

Hontech-wins

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Hontech-wins

CHICKEN FARM LED LIGHTING SOLUTION

LED Lights for Poultry House

深圳市鸿远微思电子有限公司
Shenzhen Hontech-Wins Electronics Co., Ltd.

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 审核：魏文财
 版次：2018-5-1次版

CERTIFICATE



ISO9001
 Cert NO: QI137759Q



TUV-EMC
 Cert NO: AN 50383408 0001



TUV-CB
 Cert NO: DE 2-022048 01



RoHS
 Cert NO: CS1611030258R



IEC
 Cert NO: LCS1611030259S



About Hontech-Wins

Hontech-wins was established in 2009 by Mr. Rodney Wei for development and production of LED Lights. With his knowledge of LED technology and the marketing requirement for LED Poultry Lighting, Hontech succeeded in developing the most suitable LED Lighting for chicken growth. Today Hontech offers a wide range of poultry lighting systems and has grown to become a expert company in LED poultry field.

ISO

ISO 9001 Factory

CERTIFICATE

CE TUV SAA SASO UL
Certificated Products

STUDY

Year's Research On
Chicken's Biological &
Physiological Feature

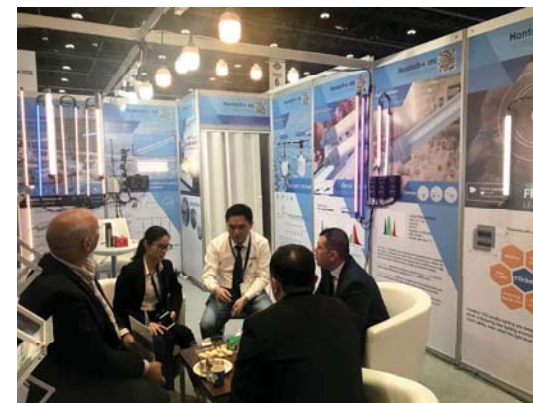
R&DTEAM

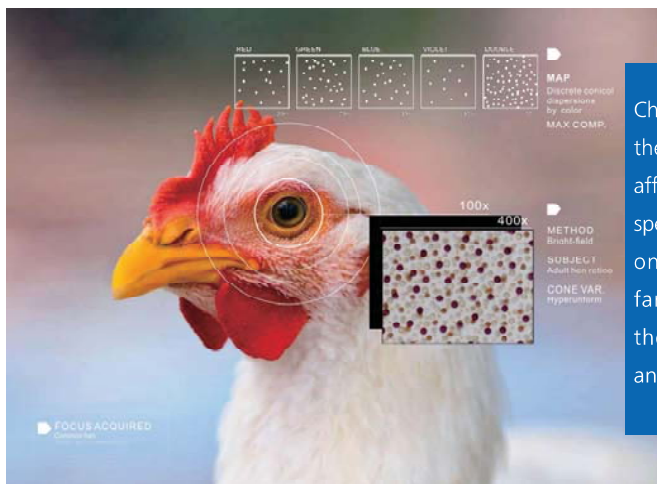
18 Year's Experienced
Engineer Team for
Dimming System



LED Poultry Lighting System Make a Better Life for Poultry

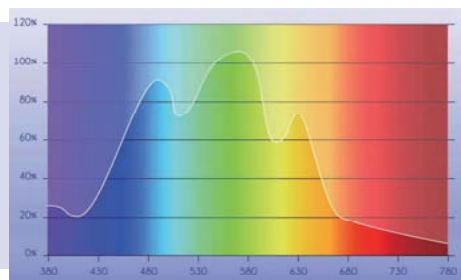
The vision of Hontech is still the same as it was when Mr. Rodney Wei founded the company. Produce high quality products, achieve in Century enterprise. New Poultry Lighting systems are developed with the research on Chicken's physiological feature and the field trips on customers' farm around the world. Hontech aims to provide poultry with optimal lighting systems that enable chicken growth in happy and healthy lighting environment.





Chickens' eyes are sensitive to the change of light. Chickens are affected by duration, intensity and spectrum of light. Lighting is one of the most important farming input on influencing the production of the meat, egg and other protein sources.

Chickens' eyes are different from human's, the light we perceive is a part of the electromagnetic spectrum our eyes can detect, known as the visible spectrum.

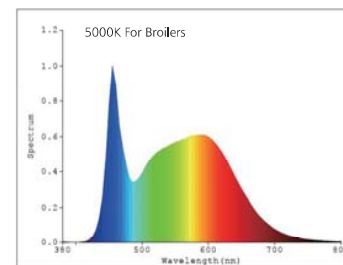


Domestic Fowl Photopic Spectral Response (Source: LED Magazine)

The same is true in animals, including poultry, but with one significant difference. The spectral sensitivity and visible spectrum of poultry, or what they actually see, is not the same as humans. That's why chickens may behave differently under the same intensity light from two different sources that look identical to us.

The most important is that the lights should be simulated the cycle from the sunrise to sunset.

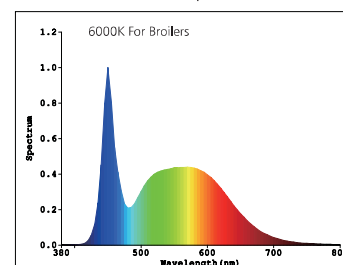
1. Color Spectrum fo Broilers



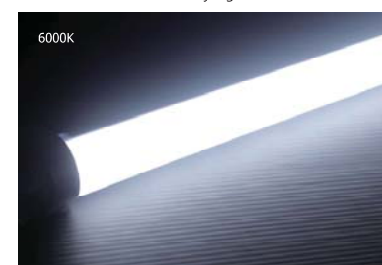
5000K Color Spectrum



5000K Day Light Color



6000K Color Spectrum



6000K Cool White Color

Why 5000K/6000K is the suggested color temperature for broilers?

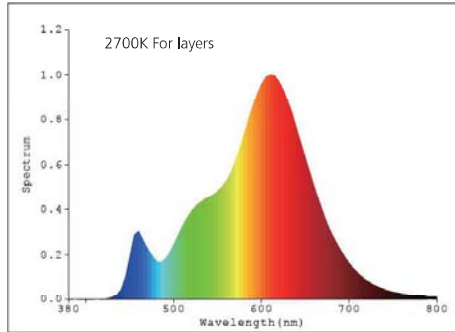
Blue Color decreases movement when catching the chicken, make it not frightened then improve the quality of chicken meat.

Red Color increases food intake, reduces the feather pecking of chick.

