

Metrolight LitoDrive™ 320 Programmable LED Driver

320W Single Isolated Output



Overview

Metrolight LED driver technology offers highly efficient, proven and programmable solution that drives and controls LEDs at a competitive price.

The driver offers complete adaptability to the LED design and user's needs.

Once selecting the required output current (which can be re-programmed at any time) the driver automatically applies the adequate current and voltage to the LEDs.

Any LED design change which may be required in the future, involves mere programming of the LED driver to the newly required current.

The LED driver incorporates unique control capabilities including: 0-10V/0-5V/PWM analog dimming, and on-board dimming profile.

The LED driver is approved by UL and TUV including CB report.

Benefits

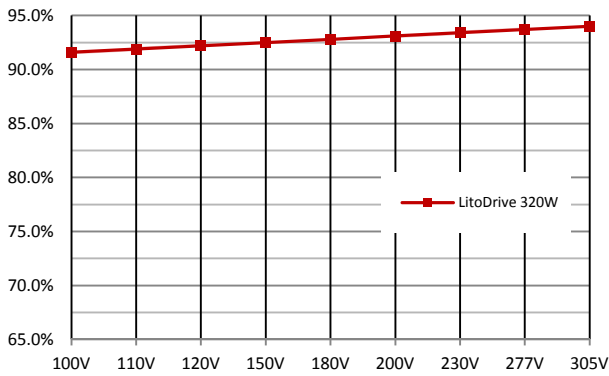
- Universal AC input Full range (95Vac up to 305Vac)
- Reprogramming of output current at any time.
- Isolated Driver suitable for Class II applications.
- Self-adapting Output Voltage, with large range of output voltages to match different LED loads
- High power factor, Low harmonic current
- High Efficiency (up to 94%)
- Protections: Short circuit, Over Current, Over Voltage, Over Temperature
- 4 in 1 dimming function control (0-10Vdc/0-5Vdc, PWM signal, resistance, auto profile dimming)
- Programmable set-up via PC or via Infrared Remote control
- Up to 5 levels of programmable auto profile dimming
- IP67 design for indoor or outdoor installations
- Suitable for LED lighting and street lighting applications
- 5 years warranty
- Low Cost
- CB approved

LitoDrive-320-SLV-XXXX-YY	320 is the maximum output power; XXXX defines the initial output current (e.g.1700 =1.7A, 8500 =8.5A), YY defines the country (EU= Europe, US= USA).
LitoDrive -320-MV-XXXX-YY	320 is the maximum output power; XXXX defines the initial output current (e.g.0110 =0.11A, 9400 =6.9A), YY defines the country (EU= Europe, US= USA).

