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# 96W Triac Dimmable 100-277V constant voltage LED driver + PWM signal



Features:

Output constant voltage
Input voltage range 100-277VAC
Built-in PFC function, PF> 0.98
Efficiency > 85% / load:0~100%
Protections:short circuit/over voltage/over heat
IP20 design for indoor installations
Cooling by free air convection
Work with leading edge and trailing edge TRIAC dimmers available
PWM output, does not change the color index
Full protection aluminum housing, for dry, damp, wet location
Strong compatibility, flicker-free dimming
Suitable for LED lighting and moving sign applications
Compliance to worldwide safety regulations for lighting
7 years warranty

# Specification

		₩\F/ C	E IP20
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model		SMT-012-100VTH	SMT-024-096VT	
	DC Voltage	12V	24V	
Output	Voltage Accuracy	±0.5V	±0.5V	
Output	Rated current	8.3A	4.0A	
	Rated power	100W	96W	
	Voltage Range	100~277V AC		
Input	Frequency Range	47~63HZ		
	Power Factor (Typ.)	PF≧0.98/110V , PF≧0.95/277V		
	Full Load Efficiency(Typ.)	>84%	>84%	
	AC Current (Typ.)	1.3A @110VAC		
	Leakage current	< 0.5mA		
	Short Circuit	Hiccup mode, recovers automatically after fault condition		
Protection		is removed.		
	Over voltage	≦140VAC(90~135V) , ≦270VAC(170~265V)		
	Working TEMP.	-40∼+60℃		
	Working Humidity	20~90%RH,non-condensing		
Environme	Storage TEM., Humidity	-40∼+80℃,10∼95%RH		
nt	TEMP.coefficient	±0.03%/°C (0~50°C)		
	Vibration	$10{\sim}500$ Hz, 2G 10min./1 cycle, period for 60min.		
		each along X,Y,Z axes		
Safety&E MC	Safety standards	UL8750+UL1310		
	Withstand voltage	I/P-O/P:3.75KVAC		
	Isolation resistance	I/P-O/P:100MΩ/500VDC/25℃/70%RH		
	EMC EMISSION	FCC Part 15 B		
Others	Weight	1.3Kg		
	Size	220*93*41mm (L*W*H)		
	packing	10PCS/CTN		

	1. All parameters NOT specially mentioned are measured at 120VAC & 277vac input , rated load and	
	25°C of ambient temperature.	
Notes	<b>S</b> 2. Ripple& noise are measured at 20MHz of bandwidth by using a 12"twisted	
	pair-wire terminated with a 0.1uf &47uf parallel capacitor.	
	3. Tolerance: includes set us tolerance, line regulation and load regulation .	

## Mechanical Specification:





%Input power cord: AC (L), (N), and earth wire (G)
%Output Red is (DIM+) ,Black is (DIM-)

#### Dimming Operation

1) The Pulse-Width Modulation (PWM) of output voltage can be adjusted through input terminal of the AC phase line(L) by connection a phase/triac dimmer.

2) Usually matching with Forward phase , leading edge , Magnetic low voltage, triac dimmers, or Reverse phase, trailing edge ,Electric low voltage Dimmers.

3) lease try to use dimmers with power at least 1.5 times as the output power of the driver.

# Derating Curve



\*Load carried in accordance with the load derating curve, according to the ambient temperature derating, in order to extend the working life.



## Instruction:

%This driver should be installed by qualified and professional person;

\*Please make sure the driver is installed with adequate ventilation around it to allow for heat dissipation.
\*Ensure that wiring is correct before test in order to avoid light and power supply damage;
\*If the dimmable LED drivers do not work normally, pl. don't maintain privately, but contact us:
<u>sales1@smartselectronics.com</u> Or take a phonecall: 0086-595-27256889