



LED Tube Series

TE Lighting DC LED Tube allows you to truly save energy without sacrificing any of the lighting qualities of your existing and future installations.

Downward lumen output of this LED tube is equivalent to that of the fluorescent tubes. The use of remote driver ensures the long life (50,000 hours) of the LED which greatly reduces your maintenance costs. Available in both T5 & T8 format in Polycarbonate or Glass cover.

At TE Lighting, we believe longevity, lighting quality to be the most important considerations when choosing LED replacement for traditional lighting. Hence, we have designed our LED Tubes to be powered by DC current only. AC LED Tubes which are widely used on the market is inexpensive by itself, however when considered in a total luminaire package, the annual maintenance cost is much higher with replacements every 1-2 years.

The Advantages of DC LED Tubes are:

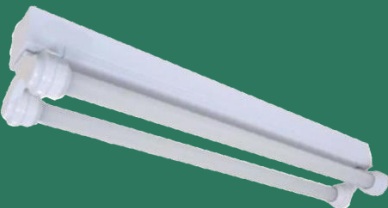
- Better dimming by Step-Dimming, 0-10V or other dimming controls
- Less heat generated in the small form factor of T5 and T8
- Remote driver with higher quality components such as larger capacitors, and heat dissipation
- Less risk of electrical shock as compared to AC 220V
- Longer life

Types of Batten We Offer:



Metal case IP66 Weatherproof Fitting

- Adequate heat dissipation from the LED tube and the driver, as proven by stringent heat run tests in the laboratory
- The fitting can be installed totally outdoor



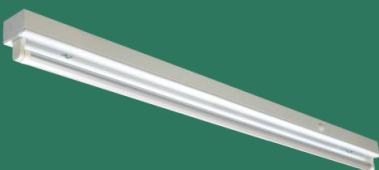
Batten with IP65 Lamp-Holder

- LED heat sink exposed for maximum heat dissipation
- IP65 lamp holder provides strong support of LED tube
- Ideal for installation under semi-outdoor locations



Recessed Ceiling Mounted Fitting

- Free choice of reflectors or diffusers to suit the particular application
- T5 length provides for easy retrofit and unobstructed installation in any ceiling grid system
- Indirect lighting using transparent LED tube or other special-made fittings are available upon request



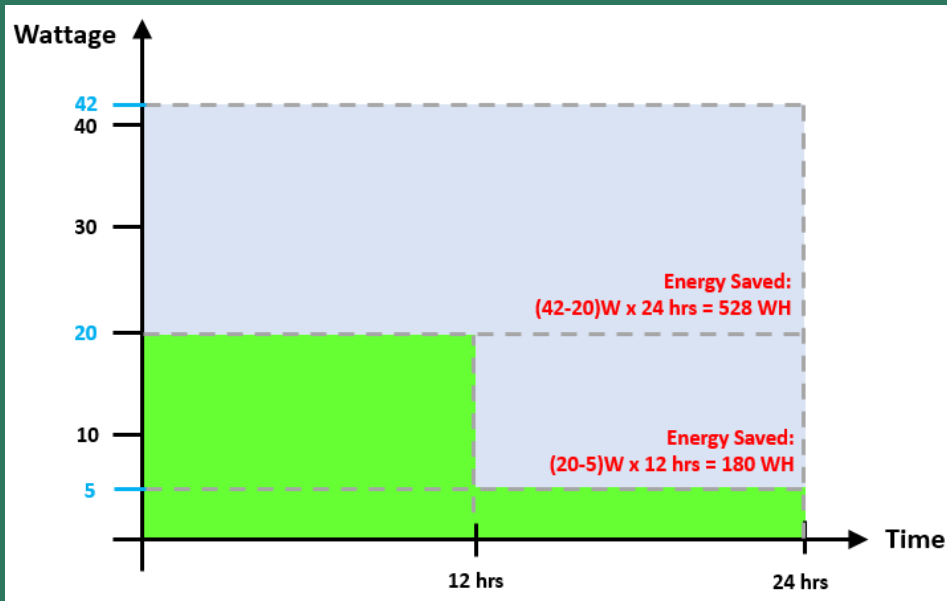
Batten with Infrared / Microwave Motion Sensor

- When motion sensor is triggered, luminaire will switch to 100% light output
When the person moves away from the detection range, a preset light output (e.g. 25%) will be provided after a time-delay
- Available time-delay settings: 5s, 30s, 1min, 3min, 5min, 8min
- Low / High sensitivity of detection can be selected
- 2 sets of motion sensors are provided in order to avoid any blind spot

Energy Savings Comparison

Energy Saving as compared to 1200mm T8 fluorescent tubes:

	T8 Fluorescent Tube	LED Tube	Energy Saving
Wattage of Tube	36W	18W	52%
Wattage of Driver	6W	2W	
Total Wattage	42W	20W	
Dimmed to 25% for 50% of Time (equiv.)	N/A	5W@50%	



- Total Energy Consumption for a T8 Fluorescent Tube for 24hrs = 42W x 24hr = 1008 WH
- Total Energy Saved = 528 + 180 WH = 708 WH
- Or: $\frac{708 \text{ WH}}{1008 \text{ WH}} = \mathbf{70\% \text{ Energy Saved}}$

Notes:

1. Dimming of fluorescent tube is expensive, inefficient and shortens lamp life
2. Dimmed LED will have its life extended considerably
3. Dimming could be achieved by an ON/OFF signal from:

- Occupancy / Daylight Sensor
- Timer Switch
- BMS Control

Can Be Connected Individually or In Group



Specifications

Electrical

- Input Voltage: DC 24V
- Output Power: Up to 30W
- Power Factor: 0.95

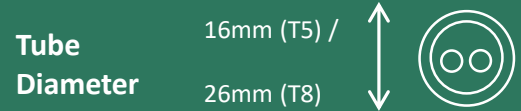
Optical & LED Driver

- Color Temperature: 3000K/3500K/4000K/5000K
- Lumen Output at LED Chip Level: > 200 lm/W
- Delivered Lumen: ~ 100 lm/W*

Mechanical

- Polycarbonate or Glass Diffusor Cover
- Quick Release Pin Connectors

Dimension Drawing



Ordering Information

Example: TETUB-9W-30K-DC-T8-PC

Product	Wattage (Length / Lumen Output)	Color Temperature	AC / DC	Profile	Material
TETUB	9W (600mm / 1050 lumens)	3000K	AC	T5	PC (Polycarbonate)
	15W (900mm / 1575 lumens)	3500K	DC	T8	GC (Glass)
	18W (1200mm / 2100 lumens)	4000K			
	30W (1500mm / 3150 lumens)	5000K			
	Others - Please Specify	6500K			
		Others - Please Specify			

Applications

