

High quality LED power supplies with constant voltage output (CV)

FEATURES:

- compact design
- reliable and powerful
- high efficiency
- compliant with international lighting standards
- fully protected
- durable and robust unit
- easy to mount case

APPLICATIONS:

- indoor lighting LED systems
- retail and industrial LED lighting
- stage LED lighting
- digital signage systems
- architectural LED lighting



LN-320 is a series of high quality for LED lighting systems. It is a high-quality power unit which meets the requirements of international standards and provides high output power. It is based on high quality electronic components that allow continuous, long-lasting work in all environmental conditions. It is reliable, fully protected and stable. 5 years warranty included.

TECHNICAL CHARACTERISTICS

Group	Parameter	LN32012CV	LN32024CV	Conditions
Input	Rated input voltage	230 VAC		
	Input voltage range	220-240 VAC		
	Mains frequency range	50-60 Hz		
	AC current (max.)	2.5 A		At 220 VAC
	Inrush current (max.)	180 A		At 240 VAC, NTC limiter
	No load power consumption	200 mW		At 230 VAC
	Input leakage current (max.)	0.4 mA		At 240 VAC
	Power factor correction	Yes		Active correction
	Power factor (typ.)	0.9		
Output	Regulation type	CV – constant voltage		
	Rated output voltage	12 V	24 V	
	No-load output voltage (max.)	12.6 V	24.8 V	
	Rated output power	260 W	320 W	
	Rated output current	21.6 A	13.3 A	
	Energy efficiency	92%	94%	At 230 VAC & rated load
	Line regulation	±1%		
	Load regulation	±3,5%	±2%	
	Ripples and noise	200 mVpp	150 mVpp	At 230 VAC & rated load
	Minimal output current required	No		
	Hold up time (max.)	40 ms		
	DC voltage rise time (max.)	50 ms		
	Turn on delay time (max.)	Up to 0.5 s		
Adjustment	Output voltage regulation	No		
Environmental	Working temperature range	-20 to +45°C		
	Maximum enclosure temperature	+85°C		
	Working humidity range	20 - 95% RH		At 40°C
	Storage temperature range	-40°C ~ +85°C		
	Working height of installation (max.)	2000 m		
	Cooling method	Free air circulation		Convection cooling
Protection	Input: overvoltage (OVP), undervoltage (UVP)	OVP, UVP		
	Output: overcurrent (OCP), short circuit (SCP)	OCP (125-150%), SCP		
	OCP protection	Automatic restore		
	Output overvoltage protection	Yes, 19 V	Yes, 36 V	
	Transient voltage protection	Yes		MOV protection
	Thermal protection	Yes		
	Automatic recovery on fault remove	Yes		
Safety and EMC	Withstand isolation voltage (min.)	3 kVAC		Input to output
	Isolation resistance (min.)	100 MΩ		500 VDC
	Isolation class	2		Reinforced isolation
	Safety compliance	EN61347-2-13:2014+A1:2017, EN61347-1:2015+A1:2021, EN62493:2015		
	EMC compliance	EN55015, EN61547, EN61000-3-2 Class C EN61000-3-3		
	Marking	CE, UKCA, RoHS		
	Functional marking	SELV, LPS		

Mechanical and features	Enclosure type	White ABS plastic		IP20
	Dimensions	210 × 80 × 36 mm		
	Weight	500 g		
	Input connector	Terminal block		
	Output connector	Double pins terminal block		
	Single package size	220 × 90 × 50 mm		
	Packing	390 × 260 × 240 mm		20 items
	Manufacturing	China		
	Warranty	5 year		
	MTBF	30 000 h		At 40°C
	EAN	5904139609767	5904139609774	

Notes: Unless otherwise stated, all parameters are specified at 230 VAC input voltage, 50 Hz, ambient temperature 25°C and relative humidity 70% for rated load output. The values of parameters related to the output voltage regulation is measured from low to high line or for load changes from 0 to 100%, respectively. The power supply is considered as an independent unit, but the final equipment still need to reconfirm that the whole system complies with the EMC directives. If the PSU is installed in the final device as a subassembly, the tests should be repeated to verify that the system has been met compliance. Detailed technical data are available on request.

BLOCK DIAGRAM

MECHANICAL SPECIFICATION

PRODUCT LABEL

Legend to the label icons:

- L** – line connection (brown or black wire)
- N** – neutral connection (blue)
- tc: 85°C** – maximum case temperature
- ta: 40°C** – maximum ambient temperature
- II safety class: no grounding is required, no dangerous voltage even in an emergency situation will appear on output
- power supply intended for indoor use only
- it can be installed separately outside a lighting fixture without an additional housing
- means safety isolating control gear with short circuit protection
- can be placed on wood surfaces or built into furniture
- thermally protected at 110°C
- designed for continuous operation
- the product must not be disposed of in normal waste containers
- Safety Extra Low Voltage output insulated from both the mains and ground circuits
- defined in EN 60529 levels of sealing effectiveness of electrical enclosures against intrusion from foreign bodies (tools, dirt) and moisture

ESPE LN LED POWER SUPPLY FAMILY			MARKING SYSTEM	
Symbol	Output power	Dimensions	LN32024CV	
LN06	6 W	67 × 51 × 21 mm		
LN12	12 W	90 × 40 × 24 mm		
LN24	24 W	147 × 48 × 25 mm		
LN36	36 W	133 × 42 × 30 mm		
LN60	60 W	186 × 64 × 22 mm		
LN100	100 W	180 × 64 × 22 mm		
LN200	200 W	205 × 71 × 35 mm		
LN320	320 W	210 × 80 × 36 mm		