Green Color increases growth rate at an early age by enhancing proliferation of skeletal muscle satellite cells.

This light spectrum is Hontech-wins specially designed for broilers. Hontech 5000K LED light can help chicken gain more weight.

2. Color Spectrum for Layers



2700K Color Spectrum



2700K Warm White Color

Why 2700K is the suggested color temperature for layers?

Blue Color keeps birds calm, reduces the feather pecking of chick.

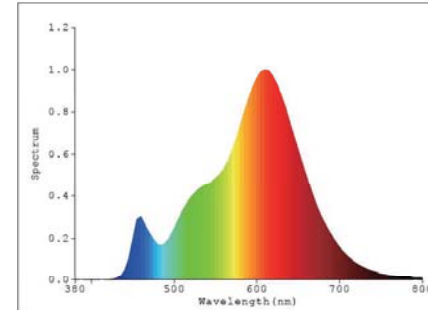
Red Color increases food intake, enhances egg production, activates movement and accelerates sexual development.

Green Color increases growth rate at an early age by enhancing proliferation of skeletal muscle satellite cells and increase the egg quality.

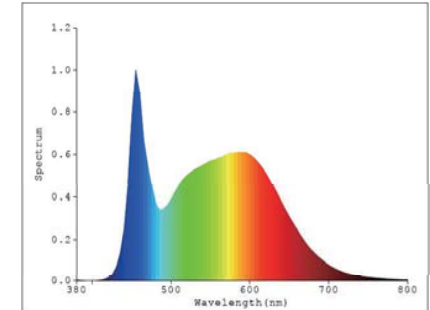


This light spectrum is Hontech-wins specially designed for layers. Hontech 2700K LED light can increase the egg production and the quality of eggs.

3. Color Spectrum for Breeders



2700K Color Spectrum



5000K Color Spectrum

For Rearing Period, light up 5000K to help chicken growth better and healthy.

Red color increases food intake, reduces the feather pecking of chick.

Blue color make chicken calm down to reduce the pecking.

Green Color increases growth rate at an early age by enhancing proliferation of skeletal muscle satellite cells.

For Production Period, light up 2700K to enhance the egg production and the egg quality for next generation.

Blue color keeps birds clam, reduces the feather pecking of chick.

Red color increases food intake, enhances egg production, activates movement and accelerates sexual development.

Green Color increases growth rate at an early age by enhancing proliferation of skeletal muscle satellite cells and increase the egg quality.



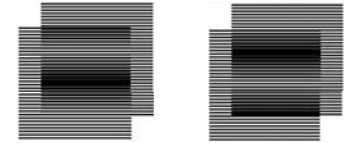
Why Chickens need flicker free light for better growth?

Flicker is the term used for the rapid and repeated modulation of light output from a source. The principle source of flicker is the periodic variation in AC mains operated lamp output, at twice the AC frequency. This is known as photometric flicker and varies with each technology.

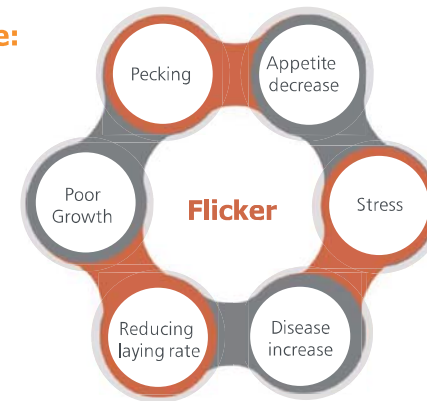


The incandescent bulb does not appear to flicker due to its inefficient thermal persistence keeping the filament hot, masking the switch in direction of the current. In contrast to this, LED responds instantaneously to changes in the power supply so any effect of photometric flicker is obscured by electrical flicker such as noise on the AC distribution lines or dimming an LED using pulse width modulation.

Poultry have keen eyesight and are much more sensitive than humans to light flickering. Chicken's eyes can see the frequency lower than 205Hz.



Flicker will cause:



Hontech Lighting
(NO Flicker)



Normal Lighting
(100Hz Flicker)



Hontech LED poultry lighting are designed with flicker free LED driver. A flickering free lighting environment help the birds behave more calmer, even when the light level is raised from dim to full light.





