

# LED.Commercial 20W LED Tube

20W G13 T8 LED Tube (4ft)



## Product Overview

Kosnic's range of LED tubes takes a fresh approach to functional lighting with a design philosophy so that there are no barriers to retrofitting LEDs in commercial fittings. The products bring the energy saving capabilities of LED technology to the commercial environment and the lamps can quickly replace fluorescent tubes with little or no rewiring.

## Features

- Save energy up to 65% compared with a fluorescent tube with magnetic ballast.
- Single side high lumen output for light only where it's needed.
- Long life of 30,000h.
- Live and neutral connections at one end for safety.
- Instant start.
- Negligible UV output.
- Mercury free.

## Safety and Maintenance

- Switch off supply before installing or removing lamp. Allow to cool before handling.
- Do not dispose of in household waste.
- Dispose of in appropriate section of local civic amenity site or recycling centre.

## Specifications

Product Code	KLED20T8/FRT-W40	KLED20T8/FRT-W65
Lamp Cap	G13	G13
Lamp Shape	T8	T8
Nominal Power (W)	20	20
Voltage	220-240Vac 50-60Hz	220-240Vac 50-60Hz
Current (mA)	93	93
Nominal Luminous Flux (lm)	1700	1950
CCT (K)	4000K Cool White	6500K Day Light
Nominal Lifetime (h)	30000	30000
Dimmable	No	No
Switching Cycles	50000	50000
Warm-up time to 60% (S)	Instant full light	Instant full light
Length Without Pins (mm)	1196	1196
Largest Diameter (mm)	32	32
Mercury (mg)	0	0
Clean-up instructions	N/A	N/A
Retrofit	Yes	Yes
Rated Power (W)	20.0	20.0
Rated Luminous Flux (lm)	1700	1950
Rated Lifetime (h)	30000	30000
Power Factor	0.90	0.90
Rated Peak Candelas (cd)	650	750
Lumen Maintenance Factor at Nominal Lifetime	0.75	0.75
CRI	84	76
Start Time (s)	0.22	0.22
Ambient Temperature (°C)	-20 to 40	-20 to 40

## Energy Label

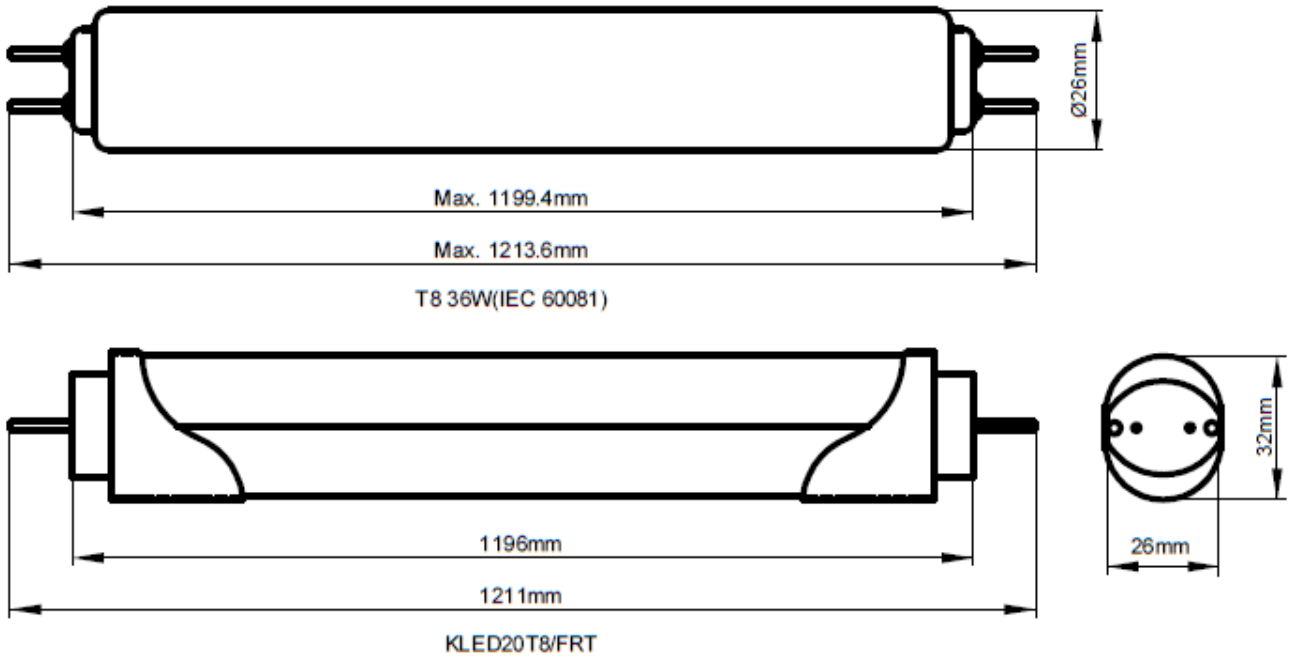
Manufacturer	Kosnic	Kosnic
Product Code	KLED20T8/FRT-W40	KLED20T8/FRT-W65
Energy Class	A+	A+
Energy Consumption (kWh/1000h)	20.00 (20)*	20.00 (20)*

\* The kWh/1000h value published on the energy label is required to be rounded up to an integer according to the EU implementing directive on Energy Labelling. The value to 2 decimal places is given for reference.

