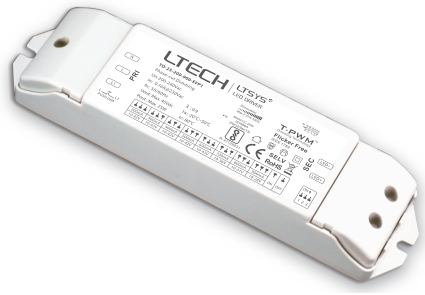
LTECH

LED Intelligent Driver

Triac/ELV
Push DIM



- Support Leading edge (Triac), Trailing edge (ELV) and Push Dimmer.
- With soft-on and fade in function, visual more comfortable.
- T-PWM™ digital dimming, present a perfect visual experience.
- Dimming range: 0~100%, dimming depth: Max. 0.01%.
- 0-100% flicker free, High frequency exemption level.
- Innovative thermal management technology, intelligent power life protection.
- Multi-current & wide voltage, suitable for different power LED.
- Over load / Over-heat / Short circuit protection, recover automatically.
- Class 2 power supply. Full protective plastic housing.
- Compliant with Safety Extra Low Voltage standard.
- Suitable for internal lights application for Ⅰ/Ⅱ/Ⅲ.
- Up to 30000-hour life time.

T-PWM™
Super depth dimming technology

Flicker-free
IEEE 1789

Dimmable:
Max. 0.01-100%

SELV CE RoHS

Model:CC-25W
IS15885
(Part2/Sec13)
R-41129631

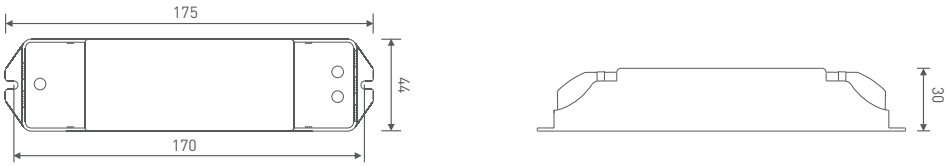
Triac ELV | Push DIM | T-PWM Super depth dimming technology | Flicker-free IEEE 1789 | Multiple Current | Over-heat Protection | Over Load Protection | Short Circuit Protection

Specification

Model		TD-15-150-700-EFP1	TD-20-200-700-EFP1	TD-25-200-900-EFP1	TD-30-300-900-EFP1
OUTPUT	Output Voltage	10-42Vdc			
	Max Output Voltage	45Vdc			
	Output Current	150-700mA	200-700mA	200-900mA	300-900mA
	Output Power Range	1.5W~15W	2W~20W	2W~25W	3W~30W
	Fluctuation Level	High frequency exemption level			
	Dimming Range:	0~100%, dimming depth: Max. 0.01%			
	LF current ripple(<120Hz)	<1%			
	Current Accuracy	±5%			
	Ripple & Noise	≤2V			
	PWM Frequency	3600Hz			
INPUT	Dimming Interface	Triac/ELV, Push			
	Input Voltage Range	200-240Vac			
	Frequency	50/60Hz			
	Input Current	0.11A@230Vac	0.13A@230Vac	0.16A@230Vac	0.18A@230Vac
	Power Factor	PF>0.9/230Vac (full load)			
	Efficiency(typ.)	80%	82%	83%	85%
	Inrush Current(typ.)	Cold start 5A at 230Vac (twidth=76μs measured at 50% Ipeak)			
	Anti Surge	L-N: 1kV			
	Leakage Current	<0.5mA/230Vac		<0.25mA/230Vac	
ENVIRONMENT	Working Temperature	ta: -20°C ~ 50°C tc: 80°C			
	Working Humidity	20 ~ 95%RH, non-condensing			
	Storage Temp., Humidity	-40°C ~ 80°C, 10~95%RH			
	Temp. Coefficient	±0.03%/°C (0-50°C)			
	Vibration	10~500Hz, 2G 12min./1cycle, period for 72min. each along X, Y, Z axes.			
PROTECTION	Over Load Protection	Power limit when rated power⩾102%, auto recovers.			
	Over-heat Protection	Intelligently adjusting or turning off the output current if the PCB temperature ≥110°C, auto recovers.			
	Short Circuit Protection	Shut down automatically if short circuit occurs, auto recovers.			
SAFETY & EMC	Withstand Voltage	I/P-O/P: 3750Vac			
	Isolation Resistance	I/P-O/P: 100MΩ/500VDC/25°C/70%RH			
	Safety Standards	IEC/EN61347-1, IEC/EN61347-2-13			
	Strobe Test Standard	IEEE 1789			
OTHERS	Dimension	175×44×30mm(L×W×H)			
	Packing	178×48×33mm(L×W×H)			
	Weight(G.W.)	140g±10g	145g±10g	150g±10g	