LED Poultry Lighting For Cage Chicken

T14 360° LED Tube Light
Wattage: 20-25W
OD: 34mm



T12 Double Sided LED Tube Light
Wattage: 23-35W
OD: 32mm



IP65 E27 LED Bulb
Wattage: 6-15W
OD: 70-100mm



LED Poultry Lighting For Floor Chicken

T12 LED Tube Light
Wattage: 15-35W
OD: 32mm

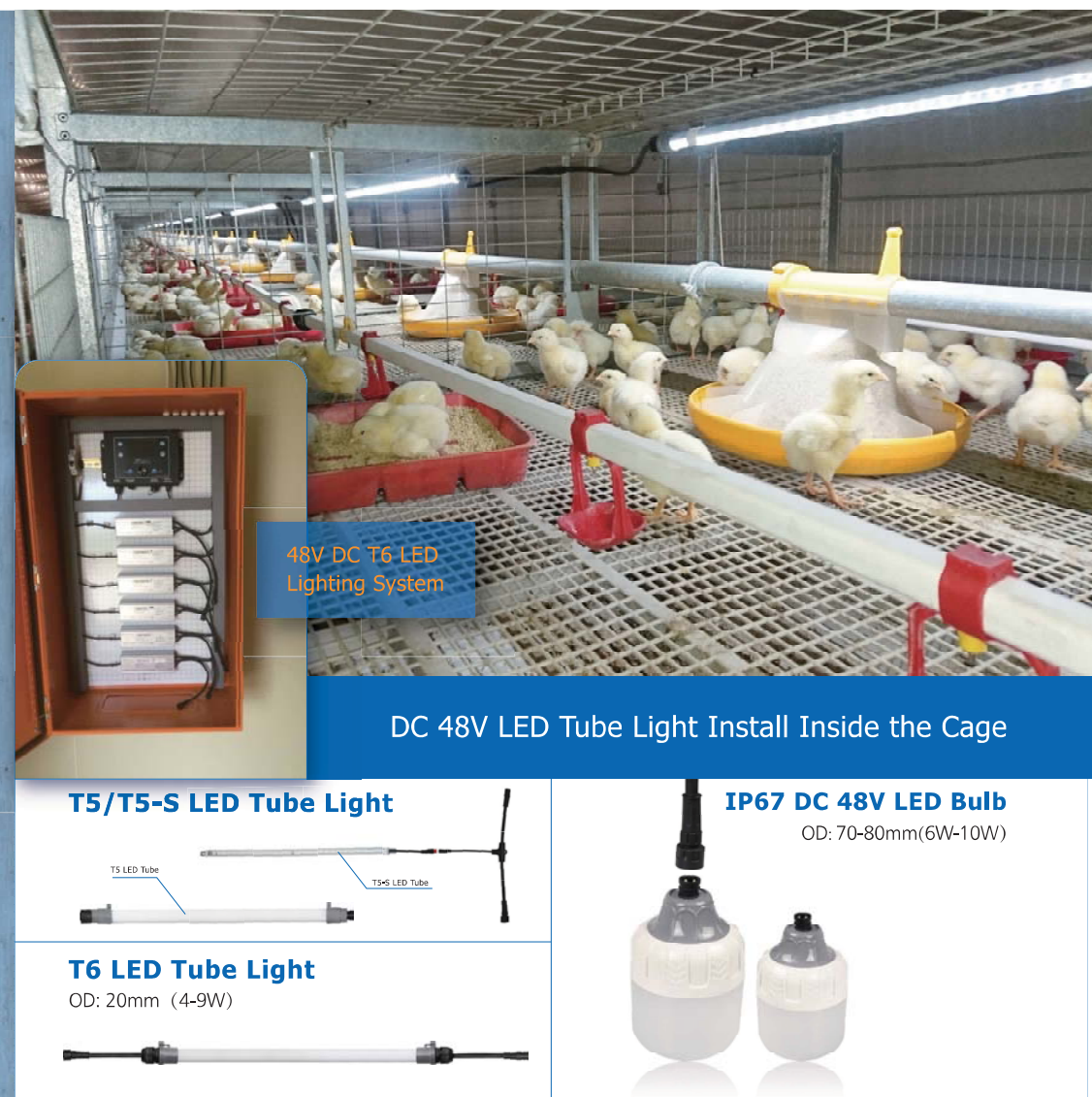
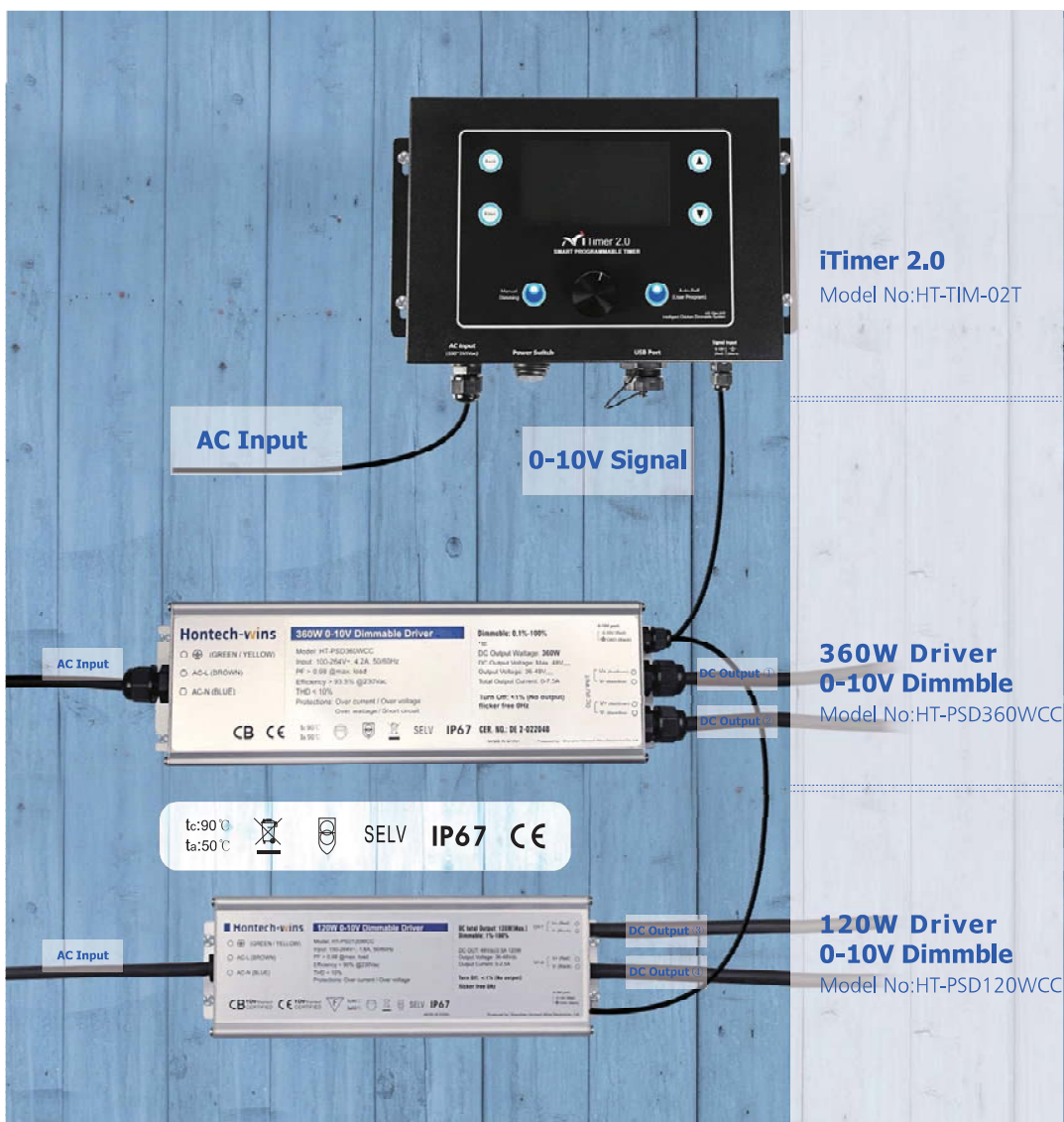


T8 LED Tube Light
Wattage: 8-18W
OD: 26mm



IP67 HT19 LED Bulb
Wattage: 6-10W
OD: 70-80mm





Programmable Dimming Controller

Traic (Leading Edge & Trailing Edge) Dimmable



4500W DIMMER

Model No.: HT-DIM-045L



2200W DIMMER

Model No.: HT-DIM-022L

PRODUCT FEATURES

- Programmable Dimmer
= Manual Dimmer+Timer
- High Efficiency : 98%
- Dimmable from : 1%-100%
- Smooth dimming without flickering
- Programmable brightness control by Auto-self setting
- Support system updating
- 24hrs/Days Lighting program control
- Support DIY lighting program setting
- 5 Modes for lighting program setting

