

LED Intelligent Driver

- Dimming interface: 0-10V (1-10V/10VPM/RX), Push DIM.
- T-PWM™ digital dimming
- Built-in SCM, dimming curve and smoothing time can be customized.
- Automatic recognition of 0-10V, 1-10V input signal.
- Dimming range: 0~100%, LED start at 0.01% possible.
- 0-100% flicker-free (IEEE 1789 standard).
- Innovative thermal management technology, intelligent power life protection.
- Multiple current & wide voltage, suitable for different power LED.
- Non-load output voltage 0V to prevent damages to LED caused by poor contact.
- Short circuit / Over-heat / Over load / Non-load protection, recover automatically.
- Suitable for internal lights application for I / II / III
- 5 years warranty (Rubycon capacitor).

T-PWM™

Super depth dimming technology

Flicker-free

IEEE 1789

Dimmable:

0.01-100%

5 in 1 dimming

0-10V
1-10V
PWM
RX
Push DIM

TUV Certificate No. B 17 06 01119 001
RCM Equipment registration No: E2017013627 Ref: ESV170365
ENEC Certificate No. U6 17 07 01119 004
CE EMC Certificate No. BST1702498520001Y-1EC-1
LVD Certificate No. BST1709992470001Y-1SC-2

5 years
warranty



RoHS

SELV



Class 2

0-10V
PUSH DIM

T-PWM™
Super depth
dimming
technology

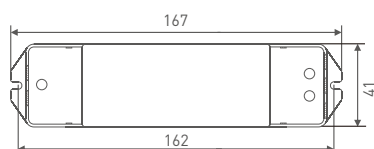
Flicker-free
IEEE 1789



Specification

Model		AD-15-100-700-E1A1	AD-25-150-900-E1A1	AD-36-200-1200-E1A1
OUTPUT	Output Voltage	10-54Vdc		
	Max Output Voltage	58Vdc		
	Non-load Output Voltage	0Vdc		
	Output Current	100-700mA	150-900mA	200-1200mA
	Output Power	1W~15W	1.5~25W	2W~36W
	Strobe Level	Almost flicker-free / High frequency exemption assessment level.		
	Dimming Range	0~100%, LED start at 0.01% possible.		
	PWM Frequency	≤3600Hz		
	Current Accuracy	±5%		
Ripple & Noise	≤2V			
INPUT	Dimming Interface	0-10V [1-10V/PWM/RX], Push DIM		
	Input Voltage Range	220-240Vac ±10%		
	Frequency	50/60Hz		
	Input Current	<0.15A	<0.2A	<0.3A
	Power Factor	PF>0.90/230Vac, at full load	PF>0.93/230Vac, at full load	PF>0.95/230Vac, at full load
	THD	≤20% at 230Vac, at full load		
	Efficiency(typ.)	83%	84%	87%
	Inrush Current(typ.)	Cold start 2.48A at 230Vac (twidth=25.1μs measured at 50% Ipeak)	Cold start 2.28A at 230Vac (twidth=36μs measured at 50% Ipeak)	Cold start 6.32A at 230Vac (twidth=60.1μs measured at 50% Ipeak)
	Anti Surge	L-N: 1kV		
Leakage Current	<0.5mA/230Vac			
ENVIRONMENT	Working Temperature	ta: 50°C tc: 90°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-heat Protection	Intelligently adjusting or turning off the output current if the PCB temperature ≥110°C, , auto recovers.		
	Over Load Protection	Shut down the output when rated power≥102%, auto recovers.		
	Short Circuit Protection	Shut down automatically if short circuit occurs, auto recovers.		
	Non-load Protection	Shut down the output if no load, auto recovers when load back to normal.		
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		
	EMC Emission	EN55015, EN61000-3-2 Class C, IEC61000-3-3		
	EMC Immunity	EN61000-4-2,3,4,5,6,8,11 EN61547		
	Strobe Test Standard	IEEE 1789		
OTHERS	Dimension	167×41×32mm[L×W×H]		
	Packing	168×43×35mm[L×W×H]		
	Weight[G.W.]	165g±10g		

Dimensions Unit: mm



LED Current Selection

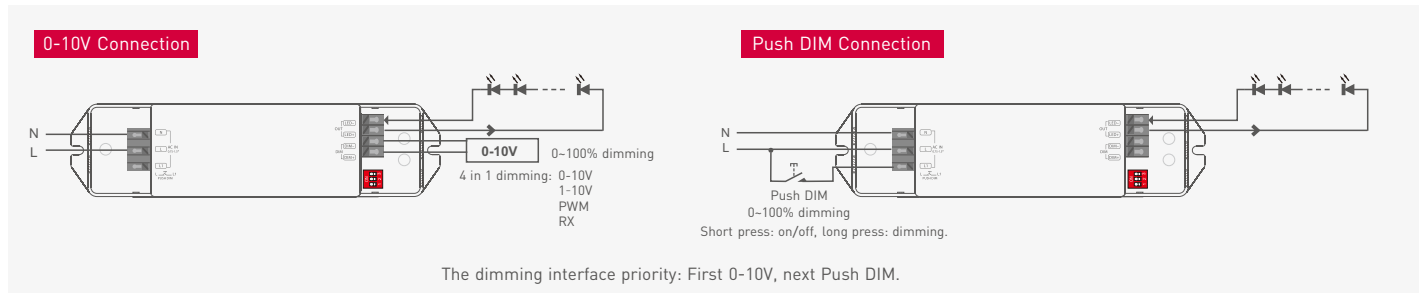
Quick options: DIP switch for 8 optional currents' quick selection (see the table below).