Dimensions

Unit: mm



LED Current Selection

DIP switch for 8 optional currents' quick selection

	DIP switch	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	
TD-15-150-700-EFP1	Output current	150mA	200mA	300mA	350mA	500mA	550mA	650mA	700mA	ON OFF
	Output voltage	10-42V	10-42V	10-42V	10-42V	10-30V	10-27V	10-23V	10-21.5V	
	Output power	1.5-6.3W	2-8.4W	3-12.6W	3.5-14.7W	5-15W	5.5-14.85W	6.5-14.95W	7-15.05W	

	DIP switch	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	
TD-20-200-700-EFP1	Output current	200mA	250mA	300mA	350mA	550mA	600mA	650mA	700mA	ON OFF
	Output voltage	10-42V	10-42V	10-42V	10-42V	10-36V	10-33V	10-31V	10-29V	
	Output power	2-8.4W	2.5-10.5W	3-12.6W	3.5-14.7W	5.5-19.8W	6-19.8W	6.5-20.15W	7-20.3W	

	DIP switch	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	
TD-25-200-900-EFP1	Output current	200mA	300mA	400mA	500mA	600mA	700mA	800mA	900mA	ON OFF
	Output voltage	10-42V	10-42V	10-42V	10-42V	10-42V	10-36V	10-31V	10-28V	
	Output power	2W-8.4W	3W-12.6W	4W-16.8W	5W-21W	6W-25.2W	7W-25.2W	8W-24.8W	9W-25.2W	

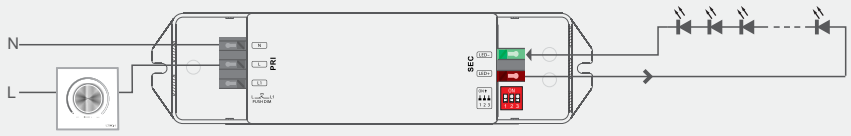
	DIP switch	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	
TD-30-300-900-EFP1	Output current	300mA	350mA	450mA	500mA	700mA	750mA	850mA	900mA	ON OFF
	Output voltage	10-42V	10-42V	10-42V	10-42V	10-42V	10-40V	10-35V	10-33V	
	Output power	3W-12.6W	3.5W-14.7W	4.5W-18.9W	5W-21W	7W-29.4W	7.5W-30W	8.5W-29.75W	9W-29.7W	

✻ After current setting by DIP switch, power off and then power on to make the new current effective.

✻ E.g. LED 3.2V/pcs: 10-42V can power 3-14pcs LEDs in series, 10-21.5V can power 3-7pcs LEDs, the max quantity of LEDs in series will be subject to the actual voltage of LED.

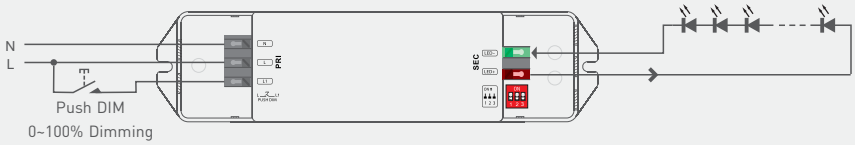
Connections

Triac/ELV Connection



Triac/ELV Dimmer
0~100% Dimming

Push DIM Connection



Push DIM
0~100% Dimming
Short press to on/off, long press to dimming.