Programmable Dimming Controller

Traic (Leading Edge & Trailing Edge) Dimmable

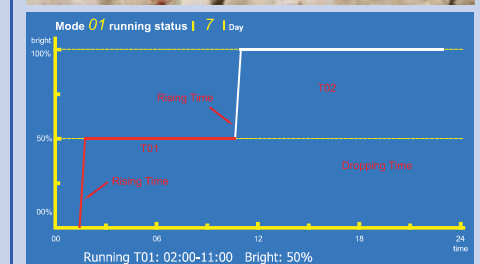
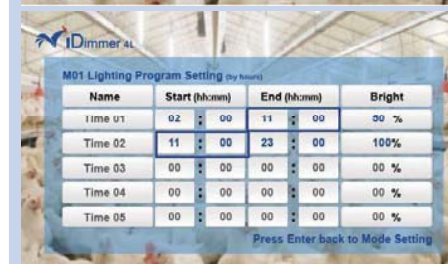
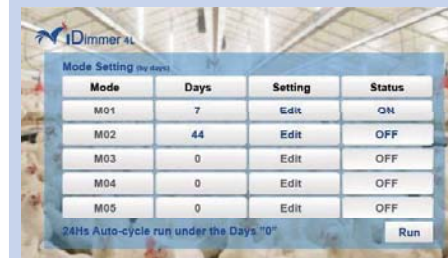
Why it need to set Rising & Dropping Time?

According to the RSPCA (Royal Society for the Prevention of Cruelty to Animals), the light intensity between lighting period must be adjusted in a gradual manner (using dimmer or switching individual lights on/off) over at least 15 minutes.

Lighting program setting

(set by days, specific time and brightness)

Rising & Dropping Time



AC 2200W iDimmer 3L and Hontech-Wins LED Poultry Lighting Wire Diagram



Manual Dimming Controller

Traic (Leading Edge & Trailing Edge) Dimmable



4500W DIMMER

Model No.: HT-DIM-O45S



2200W DIMMER

Model No.: HT-DIM-O22S



1200W DIMMER

Digital Dimmer
Model No.: HT-DIM-O12L



Analog Signal Dimmer
Model No.: HT-DIM-O12S

PRODUCT FEATURES

Manual Dimmer:

Control the lights by manual switch
With 0-10V signal, can be controlled by external systems

Humidity : 20%-90% RH non-condensing

Safety : Primary-GND Class A 1750V

Smooth dimming without flickering

Dimmable from : 1%-100%

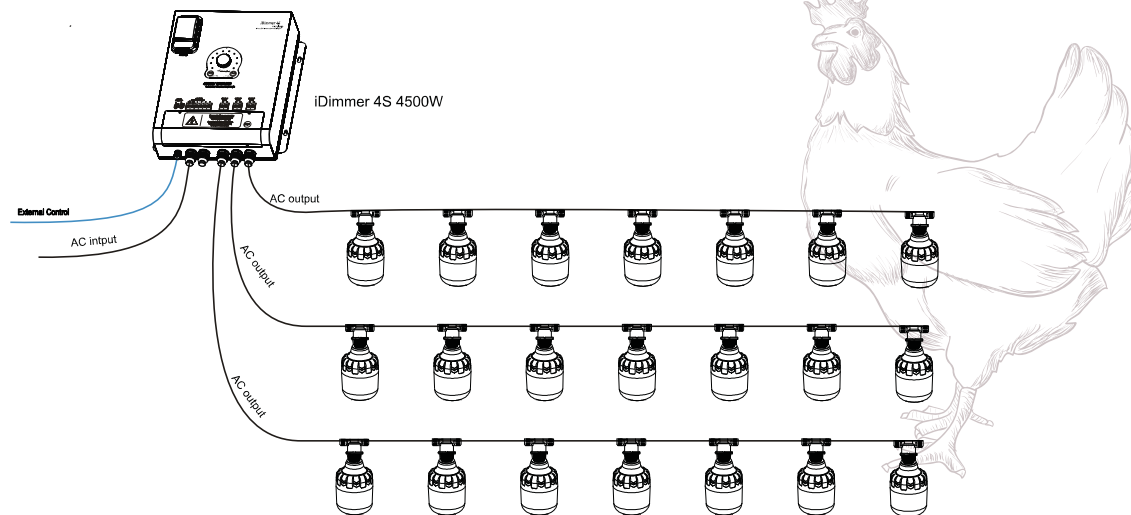
Working Temp : -20-50 C

Storage Temp : -25-65 C

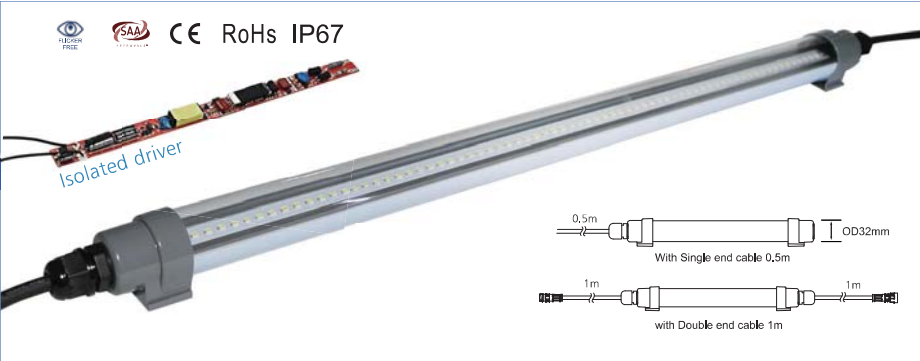
High power factor : 0.97

High Efficiency : 98%

220Vac Manual Dimmer and Hontech LED Poultry Lighting Wire Diagram



T12 LED TUBE LIGHT



Beam Angle 180°	HT Product Code	Beam Angle	Voltage	Power	LED info	Total Length
	HT-T12AC25W12FD	180°	180-264Vac	23-25W	SMD2835 132pcs	L: 1200mm OD32mm
	HT-T12AC30W15FD			28-30W	SMD2835 168pcs	L: 1500mm OD32mm
	HT-T12AC38W18FD			33-35W	SMD2835 192pcs	L: 1800mm OD32mm

Beam Angle 270°	HT Product Code	Beam Angle	Voltage	Power	LED info	Total Length
	HT-T12AC25W12FE	270°	180-264Vac	23-25W	SMD2835 168pcs	L: 1200mm OD32mm
	HT-T12AC30W15FE			28-30W	SMD2835 216pcs	L: 1500mm OD32mm
	HT-T12AC38W18FE			33-35W	SMD2835 288pcs	L: 1800mm OD32mm