AD-15-100-700-E1A1	DIP Switch									ON OFF
	Output Current	100mA	180mA	300mA	350mA	450mA	500mA	600mA	700mA	
	Output Voltage	10-54V	10-54V	10-50V	10-43V	10-34V	10-30V	10-25V	10-22V	
	Output Power	1W-5.4W	1.8W-9.72W	3W-15W	3.5W-15.05W	4.5W-15.3W	5W-15W	6W-15W	7W-15.4W	
AD-25-150-900-E1A1	DIP Switch									ON OFF
	Output Current	150mA	250mA	300mA	350mA	500mA	600mA	700mA	900mA	
	Output Voltage	10-54V	10-54V	10-54V	10-54V	10-50V	10-42V	10-36V	10-28V	
	Output Power	1.5W-8.1W	2.5W-13.5W	3W-16.2W	3.5W-18.9W	5W-25W	6W-25.2W	7W-25.2W	9W-25.2W	
AD-36-200-1200-E1A1	DIP Switch									ON OFF
	Output Current	200mA	350mA	500mA	600mA	700mA	900mA	1050mA	1200mA	
	Output Voltage	10-54V	10-54V	10-54V	10-54V	10-52V	10-40V	10-35V	10-30V	
	Output Power	2W-10.8W	3.5W-18.9W	5W-27W	6W-32.4W	7W-36.4W	9W-36W	10.5W-36.75W	12W-36W	

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

* E.g. LED 3.2V/pcs: 10-54V can power 3-16pcs LEDs in series, 10-22V can power 3-6pcs LEDs, the max quantity of LEDs in series will be subject to the actual voltage of LED.

Wiring Diagram



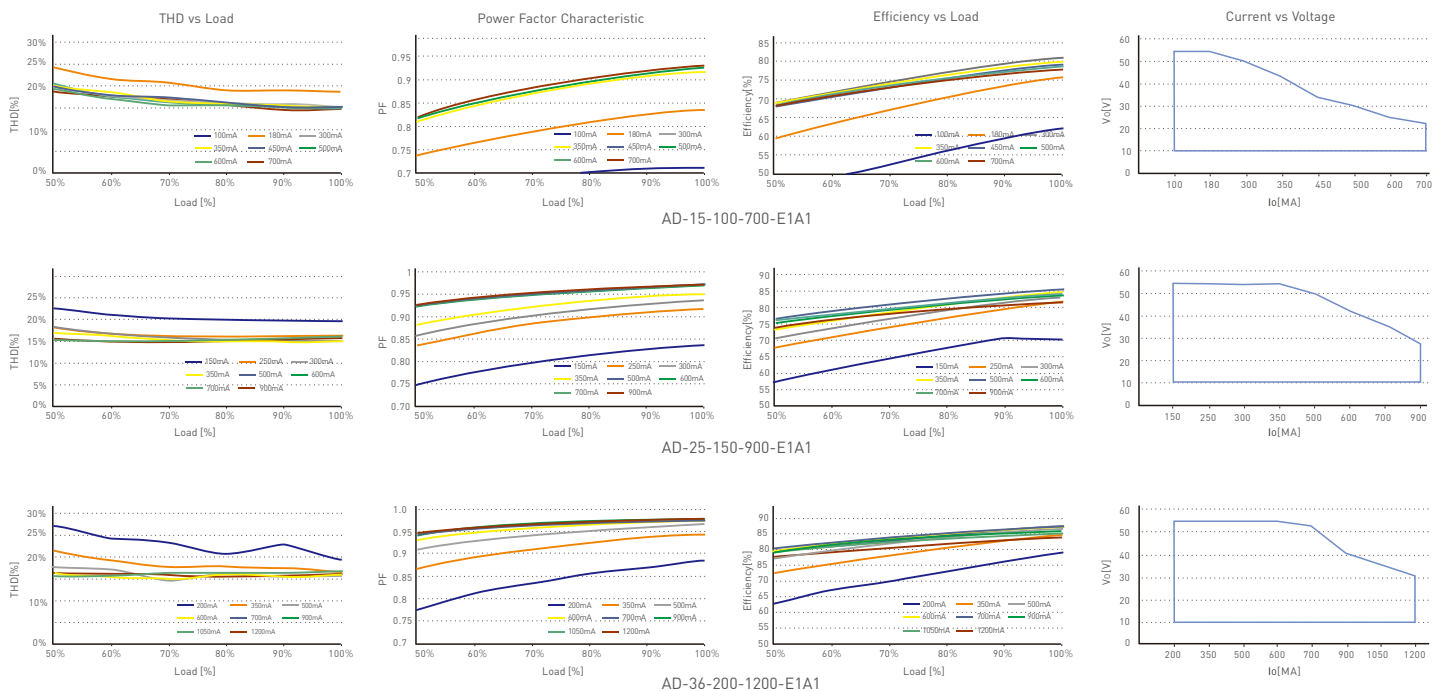
Push Dimming



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: Brightness will be the same as previously adjusted when turning off and on again.

Relationship Diagrams



Available from:



Sales & Technical Support:

Bright Green Connect Limited

Unit 3, Oyster Park

Byfleet

Surrey

KT14 7AX

📞 +44 (0) 1932 497992

✉ contact@brightgreenconnect.com

🖱 brightgreenconnect.com