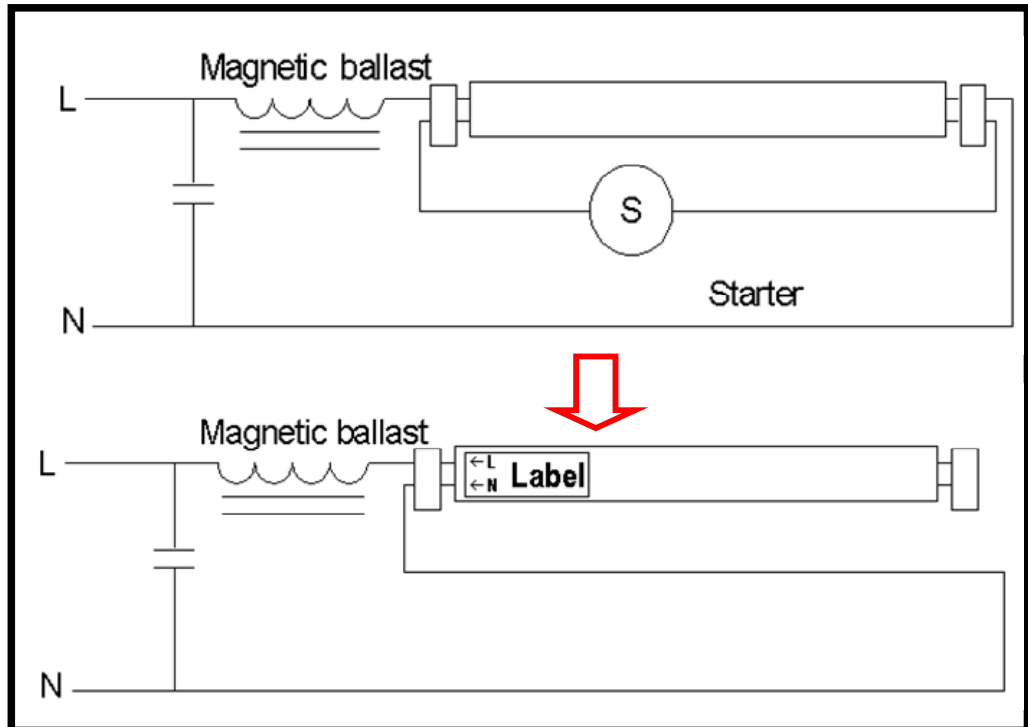
- Diagram:



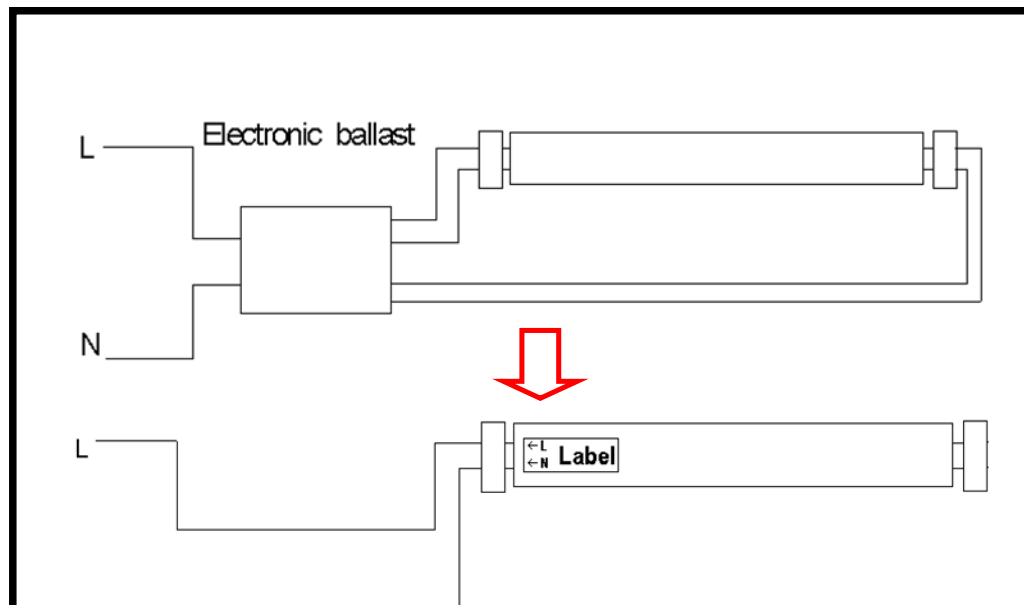
- Installation steps:

1. Turn off the electricity supply before installation.
2. Make sure the circuit of the base is as following A2 and B2. For old circuit originally for conventional T8/T10 fluorescent, please following the illustrated steps to adjust the circuit as follow.

● **Magnetic Ballast(A1)**



● **Electronic Ballast(B1)**



- For Figure A1 circuit, after removing the starter, the LED tube can be installed directly onto the G13 base
- For Figure B1 circuit, please removing the electronic ballast, and connect L and N to the joints in the base separately
- After adjusting the circuit, install the LED tube in the same way as installing the traditional fluorescent tube light.

Turn on the power supply of the base to check whether the tube light is working properly or not.

Precautions

- LEDs are static sensitive devices. Precautions should be taken to ensure that LEDs are well protected from ESD during handling.
- ESD protection for GaP and AlGaAs based chips is still necessary even though the chips are safe in low static-electric discharge events
- AlInGaP, GaN and/or InGaP based chips are STATIC SENSITIVE devices and ESD protection must be taken into consideration in the initial design stages.
- Do not operate LEDs in reverse bias.

Warranty and Liability Information

- Two years limited warranty.
- The information contained herein is presented only as a guide for the applications of our products.
- No responsibility is assumed by factory for any infringements of intellectual property or other infringements of

the rights of third parties that may result from its use.

- Factory is committed to a process of continuous improvements of the quality and the features of its products and reserves the right to make changes that result in such improvements.
- Factory products are not intended for use in applications where extraordinarily high reliability is required to prevent the loss of human life or where failure could result in bodily injury.
- Factory limits the extent of our liability to the initial component cost and will, in the event of a failure, replace a failed component or refund the purchase price at factory option.