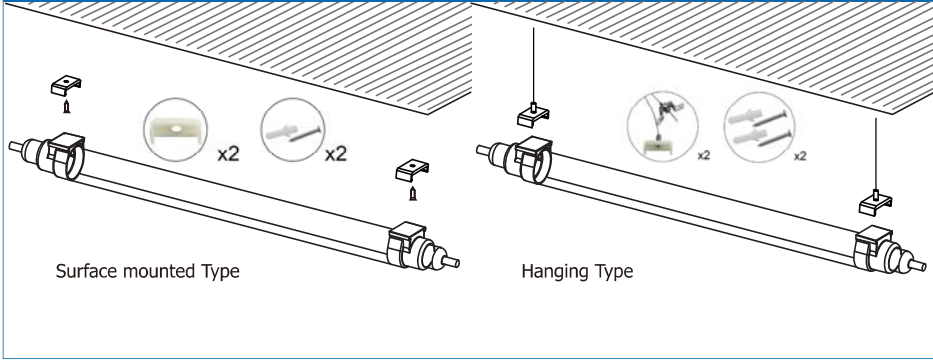


T8 LED TUBE LIGHT

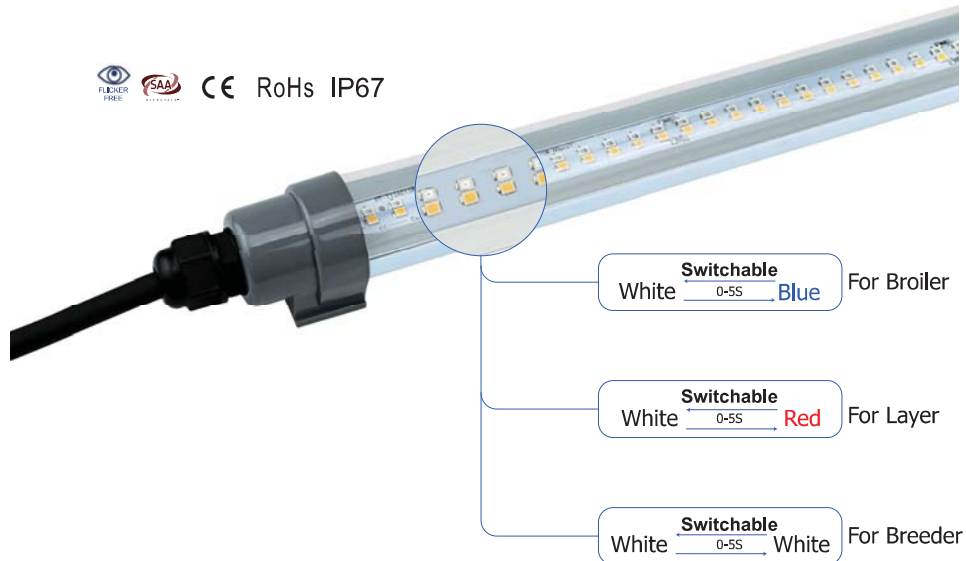


Beam Angle 140°	HT Product Code	Beam Angle	Voltage	Power	LED info	Total Length
	HT-T8AC18W12FB	140°	180-264Vac	16-18W	SMD2835 108pcs	L: 1200mm OD26mm
	HT-T8AC18W15FB			18-20W	SMD2835 120pcs	L: 1500mm OD26mm

Installation



TWO COLOR SWITCHABLE T12 LED TUBE LIGHT



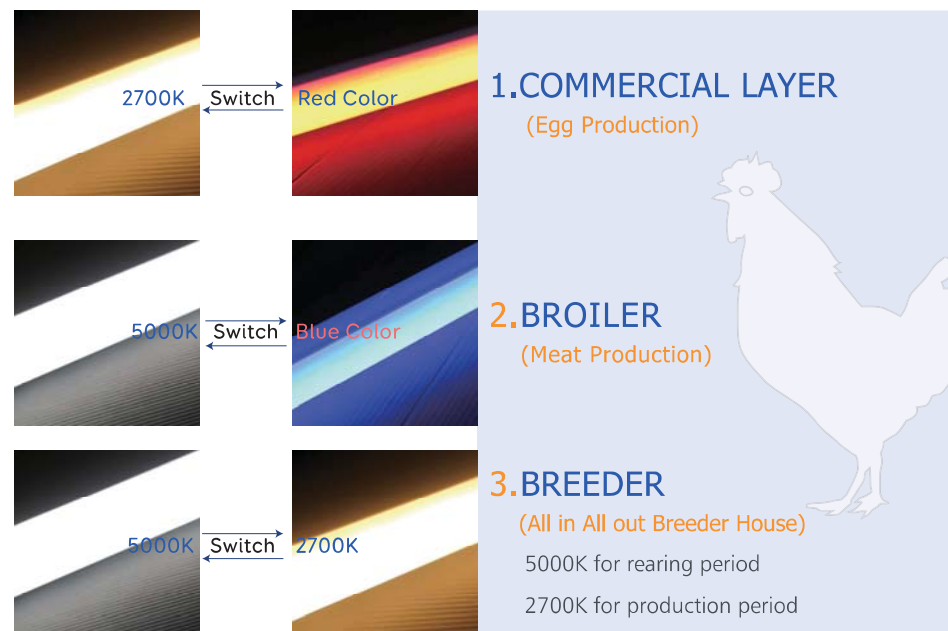
Color switchable (e.g: "White" vs "Blue") within 0-5s from AC OFF / ON .Turn OFF / ON the AC power within 0-5s each time, the color shall be switched into the other color.

Restore to Default Color: Turn OFF / ON the AC power three times within 0-5s, The color shall be switched into the default color (The color in CH-1, e.g: white color).

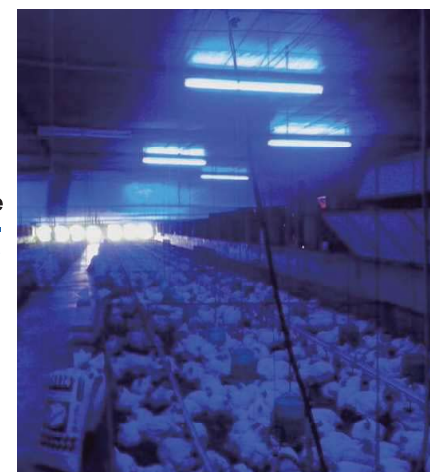
Memorable: Turn OFF / ON the AC power by 10s or more, the light can be memorable for the color which the color before the power off.