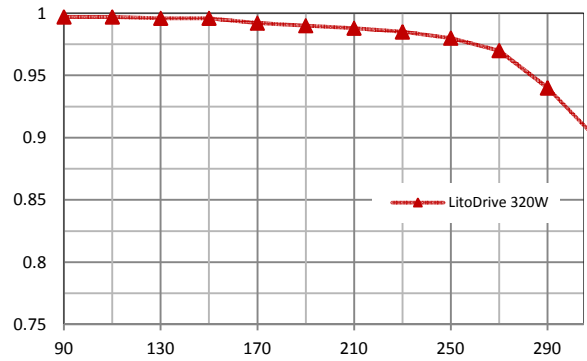
Operating Specifications

Model		LitoDrive™ 320-SLV	LitoDrive™ 320-MV
OUTPUT	Output Current Range	1.0A-10A	0.21A-2.1A
	Output Voltage	20~41Vdc	120~230Vdc
	Rated Power	320W	320W
	Ripple Current (max.)	200mA	100mA
	Output current regulation	±3%	±3%
	Turn-on Delay time	3Smax.@220Vac input & Full load, 5Smax.@100Vac input & Full load.	
	Turn-on Rise time	300mSmax.@ Full load	
INPUT	Voltage range	90V~305VAC	90V~305VAC
	Frequency Range	47Hz~63Hz	47Hz~63Hz
	Power Factor(Typ.)	PF>0.99 at 115VAC	PF>0.99 at 115VAC
	Efficiency (Typ.)	93%	94%
	AC Current	3.5A@100Vac , 1.15A@277Vac & Full Load	
	Inrush Current	30A max @ 230Vac input	30A max @ 230Vac input
PROTECTION	Over Voltage	<60Vdc	<2700Vdc
	Short Circuit	When the output voltage is over the limitation, the product will shut down output, it can recovery when the fault condition is removed. The input power shall decrease when the output rail is shorted, the power supply shall have no damage, and shall recovery when the fault condition is removed.	
	Over Temperature	When Tc > 90°C , the output current will be decreased to protect the LED driver. When the temperature of the case go down below 85°C , the product will self-recovery. The minimum output current will be limited to 30% (typ.) of the rated output current in OTP function. The LED driver could survive in 125 °C , for 2hrs.	
ENVIRONMENT	Operating Temp.	-40~60°C	-40~60°C
	Operating Humidity	95% RH	95% RH
	Storage Temp	-40~85° C	-40~85° C
	Water proof	IP67	IP67
	Vibration	The LED power supply can survive vibration towards three mutually perpendicular direction (X, Y, Z), each direction for 72 minutes. The vibration is in accordance with the sine wave with 2mm amplitude, and its frequency range from 10Hz to 500Hz with 5G acceleration	
RELIABILITY	MTBF	>200Khours @ 25 °C	
	E-CAP LIFETIME	The life time shall be at least 10 years at 40°C (typ. 12hours per day) at full load and nominal input condition.	
SAFETY & EMC	SAFETY STANDARDS	UL8750, EN61347-1/A2:2013, EN61347-2-13 F2006, IEC61347-1, IEC61347-2-13, EN62493 F2010 C GB19510.1-2009, GB19510.14-2009,	
	WITHSTAND VOLTAGE	I/P-O/P: 3750VAC I/P-FG: 1650VAC O/P-FG: 500VAC	
	ISOLATION RESISTANCE	50MΩ min. at primary to secondary with 500Vdc test voltage	
	EMC EMISSION	Compliance to EN55015 (CISPR15), EN61000-3-2; EN61000-3-3, GB17743, GB17625.1	
MECHANICAL	EMC IMMUNITY	Compliance to EN61547; EN55042, EN61000-4-2,3,4,5,6,8,11, GB/T18595, GB17626	
	DIMENSION	234*98*40mm, 9.21*3.85*1.57 Inch.	
	WIGHT	1000 ±50g	
	COLOR	BLACK	BLACK
OTHERS	PACKING	10pcs/10Kg	10pcs/10Kg
	/	/	/
NOTE	1. Ripple current are measured at full bandwidth.		
	2. The power supply will be operated in combination with final equipment. Since EMC performance will be affected by the complete installation, the final equipment manufacturers must re-qualify EMC Directive on complete installation.		

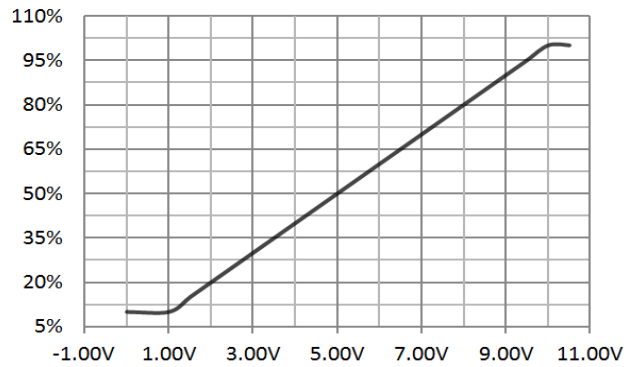
Efficiency vs Input Voltage



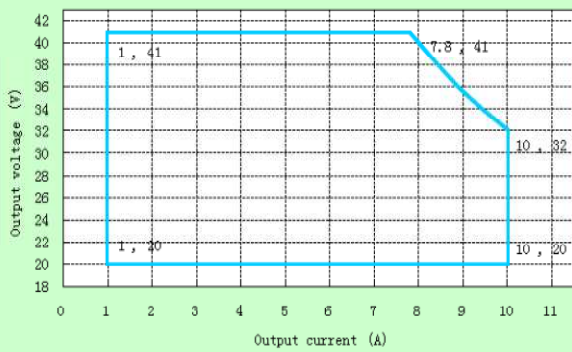
Power Factor vs Input Voltage



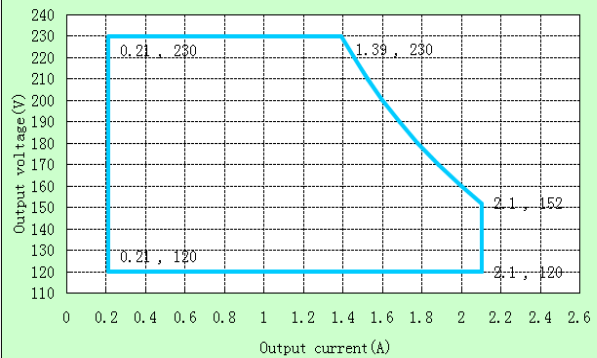
Output Power vs Dimming Voltage



Maximum Output Voltage vs. Output Current



Maximum Output Voltage vs. Output Current



Mechanical Dimensions

