



T-SERIES LED TUBES LIGHTING SYSTEMS

Lighting systems for use in aviary systems and in broiler cages

T1+ Warm white (3000k)

T1+ Special white

T1+ Amber



PROLUCENT LED LIGHTING SYSTEMS FOR AVIARY

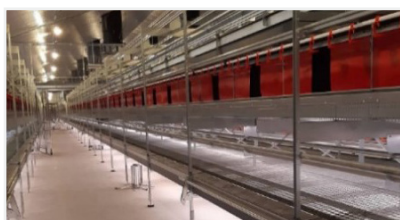
The ProLucent LED lighting tubes provide an uniform light distribution by using 72-144 LEDs and an opaque finish. Unlike other LED tubes that create point source lighting, we reduce stress by equal distribution of light.

The low voltage system (48Vdc) is the perfect balance between safety and efficiency. With this 48 Volts dc setup there is less chance of power loss compared to 24 or 12Vdc. Due to the DC current, the T-series tubes are always flicker free.

Specifications T1+ LED tubes (Single colour)

LED T1+ tube	T1+ PLT14801	T1+ PLT14803	T1+ PLT14802
Lumen Output	555 Lumen	947 Lumen	690 Lumen
Nominal power	5,5 Watt	9,6 Watt	5,5 Watt
Lumen/Watt efficiency	101 Lm/W	99 Lm/W	125 Lm/W
Light spectral output	3000K Warm white	3000K Warm white	Special white
Dimmable	Yes 0 – 100% Flicker Free		
Operating temperature	45°C / 113°F		
Input voltage	48Vdc		
Number of LED's	72		
Beam angle	129°		
Waterproof	IP69K Highest possible rating		
Certification	CE		
Usage	Layer Pullet Breeding Broiler cages		

*Technical info on T1+ Amber available on request



Advantages T-series LED tubes

- ⊕ Ideal to use in aviary systems & enriched cages
- ⊕ Ideal for usage underneath the system
- ⊕ Designed for excellent light distribution
- ⊕ Smooth and flicker free dimmable (0-100%)
- ⊕ IP69K ammonia resistant PMMA material
- ⊕ 48 VDC low power consumption
- ⊕ Easy installation with 'plug & play' 2 pin connectors
- ⊕ Different LED colours available
- ⊕ Connect up to 50 units on 1 dimmer
- ⊕ No heat problems
- ⊕ Internal resettable fuse
- ⊕ Anti-pecking electrical wire (extra coating)
- ⊕ High lumen per Watt ratio (99 to 125Lm/W)
- ⊕ 5,5W and high output 9,6W version
- ⊕ Din rail mountable dimmer with alarm relays and safety functions
- ⊕ 0-10V input signal with auto slow fading: to avoid stress induction & flickering

Extra advantages T2+ series LED tubes

- ⊕ 2x 5,5 Watt output versions
- ⊕ Possibility to control the behaviour of animals by changing the colour spectrum
- ⊕ Reduction of ground eggs, stress & pecking
- ⊕ 144 LED's driven at low current
- ⊕ Different colours available | Spectrum combination possible

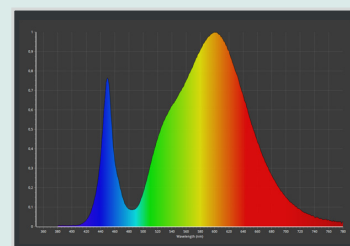


Figure wavelength Warm White (3000K)

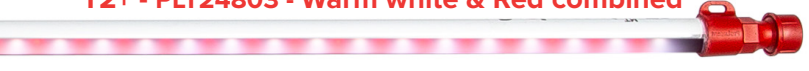
① T2+ - PLT24801 - Warm white & Blue combined



② T2+ - PLT24802 - Special white & Red combined



③ T2+ - PLT24803 - Warm white & Red combined



The effect of different colours (T2+)

It's well known that the behaviour of animals can be influenced by colour lighting. Eventually resulting in less stress, less pecking and a reduction in floor eggs.

① PLT24801 - Warm White & Blue

Blue light calms animals (and humans) and discourages hens for laying eggs. This makes it perfect for reducing the amount of floor eggs in aviary houses. By mixing the *Blue* and *Warm White* colours on a daily basis, animals will not get used to the spectrum and we can hereby avoid a reduction in the effectiveness.

Recommended under aviary systems

② PLT24802 - Special White & Red

For the human eye the colour *Special White* looks like a greenish white, however it's a combination of *Green & Blue*. These 2 short wave colours are preferable colours for poultry. It reduces pecking and poultry spend more time eating. By adding the red colour, we have the 3 primary colours leading to white light. The red colour stimulates the hypothalamus, leading to more eggs and a higher fertility rate.

Recommended in aviary systems and over corridors

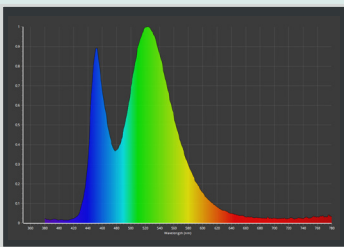


Figure wavelength Special White

③ PLT24803 - Warm White & Red

By combining the popular colour *Warm White* (3000K) with different levels of *Red*, the hypothalamus of poultry animals will be stimulated, leading to a higher egg production and prevents pecking and cannibalism.