Beam Angle 180°

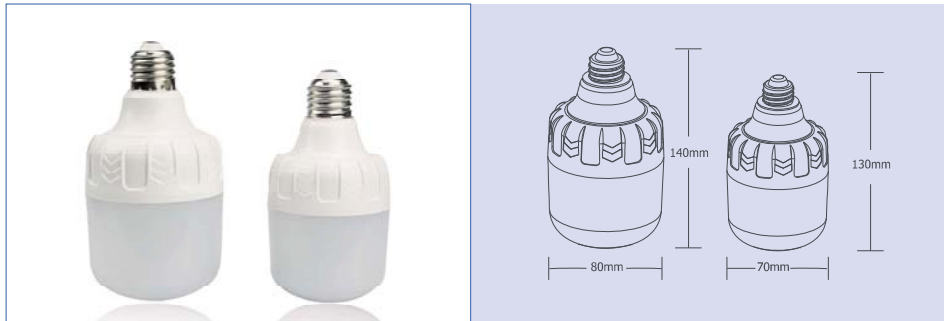
HT Product Code	Beam Angle	Voltage	Power	LED Info	Total Length
HT-T12AC25W12FS	180°	180-264Vac	white color 25W white/red/blue color 8W	white SMD2835 132pcs white/red/blue SMD2835 44pcs	L: 1200mm OD32mm
			white color 25W white/red/blue color 25W	white SMD2835 132pcs white/red/blue SMD2835 132pcs	L: 1200mm OD32mm
HT-T12AC30W15FS			white color 30W white/red/blue color 11W	white SMD2835 168pcs white/red/blue SMD2835 56pcs	L: 1500mm OD32mm
			white color 30W white/red/blue color 30W	white SMD2835 168pcs white/red/blue SMD2835 168pcs	L: 1500mm OD32mm



White
↔
Blue



IP65 E27 DIMMABLE LED BULB



PRODUCT FEATURES

- Easy to replace the old farm lamps.
- PC Material LED bulb Housing to resist cleaning chemicals.
- Waterproof glue inside for standing the water jet when cleaning.
- Flicker free LED driver, smooth dimming without flickering.

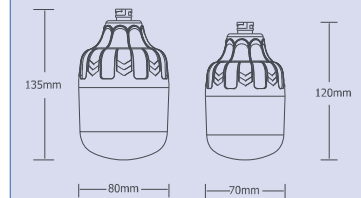
HT Product Code	Voltage	Power	LED info	Size
HT-QPF06WS/E27	180-264Vac@ Dimmable	6W	SMD2835	OD70*130mm
HT-QPF10WS/E27		10W	SMD2835	OD80*140mm
HT-QPF15WS/E27		15W	SMD2835	OD100*190mm



IP67 HT19 DIMMABLE LED BULB



IP67
Waterproof



HT Product Code	Voltage	Power	LED info	Size
HT-QPF06WS/HT19	180-264Vac@ Dimmable	6W	SMD2835	OD70*120mm
HT-QPF10WS/HT19		10W	SMD2835	OD80*135mm



T14 360° HANGING LED TUBE LIGHT



Chicken Farm(Layer House) In South America
Installed light: HT-T14AC20W12FD
Dimmable T14 360degree LED tube light 1200mm 20W
Color Temperature 2700K
E27 base for vertical installation
4M Light distance

T12 DOUBLE SIDED LED TUBE LIGHT

Double Sided Lighting	HT Product Code	Beam Angle	Voltage	Power	LED info	Total Length
	HT-T12AC25W12FF	Double Sided	180-264Vac @Dimmable	23-25W	SMD2835 168pcs	L: 1200mm OD32mm
	HT-T12AC30W15FF			28-30W	SMD2835 216pcs	L: 1500mm OD32mm
	HT-T12AC36W18FF			33-35W	SMD2835 264pcs	L: 1800mm OD32mm



iTIMER 2.0

Model No.: HT-TIM-02T

PRODUCT
FEATURES

- Built in 0-10V signal
- Manual brightness control
- Programmable brightness control by Auto-Self Setting
- USB port for program update
- 24hrs/Days Lighting program control
- Support DIY lighting program setting
- 5 Modes for lighting program setting



120W DRIVER

Model No.: HT-PSD120WCC



360W DRIVER

Model No.: HT-PSD360WCC

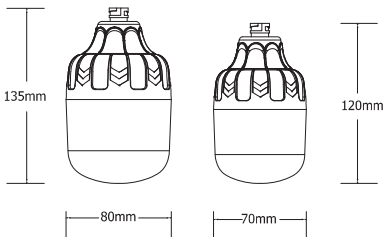
Input: 100-264V~ , 50/60HZ
PF > 0.95 @max. load
Efficiency > 92% @230Vac
THD < 10%

Dimmable: 1%-100%
Ripple & Noise: 50mVp-p
Turn Off: 1% (No output)

Notes:

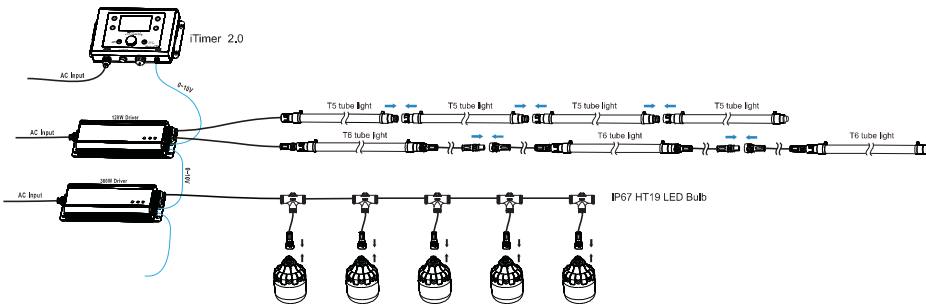
Rated 14AWG(2*1.5MM²) can be connected T6 lights to 100meter @48Vdc.

