



T5 LED Tubes (Type A+B Hybrid)

Plug & Play or Direct Wire

For: Replacement for T5 fluorescent lamp.



FEATURES AND BENEFITS

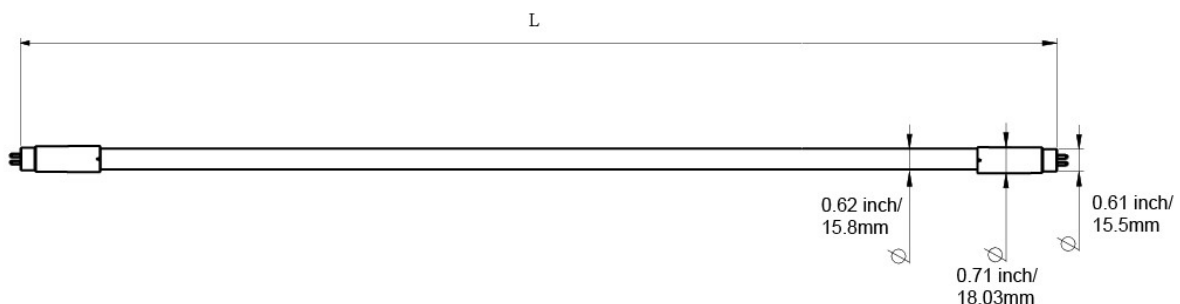
- Energy saving replacement for traditional T5 fluorescent lamps.
- Works with specific ballasts (see Ballast Compatibility List)
- 3-in-1: Ballast compatible, double-ended or single ended ballast bypass
- Current leakage protection; Passes UL1993 new standard.
- Safety: Constant current, constant power, and no ARC discharge when used with compatible HO ballast.
- Reduces energy consumption by up to 60%.
- Shatterresistant design.
- 2.5kV surge protection.
- LED L70 Life Hours @ 25°C - >60,000
- UL Damp Location rated; IP20; Suitable for use in enclosed fixtures

PRODUCT SPECIFICATIONS

Body	Glass with PET film coating
End cap	G5
Lens	Frosted
Input Voltage	120-277Vac,50/60hz
Power Factor	>0.9
Available colors*	3000K/3500K/4000K/4100K/ 4500K/5000K/5700K/6500K
CRI	Ra83
Dimming**	Dimmable (0-10V dimming system support)
LED L70 Life Hours	60,000 Hours
Warranty	5 Years
Environmental Requirements	Operation Temp: -4~113 °F (-20~45°C) Storage Temp: -4~140 °F (-20~60°C) Relative Humidity: 45%-85% Non-corrosive environments
Size	L: 2ft: 21.61inch/ 549mm 3ft: 33.43inch/ 849mm 4ft: 45.24inch/ 1149mm

*Optional color temperatures available via Special Order. Please call 1-800-624-4488.

**Requires dimming mate (PLTS-20115), available via Special Order. Please call 1-800-624-4488





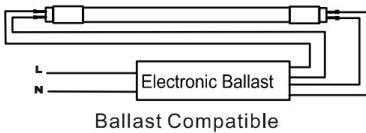
SPECIFICATION

Item No.	Power (Type B)	Power (Type A)	CCT	Lumen (Type B)	Lumen (Type A)	CRI	Voltage	PF	Beam Angle	Field Angle	Target Lamp
PLT-60032	12W	14W	3500K	1440lm	1440lm	Ra83	AC120-277V 50/60Hz	0.9	180°	270°	24W/24T5
PLT-60033	12W	14W	4000K	1500lm	1500lm						
PLT-60034	12W	14W	5000K	1500lm	1500lm						
PLT-60035	18W	20W	3500K	2160lm	2160lm	Ra83	AC120-277V 50/60Hz	0.9	180°	270°	39W/36T5
PLT-60036	18W	20W	4000K	2250lm	2250lm						
PLT-60037	18W	20W	5000K	2250lm	2250lm						
PLT-60038	24W	27.5W	3500K	3000lm	3300lm	Ra83	AC120-277V 50/60Hz	0.9	180°	270°	54W/48T5
NPS-00196*	24W	27.5W	4000K	3200lm	3300lm						
NPS-00197*	24W	27.5W	5000K	3200lm	3300lm						

*Special Order. Call 1-800-624-4488.

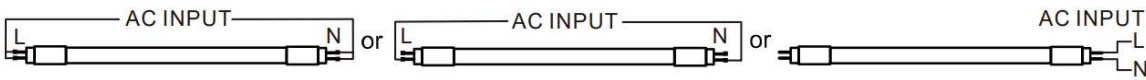
WIRING DIAGRAM:

TYPE A (Ballast compatible) - Assembly introduction:



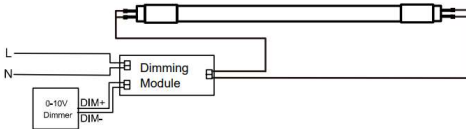
TYPE B (AC directly, double-end or single-end ballast bypass) - Assembly introduction:

