

LED Commercial 21W LED Tube

21W G13 T8 LED Tube (5ft)



Overview

Kosnic's range of LED tubes takes a fresh approach to functional lighting with retrofit LED tubes that bring the energy saving capabilities of LED technology to the commercial environment. The LED tubes can directly replace fluorescent tubes in magnetic ballast fittings with no rewiring. The LED tubes are also perfectly suited to use in fittings designed for dedicated LED tube use. Suitable for amenity lighting of corridors, stairwells, store rooms, transit areas and other utility spaces.

Features

- Save energy up to 65% compared with a fluorescent tube with magnetic ballast.
- For maximum energy savings, use the tube in a dedicated LED tube fitting.
- Glass tube.
- Single side high lumen output for light only where it's needed.
- Long life of 50,000h.
- Live and neutral connections at one end for safety.
- Instant start.
- Negligible UV output.
- Mercury free.

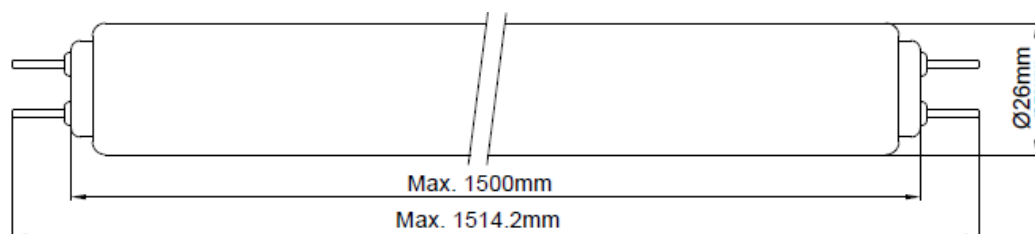
Safety and Maintenance

- Switch off supply and allow cooling before handling lamp.
- Do not dispose of lamp in household waste.
- Dispose of in appropriate section of local civic amenity site or recycling centre.

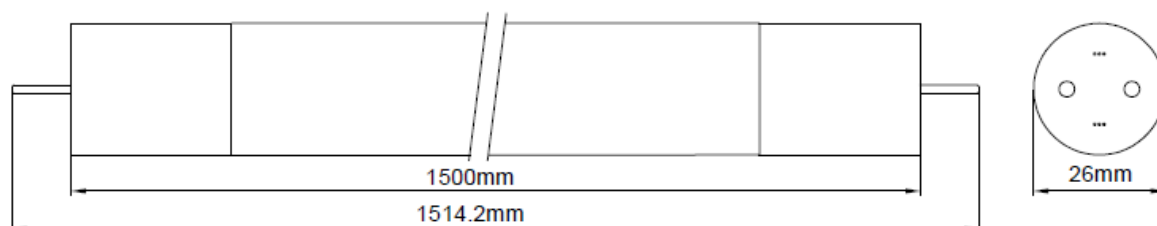
Specifications

Product Code	T8PRO21-W40	T8PRO21-W65
Voltage	220-240Vac 50/60Hz	220-240Vac 50/60Hz
Current (mA)	101	101
Rated Power (W)	21	21
L70B50 Lifetime	50000 h	50000 h
Blue Light Hazard	RG1	RG1
Power Factor	0.9	0.9
Total Luminous Flux (lm)	2750	2750
Dimensions (LxWxD)mm	1514 x 26 ø	1514 x 26 ø
Ambient Temperature Range (°C)	-20 to 40	-20 to 40
Weight (Kg)	0.26	0.26
In-rush Current	26A/4us	26A/4us
Lighting Technology used	LED	LED
Directional / Non-Directional	NDLS	NDLS
Cap Type / interface	G13	G13
Mains / Non-Mains	MLS	MLS
Connected Light Source	N	N
Colour Tuneable Lightsource	N	N
High luminance light source	N	N
Anti-glare shield	N	N
Dimmable	N	N
Energy Consumption in on-mode (kWh/1000h)	21	21
Energy Efficiency Class	E	E
Useful Luminous Flux (lm)	2750	2750
Beam Angle Correspondence	360°	360°
CCT	4000K Warm White	6500K Day Light
On-mode power (Pon)	21W	21W
Standby power (Psb)	0W	0W
Networked standby power (Pnet) (CLS only)	N/A	N/A
CRI	82	82
Claim of equivalent power	N	N
Equivalent power	N/A	N/A
Chromacity Coordinates	0.3800(x), 0.3800(y)	0.3130(x), 0.3370(y)
Peak luminous intensity(cd) (DLS)	N/A	N/A
Beam angle (DLS)	N/A	N/A
R9 CRI value (LED/OLED)	5	5
Survival Factor	1	1
Lumen maintenance factor	0.96	0.96
Displacement factor(Mains LED/OLED)	0.93	0.93
Colour consistency in mcdam ellipses (Mains LED/OLED)	5	5
LED light source rep. a fluorescent light source without integrated ballast of a particular wattage? (Mains LED/OLED)	Y	Y
Rep. W claim (MainsLED/OLED)	58	58
Flicker (pst LM) (Mains LED/OLED)	0.6	0.6
Stroboscopic effect metric(SVM)	0.1	0.1