IP67 DC 48V LED BULB



HT Product Code	Voltage	Power	LED info	Size
HT-QPF06WS/HT19	48Vdc	6W	SMD2835 45pcs	OD70*120mm
HT-QPF10WS/HT19		10W	SMD2835 60pcs	OD80*135mm

DC48V Dimmable LED Lighting System Wire Diagram

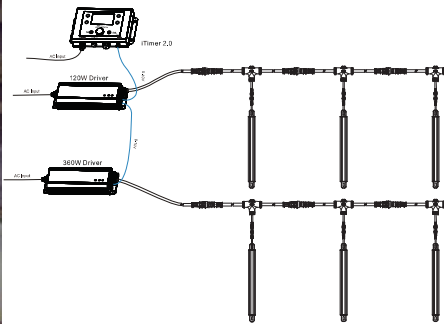


2W T5-S LED STRIP LIGHT

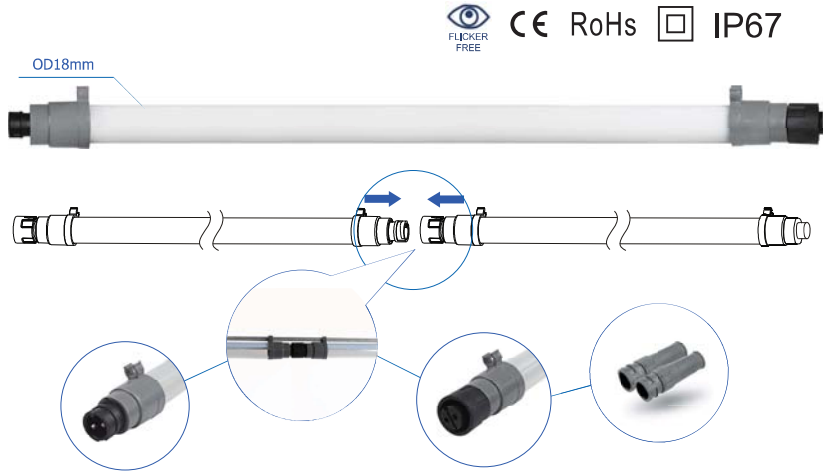


- Installed on the top of cages
- Efficiency and cost saving
- "T" Type Installation
- 2W T5 LED Tube
- The length can be customized

HT Product Code	Beam Angle	Voltage	Power	LED info	Total Length
HT-T5DC02W045FB/A	140°	48Vdc	2W	SMD2835 30leds	450mm

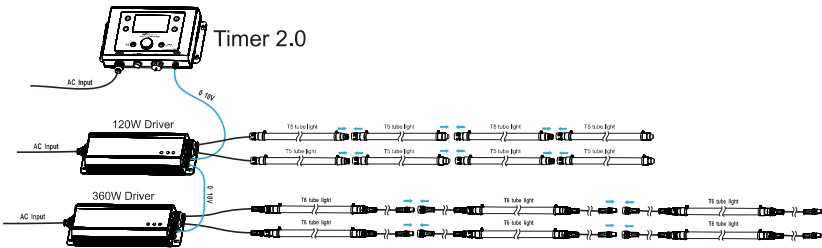


T5 LED TUBE LIGHT

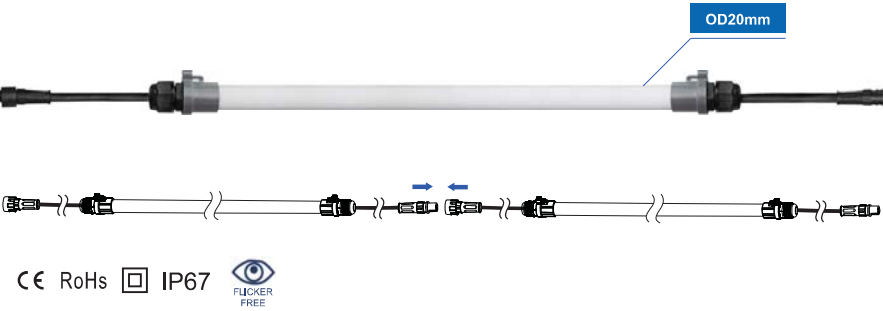


HT Product Code	Beam Angle	Voltage	Power	LED info	Total Length	PLUG & PLAY CONNECTION
HT-T5DC04W12FB/B	140°	48Vdc	4W	SMD2835 48leds	1200mm	
HT-T5DC05W15FB/B			5W	SMD2835 60leds	1500mm	
HT-T5DC06W18FB/B			6W	SMD2835 75leds	1800mm	

Timer with 0-10V 120W/360W Driver and 48Vdc T5/T6 LED Tube Light Connection



T6 LED TUBE LIGHT



PLUG & PLAY CONNECTION

PRODUCT FEATURE:

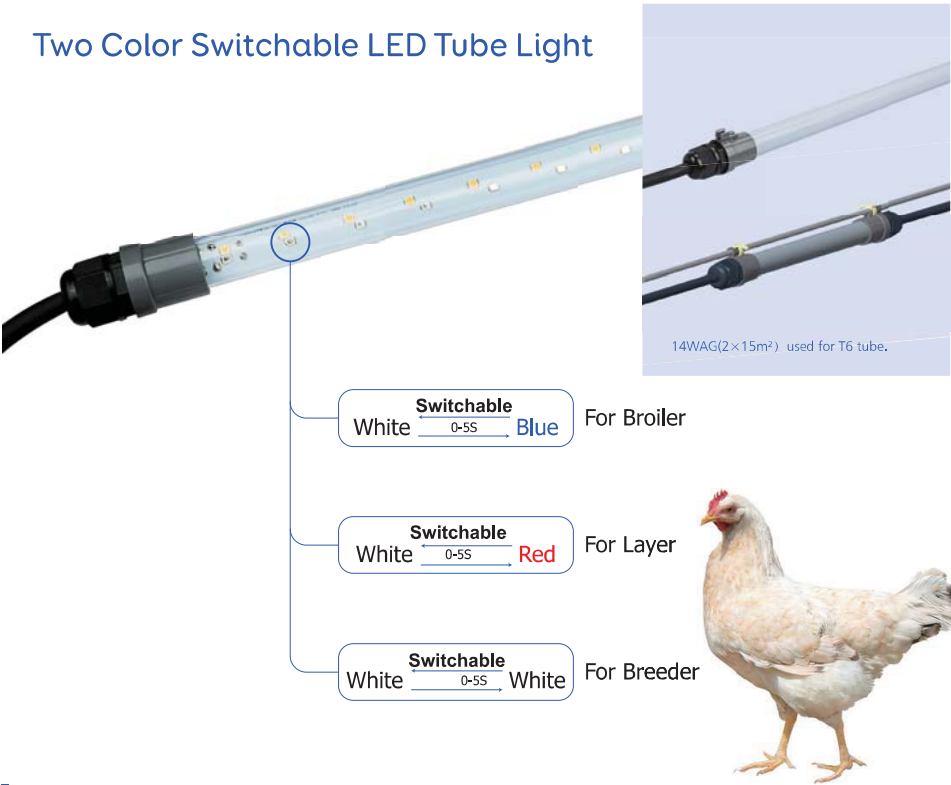
Specially design for cage chicken, IP67 LED tube light.
DC 12V/24V/36V/48V available, low safety voltage.
Wide beam angle, no dark area for cage chicken.
PC material, chemical resistance(Ammonia).
Flicker free and perfectly dimmable from 1-100%.