Case 1 Without dimming



Voltage Input: AC120-277V 50/60Hz

Case 2 With dimming



Voltage Input: AC120-277V 50/60Hz

Ballast Compatibility List

T5 Type A+B 4FT

No.	Ballast Brand	Model No.	Start Type	Max Loading Qty	Compatibility (Y/N)			
					1 lamp	2 lamp	3 lamp	4 lamp
1	AMASX	HD8/13-120A	Rapid Start	1	Y	N	N	N
2	ESPEN	VE454MVHRP 11088	Programmed Start	4	Y	Y	Y	Y
3	GE	GE254MVPS90-A-L	Programmed Start	2	Y	Y	N	N
4	GE	GE254MVPS-D-1	Programmed Start	2	Y	Y	N	N
5	GE	GE454PS347/480-E	Programmed Start	4	Y	Y	Y	Y
6	KEYSTONE	KTEB-113-1-TP-SN-MB/A	Rapid start	1	Y	N	N	N
7	KEYSTONE	KTEB-108-1-TP-TP-FC /L	Programmed Start	2	Y	Y	N	N
8	KEYSTONE	KTEB-114-1-TP-TP-FC /P	Programmed Start	2	Y	Y	N	N
9	KEYSTONE	KTEB-213-1-TP-SL-MB	Programmed Start	2	Y	Y	N	N
10	PHILIPS ADVANCE	ICN-2S54-T	Programmed Start	2	Y	Y	N	N
11	PHILIPS ADVANCE	ICN-2S54-N	Programmed Start	2	Y	Y	N	N
12	PHILIPS ADVANCE	ICN-2S54-90C-T	Programmed Start	2	Y	Y	N	N
13	PHILIPS ADVANCE	ICN-2S54-90C-N	Programmed Start	2	Y	Y	N	N
14	PHILIPS ADVANCE	ICN-4S54-90C-2LS-G	Programmed Start	4	Y	Y	Y	Y
15	PHILIPS ADVANCE	HCN-2S54-90C-WL	Programmed Start	2	Y	Y	N	N
16	UNIVERSAL	B228PUNV-C	Programmed Start	2	Y	Y	N	N
17	UNIVERSAL	B254PUNV-D	Programmed Start	2	Y	Y	N	N
18	UNIVERSAL	B454PUNVHB-E	Programmed Start	4	Y	Y	Y	Y
Y: Compatible								
N: Incompatible								
When working with electronic ballast please check the compatibility list first!								
If you couldn't find your ballast on the list then bypass the fixture, or contact us please!								
Do not install the LED tube with the ballast which is not on the ballast compatibility list, risk of firing!								

Ballast Compatibility List

T5 Type A+B 2FT

No.	Ballast Brand	Model No.	Start Type	Max Loading Qty	Compatibility (Y/N)	
					1 lamp	2 lamps
1	OSRAM	QHE2X28T5/UNV PSN HT	Programmed Start	1	Y	N
2	OSRAM	QHE 2X28T5/UNV PSN	Programmed Start	1	Y	N
3	KEYSTONE	KTEB-113-1-TP-SN-MB/A	Rapid start	1	Y	N/T
4	KEYSTONE	KTEB-108-1-TP-TP-FC /L	Programmed Start	2	Y	Y
5	KEYSTONE	KTEB-114-1-TP-TP-FC /P	Programmed Start	2	Y	Y
6	KEYSTONE	KTEB-213-1-TP-SL-MB	Programmed Start	2	Y	Y
7	Amax	HD8/13-120A	Rapid Start	1	Y	N/T
8	UNIVERSAL	B228PUNV-C	Programmed Start	2	Y	Y

Ballast Compatibility List

T5 Type A+B 3FT

No.	Ballast Brand	Model No.	Start Type	Max Loading	Compatibility (Y/N)			
					1 lamp	2 lamps	3 lamps	4 lamps
1	KEYSTONE	KTEB-113-1-TP-SN-MB/A	Rapid start	1	Y	N/T	N/T	N/T
2	KEYSTONE	KTEB-108-1-TP-TP-FC /L	Programmed Start	2	Y	Y	N/T	N/T
3	KEYSTONE	KTEB-114-1-TP-TP-FC /P	Programmed Start	2	Y	Y	N/T	N/T
4	KEYSTONE	KTEB-213-1-TP-SL-MB	Programmed Start	2	Y	Y	N/T	N/T
5	Amax	HD8/13-120A	Rapid Start	1	Y	N/T	N/T	N/T
6	UNIVERSAL	B228PUNV-C	Programmed Start	2	Y	Y	N/T	N/T
7	UNIVERSAL	B254PUNV-D	Programmed Start	2	Y	Y	N/T	N/T
8	UNIVERSAL	B454PUNVHB-E	Programmed Start	4	Y	N/T	N/T	Y
9	GE	GE254MVPS90-A-L	Programmed Start	2	Y	Y	N/T	N/T
10	GE	GE454PS347/480-E	Programmed Start	4	N	N/T	N/T	Y
11	SYLVANIA	QTP 2x54T5HO/347-480 PSN HT	Programmed Start	2	N	Y	N/T	N/T
12	PHILIPS ADVANCE	ICN-2S54-T	Programmed Start	2	Y	Y	N/T	N/T
13	PHILIPS ADVANCE	ICN-2S54-N	Programmed Start	2	Y	Y	N/T	N/T
14	PHILIPS ADVANCE	ICN-2S54-90C-N	Programmed Start	2	Y	Y	N/T	N/T