## Product Markings

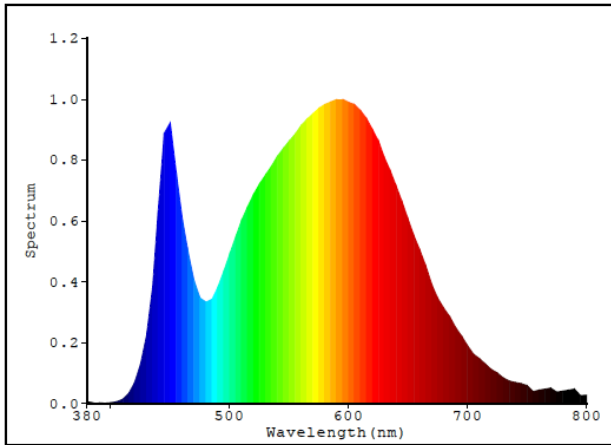
Manufacturer	Kosnic	Kosnic
Product Code	KLED20T8/FRT-W40	KLED20T8/FRT-W65
Voltage	220-240Vac 50-60Hz	220-240Vac 50-60Hz
Nominal Power (W)	20	20
Current (mA)	93	93
CE Mark	Yes	Yes
WEEE Mark	Yes	Yes
Batch Code	Yes	Yes

## Dimensions

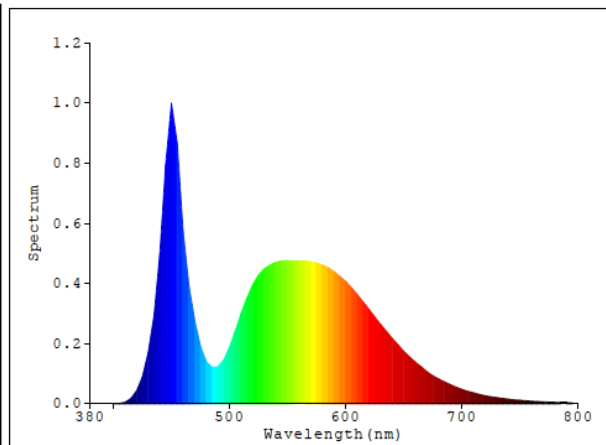


## Photometric Information

4000K



6500K

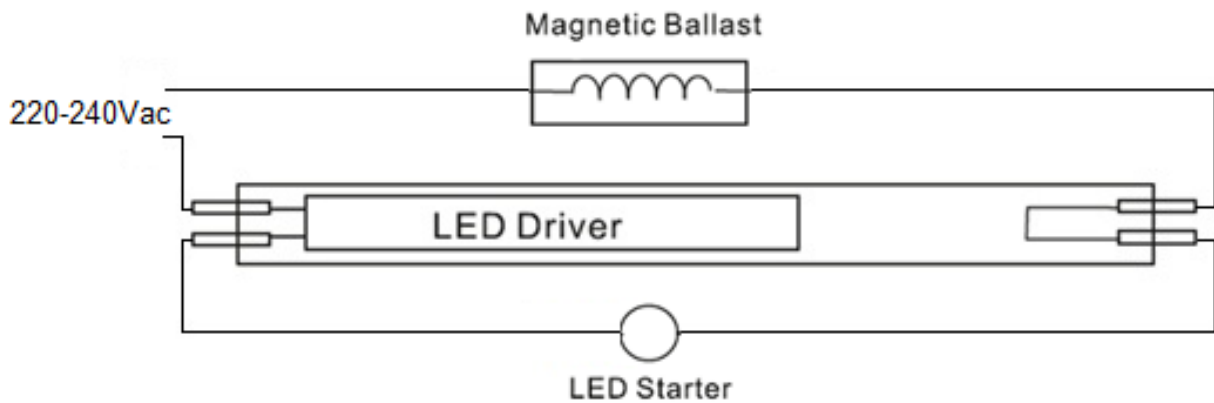


## Fitting Conversion

The existing fitting must be switched off and isolated at the mains before commencing electrical work. It is the responsibility of the converter to ensure the fitting continues to meet safety requirements. If in doubt consult a qualified electrician. Live and Neutral terminals are at the end of the LED T8 tube marked "Input: 220-240V AC"

### Magnetic Ballast (choke):

- Remove the starter and any capacitor.
- Replace the starter with the LED starter - this is a fused link.
- Plug the LED T8 lamp directly into the socket. The orientation is not important



### Electronic Ballast (High Frequency) Conversion:

- The electronic ballast is not required so it must be removed or bypassed.
- The LED starter is not required.
- Wire the Live and Neutral as per the diagram below, adding a 1A fuse per lamp as shown. Alternatively where multiple lamps are installed a 3A fuse can be added between the Live supply and the lampholders such that each is protected by the fuse.
- Add an indelible warning label, visible when changing the lamp, showing the substance of: **Warning - not for use with fluorescent lamps, use only Kosnic LED Tubes**