HT Product Code	Beam Angle	Voltage	Power	LED info	Total Length
HT-T6DC04W12FB/C	140°	48Vdc	4W	SMD2835 45leds	1200mm
HT-T6DC05W15FB/C			5W	SMD2835 60leds	1500mm
HT-T6DC06W18FB/C			6W	SMD2835 75leds	1800mm

DC 48V COLOR SWITCHABLE T6 LED TUBE LIGHT

Two Color Switchable LED Tube Light



- Switchable
White 0-5s Blue For Broiler
- Switchable
White 0-5s Red For Layer
- Switchable
White 0-5s White For Breeder



Color switchable (e.g: "White" vs "Blue") within 0-5s from AC OFF / ON .Turn OFF / ON the AC power within 0-5s each time, the color shall be switched into the other color.

Restore to Default Color: Turn OFF / ON the AC power three times within 0-5s, The color shall be switched into the default color (The color in CH-1, e.g: white color).

Memorable: Turn OFF / ON the AC power by 10s or more, the light can be memorable for the color which the color before the power off.



Why LED Light is good for pig/swine growth?

Physiology of the porcine eye suggest that the domesticated pig is best adapted for dim levels of natural light. Pig have dichromatic vision, in the pig's eye there are two sets of cones that give the animal peak wavelength sensitivity at 439 nm (blue color) and 556 nm (green color). The photoreceptors in a pig's eye cannot detect the red color (>650 nm).

Evidence shows that pigs have poorer color perception than humans and in particular a reduced sensitivity to the red end of the spectrum. There is little research into the effect of colored lights on pig production. In cases where red light has been used, pigs respond as though in darkness.

One key benefit of LED lighting is the ability to dim the lights, providing dawn and dusk periods, reducing the competition for food when lights are switched on in the morning and reducing potentially startling effects when lights are switched on or off.

HT Product Code	Beam Angle	Voltage	Power	LED Info	Total Length
HT-T12AC25W12FD	180°	180-264Vac	23-25W	SMD2835 132pcs	L: 1200mm OD32mm
HT-T12AC30W15FD			28-30W	SMD2835 168pcs	L: 1500mm OD32mm
HT-T12AC36W18FD			33-35W	SMD2835 192pcs	L: 1800mm OD32mm



Pig Farm In Netherland

Installed Light: HT-T12AC25W12FD
T12 IP67 Waterproof 1200mm, 23-25W
Color Temperture 6000-6500K



LED LIGHT FOR MUSHROOM HOUSE



RoHs

IP67

PRODUCT FEATURES

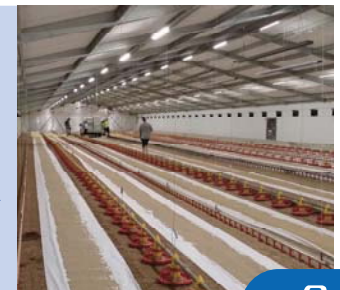
- Withstand steam and water leaks
- IP67 steam and ammonias resistant
- Specially design for mushroom house
- Operation temp:-20℃-50℃
- Storage temp:-30℃-55℃
- Steaming temp:95℃ MAX



The Netherlands Mushroom

Farm Size: 120m*16m
T12 LED Lights: 85pcs

HT Product Code	Beam Angle	Voltage	Power	LED info	Total Length
HT-T12AC25W12FD	180°	100-264Vac	23-25W	SMD2835 132pcs	L: 1200mm OD32mm
HT-T12AC30W15FD			28-30W	SMD2835 168pcs	L: 1500mm OD32mm
HT-T12AC36W18FD			33-35W	SMD2835 192pcs	L: 1800mm OD32mm

Saudi Arabia Breeder Farm
LED Bulb: 150pcs(5*30pcs)South Africa Broiler Cage Farm
Cage Size: 2.4m*1.2m
T6 LED Lights: 1pcsPoland Chicken Farm
Farm Size: 120m*14m
T8 LED Lights: 90pcs(3*30)Korea Broiler Farm
LED Bulb: 60pcs(3*20pcs)Thailand Chicken Farm
Farm Size: 60m*16m
Color Switchable LED Lights: 50pcsSpain Chicken Farm
Farm Size: 110m*15m
T8 LED Lights: 80pcs(4*20pcs)The Netherlands Pig House
Farm Size: 127m*25m
T12 LED Lights: 280pcsAustralia Chicken Farm
Farm Size: 150m*12m
T12 LED Lights: 108pcs

Lighting Project



◀ **Australia Chicken Farm**
Farm Size: 116m*15m
T12 LED Lights: 120pcs(4*30pcs)



Netherlands Pig Farm ▶
Farm Size: 17m*4.8m
T12 LED Lights: 10pcs



◀ **Ukraine Chicken Farm**
Farm Size: 80m*12m
T12 LED Lights: 96pcs (3*32pcs)



Saudi Arabia Chicken Farm ▶
Farm Size: 128m*80m
T12 LED Lights: 680pcs



◀ **Australia Chicken Farm**
Farm Size: 130m*15m
T12 LED Lights: 96pcs (3*32pcs)



Spain Chicken Farm ▶
Farm Size: 110m*15m
T8 LED Lights: 80pcs(4*20pcs)



◀ **China Chicken Farm**
Farm Size: 100m*12m
E27 LED Bulb: 245pcs (5*19pcs)



Saudi Arabia Chicken Farm ▶
Farm Size: 100m*14m
E27 LED Bulb: 120pcs

T6 Two Color Switchable LED Tube Light 	T6 LED Tube Light 	T5/T5-S LED Tube Light
T8 LED Tube Light 	T12 LED Tube Light 	T12 Two Color Switchable LED Tube Light
T14 360° LED Tube Light 	E27 LED Bulb 	HT19 LED Bulb
iDimmer 4S 4500W 	iDimmer 4L 4500W 	iDimmer 3L 2200W
iDimmer 2L 1200W 	iDimmer 2S 1200W 	iTimer 2.0