Dimensions



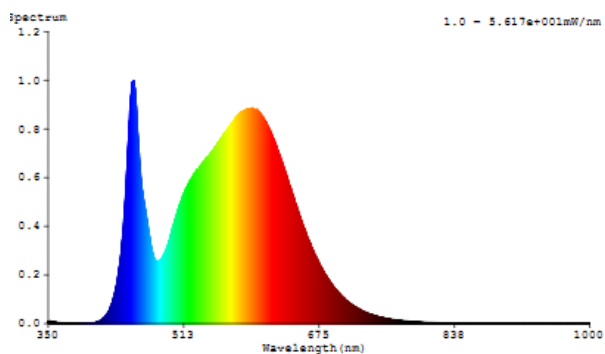
T8 58W(IEC 60081)



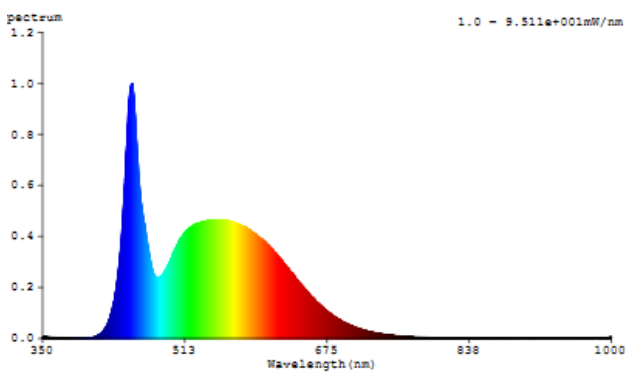
T8PRO21

Photometric Information

4000K







6500K

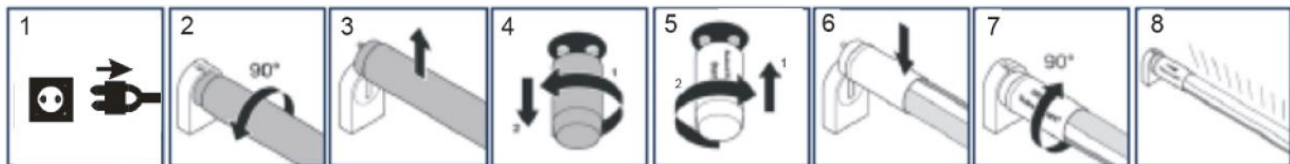


LED T8 Lamp Safety and Installation Instructions

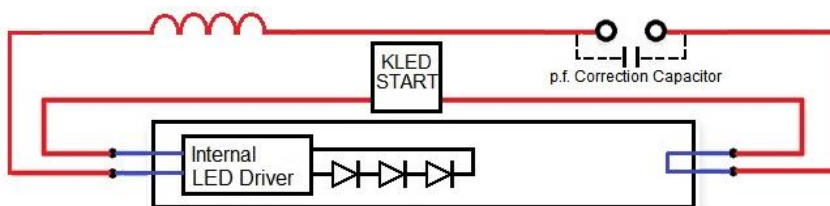
- The luminaire must be switched off before fitting the LED T8 lamp. If in doubt consult a qualified electrician.
- The LED T8 lamp is designed to replace conventional fluorescent lamps working on wire-wound magnetic ballasts (50/60Hz).
- The LED T8 lamp is not usable for use in luminaires with serial lamp connection (more than one tube to one magnetic ballast).
- The LED T8 lamp is supplied with a Kosnic LED Starter (KLEDSTART) for starter replacement when used as a retrofit lamp with magnetic ballast.
- The luminaire must not be modified, other than replacing the starter, without recertification to the relevant standard.
- The LED T8 lamp is designed for an ambient temperature range of -20°C to 40°C and may not be suitable for use in all applications where a traditional fluorescent lamp has been used. The temperature range of this lamp is more restricted. In case of doubt regarding the suitability of the application the manufacturer of this lamp should be consulted.
- The LED T8 lamp is designed for general lighting service (excluding for example explosive atmospheres).

	Lamp is suitable for use in luminaires with magnetic ballasts.		Lamp should be used in dry conditions or in a luminaire that provides protection.
	Lamp is not suitable for use in emergency luminaires designed for double-capped fluorescent lamp(s).		Lamp is not dimmable.

Retrofitting the LED T8 lamp in a luminaire with magnetic ballast:



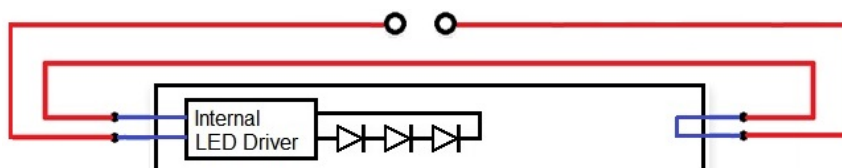
- 1) Switch off electricity.
- 2) and 3) Remove the conventional lamp by turning the lamp by 90° and removing.
- 4) Remove the starter by twisting anticlockwise and pulling out.
- 5) Fit the LED replacement starter into the starter holder and twist clockwise to secure.
- 6) and 7) Insert the LED lamp into the lampholder and secure by turning the lamp by 90°.
- 8) Switch on electricity and check for lamp starting.
- 9) An indelible warning label should be added, visible when changing the lamp, showing the substance of: **Warning - not for use with fluorescent lamps, use only Kosnic LED Tubes**



Circuit diagram for a retrofitted LED T8 lamp in a fitting with a magnetic ballast.

Using the LED T8 lamp in dedicated luminaires:

- For maximum energy savings the LED T8 lamp can be used in a luminaire for dedicated LED T8 use, i.e. one without a ballast or power factor correction capacitor.
- The LED Tube has Live and Neutral pins at the end of the LED tube marked "Input" connected to the internal driver. The pins at the opposite end are isolated from the input and are connected to each other for circuit continuity.



Typical circuit diagram for a dedicated LED T8 luminaire without ballast.