# AD-36-200-1200-U1P1

# LED Intelligent Driver

- Dimming interface: 0-10V (compatible with 1-10V/PWM/RX), Push Dim.
- Built-in high performance MCU, dimming curve can be customized. .
- PWM digital dimming, no alter LED color rendering index. .
- Dimming range: 0~100%, LED start at 0.1% possible. ٠
- Multiple current, wide voltage, compatible with a variety of LED lights. •
- Power factor > 0.99, Efficiency > 89%. ٠
- Short circuit / Over-heat / Over load protection. .
- . Non-load output voltage OV to prevent damages to LED caused by poor contact.
- Class 2 power supply. Full protective plastic housing. .
- Compliant with Safety Extra Low Voltage standard.
- Suitable for indoor environments.







SELV



\F/

110



 $\overline{\mathbb{W}}$ 



LTECH



5 in 1 dimming

0-10V

1-10V

PWM

RX . Push DIM

M/



**RoHS** 

X

0-10V

## Main Characteristics

Dimming Interface:	0-10V (compatible with 1-10V/PWM/RX), Push Dim	Current Accuracy:	±3%
Input Voltage Range:	100-277Vac ±10%	Max. Output Voltage:	58Va
Frequency:	50/60Hz	No Load Output Voltage:	OVdo
Input Current:	115Vac≤0.45A, 230Vac≤0.25A	Dimming Range:	0~10
Power Factor:	PF>0.99/115Vac, PF>0.95/230Vac, at full load	PWM Frequency:	≪4⊮
THD:	${\leqslant}16\%$ at 115Vac, ${\leqslant}20\%$ at 230Vac, at full load	Working Temperature:	tc: 7
Efficiency:	>89%	Working Humidity:	20 ~
Inrush Current(typ.):	Cold start 20A at 230Vac	Storage Temp., Humidity:	-40 -
Control Surge Capability:	L-N: 1kV	Temp. Coefficient:	±0.0
Leakage Current:	<0.5mA/230Vac	Vibration:	10~5
Operating Voltage:	10-54Vdc		for 7
Output Power Range:	2W~36W		
Output Current :	200mA 350mA 500mA 600mA 3	700mA 900mA 1050n	nA
Output Voltage :	10-54V 10-54V 10-54V 10-54V	10-52V 10-40V 10-35	σV
Output Power :	2W-10.8W 3.5W-18.9W 5W-27W 6W-32.4W 7V	N-36.4W 9-36W 10.5-36.	75W

ent Accuracy:	±3%				
Output Voltage:	58Vdc				
oad Output Voltage:	0Vdc				
ning Range:	0~100%, LED start at 0.1% possible.				
Frequency:	≪4KHz				
ing Temperature:	tc: 75°C ta: -30°C ~ 55°C				
ing Humidity:	20 ~ 95%RH, non-condensing				
ge Temp., Humidity:	-40 ~ 80°C, 10~95%RH				
. Coefficient:	±0.03%/°C(0-50°C)				
tion:	10~500Hz, 2G 12min./1cycle, period for 72min. each along X, Y, Z axes				

#### Protection

Over-heat Protection:	Shut down the output when PCB temp. $\geq$ 110°C, auto recovers when temp. back to normal.
Over Load Protection:	Shut down the output when rated power $\!\geq\!102\%$ ~125%, auto recovers when the load is reduced.
Short Circuit Protection:	Shut down automatically if short circuit occurs, auto recovers after faulty condition is removed.

175

170

#### Safety & EMC

Withstand Voltage:	I/P-0/P: 3750Vac
Isolation Resistance:	I/P-0/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

1200mA

10-30V

12-36W

#### Others

Dimension: Packing: Weight(G.W.):

175×44×30mm(L×W×H) 178×48×33mm(L×W×H) 175g±10g



### Dimensions

8

2~36W 200~1200mA 10~54Vdc

LTSY5 0.10

Dimmable:

0.1%-100%

# Connections

#### 0-10V Connection N 0-10V 111 8 0~100% Dimming 4 in 1:0-10V 1-10V PWM RX Push Dim Connection F-7 Push Dim 0~100% Dimming Short press to on/off, long press to dim. The dimming interface priority: first 0-10V, next Push Dim.

#### **Push Dimming**



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



	117	111	1 T T	TII	TIT	TTL	TTT	Ŧ	
200mA	350mA	500mA	600mA	700mA	900mA	1050mA	1200mA	ON	OFF
10-54V	10-54V	10-54V	10-54V	10-52V	10-40V	10-35V	10-30V		

\* 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, 10-30V can power 3-9pcs LEDs, the max quantity of LEDs in series will be subject to the actual voltage of LED.

Advanced options: connect ISET port with resistors of different values to set up any current from 200mA to1200mA. (specific resistor values refer to the table).



	Connecting ISET with resistors can obtain the following typical currents.										
	Current (nA )	25 0mA	300mA	350mA	400mA	450mA	500mA	550mA	600mA	650mA	700mA
	Resistor (KΩ)	41.6KΩ	34.7 KΩ	29.52KΩ	25.4 KΩ	21.9 KΩ	19 KΩ	16.66 KΩ	14.5KΩ	12.62 KΩ	11.19KΩ
	Current (nA )	750mA	800mA	850mA	900mA	950mA	1000mA	1050mA	1100mA	1150mA	)
r	Resistor (KΩ)	98KΩ	8.57 KΩ	7.43 KΩ	6.42 KΩ	5.47 KΩ	4.65 KΩ	3.93 KΩ	3.2 KΩ	2.57 KΩ	J

• 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.