Recommended in aviary systems

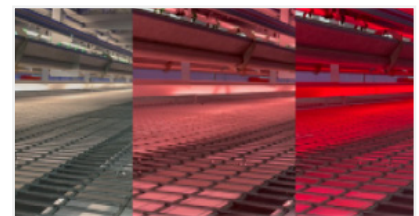
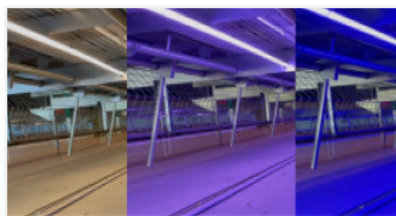
T2+ SERIES LED TUBES (MULTICOLOR)

The Prolucent T2+ LED tubes combine two T1+ tubes into one unit with 144 LEDs offering the advantages of two different light colours without doubling the investment.

With the T2+ LED tubes the LEDs of both colours are in one and the same line for optimum light uniformity. One can control each colour individually as well as combined for the optimum light mix as indicated by the animals and ultimately decided by the farmer.

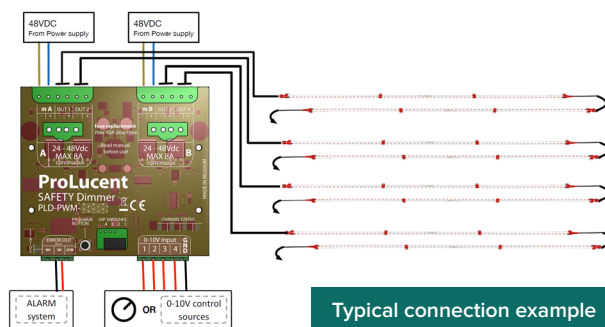
Specifications T2+ LED tubes (Multicolour)

LED T2+ tube	T2+ PLT24801	T2+ PLT24803	T2+ PLT24802
Lumen Output	Warm white = 555 Lm Blue = 67 Lm	Warm white = 555 Lm Red = 110 Lm	Special white = 695 Lm Red = 110 Lm
Nominal power	2 x 5,5 Watt	2 x 5,5 Watt	2 x 5,5 Watt
Lumen/Watt efficiency	Warm white = 101 Lm/W Blue = 12 Lm/W	Warm white = 101 Lm/W Red = 20 Lm/W	Special White = 126 Lm/W Red = 20 Lm/W
Light spectral output	White 3000K Blue 470 Nm	White 3000K Red 625 Nm	Special white Red 625 Nm
Dimmable	Yes 0 – 100% Flicker Free		
Operating temperature	45°C / 113°F		
Input voltage	48Vdc		
Number of LED's	144		
Beam angle	129°		
Waterproof	IP69K Highest possible rating		
Certification	CE		
Usage	Aviary Layer Pullet Breeding		

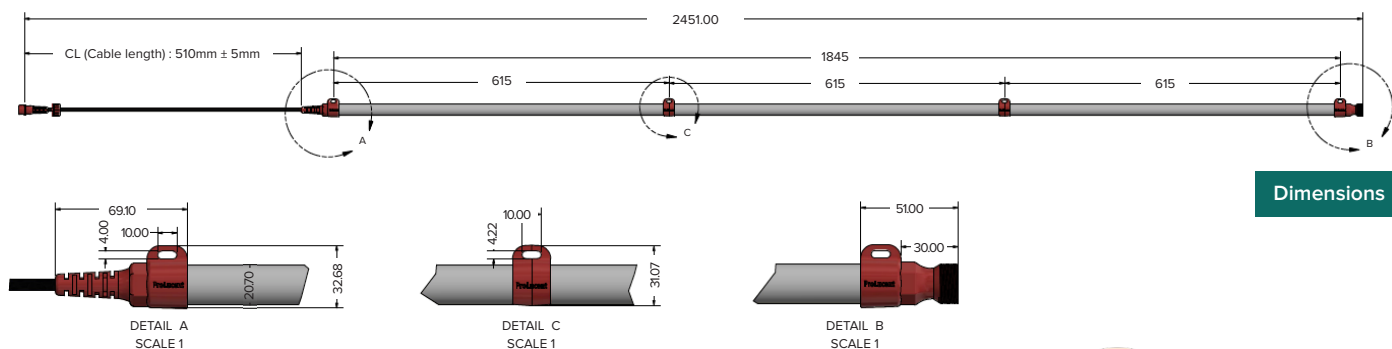


DC Safety Dimmer for T-series LED tubes (48V)

- ⊕ Din rail mountable: can be installed within standard wiring cabinets
- ⊕ 2 power input channels (each max. 8Amp) → 4 power output channels
- ⊕ Alarm detections: overheating, overload, broken wiring and broken lamps
- ⊕ 0-10V input signal or 10K pot meter
- ⊕ Equipped with alarm relay → can be connected to a central alarm system
- ⊕ Programs can be installed to change the colour output automatically in different time zones (for T2+)



Dimensions	± 190cm x 3cm x 3cm (see dimensional drawing for more details)
Life expectancy Warranty	L70B50 25K hours 2 years
Weight & packaging	Cardboard box with 25 lamps: WxHxL (mm) 216x280x1970 - 16 kg



E27 PROLUCENT LED LIGHT UNITS 7 & 12 WATT

12W DimTo is a popular option over corridors in aviary houses

This new generation LED bulbs feature a brighter, longer lasting and more energy efficient LED lamp, while Gasolec has managed to lower the cost price (thus selling price) of these new units. While maintaining the E27 base, these LED Lamps can replace the old CFL Energy Saving Lamps without having to install new fixtures and electric wiring. Available in 7W(2700K), 12W (2700K) and 12W DimTo (2000-4000K).




Check out Gasolec.com for more info




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