The dimming interface priority: First Triac/ELV, next Push DIM.

Push Dimming

Reset switch

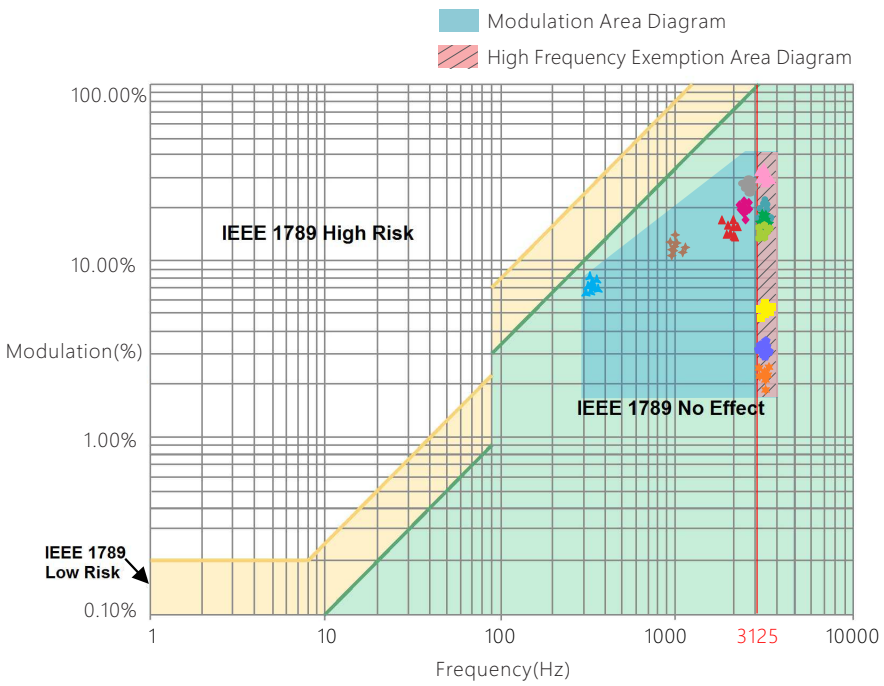
- On/off control: Short press.
- Stepless dimming: Long press.
- With every other long press, the light level goes to the opposite direction.
- Dimming memory: The lights will return to its previous brightness value when short press on PUSH DIM button.
  Power on again after power cut, the output brightness is subjected to the input voltage of drivers.

Flicker Test Form

IEEE 1789

Limit of Modulation in low risk area	
Waveform frequency of Optical output	limit (%)
$f \leqslant 8Hz$	0.2
$8Hz < f \leqslant 90Hz$	$0.025 \times f$
$90Hz < f \leqslant 1250Hz$	$0.08 \times f$
$f > 1250Hz$	Exemption assessment
Limit of Modulation in no effect area	
Waveform frequency of Optical output	limit (%)
$f \leqslant 10Hz$	0.1
$10Hz < f \leqslant 90Hz$	$0.01 \times f$
$90Hz < f \leqslant 3125Hz$	$(0.08/2.5) \times f$
$f > 3125Hz$	Exemption assessment (High frequency exemption)

Brightness
- 0.1%
- 1%
- 5%
- 10%
- 20%
- 30%
- 40%
- 50%
- 60%
- 70%
- 80%
- 90%
- 100%



Marks in the right chart were tested results of different current ranges.

The output frequeny is 0Hz in 100% brightness and its corresponding modulation is 0%, which could not be shown in the right chart.

* No further notice if any changes in the manual.
Product function depends on the goods.
Please feel free to contact our official distributor if any question.