



# LDM100S SERIES

## 100 WATT SINGLE OUTPUT AC-DC LED DRIVER



### Features

- \* Universal Input 90-305Vac or 127~420Vdc
- \* High efficiency up to 90%
- \* Meets EN55015, EN61000-3-2 Class C
- \* Meets EN61347-1, EN61347-2-13
- \* Meets UL8750
- \* Dimming input range 1%~100%
- \* Active PFC Function
- \* IP67 design for indoor or outdoor installations (note7)
- \* Max. Output power 100W
- \* Dimming function: 1~10Vdc, PWM (note10) and Resistance or DALI (Optional)
- \* Protections: Short circuit, Over current, Over voltage and Over temperature
- \* No Load Power Consumption < 0.5W (note11)
- \* 3 years warranty



### LDM100 Series

MODEL	Output Voltage	Output Current Note.6	Ripple (mV p-p) Note.1	Voltage Accuracy Note.2	Line Regulation Note.3	Load Regulation Note.4	Constant Current Region	Current Adj. Rang (Optional) Note.5	Voltage Adj. Rang (Optional) Note.5	%EFF (typ.) Note.8
LDM100S120	12V	8.34A	120mV	±1%	±1%	±2%	6.5V~12V	5.3A~8.34A	10.8V~13.2V	88%
LDM100S240	24V	4.17A	120mV	±1%	±1%	±2%	13V~24V	2.6A~4.17A	21.6V~26.4V	89%
LDM100S360	36V	2.78A	120mV	±1%	±1%	±2%	19V~36V	1.74A~2.78A	32.4V~39.6V	90%
LDM100S480	48V	2.08A	120mV	±1%	±1%	±2%	26V~48V	1.3A~2.08A	43.2V~52.8V	90%

### Ordering information

Model No.

LDM100SXXX

CODE: xx

#### 01: Constant Current Mode (IP67)

- No dimming
- No adjustment for output voltage and output current

#### 02: Constant Current Mode (IP65)

- No dimming
- With adjustment for output voltage and output current

#### 03: Constant Current Mode (IP67)

- Dimming: 1~10Vdc or PWM and Resistance
- No adjustment for output voltage and output current

#### 03A: Constant Current Mode (IP65)

- Dimming: 1~10Vdc or PWM and Resistance
- With adjustment for output voltage and output current

#### 04: Constant Current Mode (IP67)

- Dimming: DALI
- No adjustment for output voltage and output current

#### 04A: Constant Current Mode (IP65)

- Dimming: DALI
- With adjustment for output voltage and output current

# Specifications

## INPUT SPECIFICATIONS:

Voltage .....90~305Vac or 127~420Vdc  
 Frequency ..... 47 to 63Hz  
 Inrush Current .....75A max. @240Vac, Cold Start @25°C  
 Conducted EMI ..... CISPR/FCC Class B  
 Power Factor .....PF> = 0.9  
 Leakage Current.....1mA max.  
 Input Current.....1.1A typ. @110Vac ,Pout=99W  
 .....0.55A typ. @230Vac ,Pout=99W.

## OUTPUT SPECIFICATIONS:

Holdup Time ..... 16ms typ. @115Vac  
 Short Circuit Protection .....Hiccup Mode (Auto Recover)  
 Temperature Coefficient ..... ±0.05% / °C  
 Over Voltage Protection .....TVS Component to Clamp  
 Over current Limit.....constant current mode (note 9)  
 Over Temperature Protection.....110°C typ  
 Altitude.....2000 m  
 Startup time.....2.5s typ.  
 Rise time.....50ms typ.  
 MTBF..... MIL-HDBK-217F, GB, at 25°C /115VAC...160Khrs typ.  
 Life time.....40000Hrs max,@ 25°C  
 Vibration.....15~2000Hz 4G period for 60min,each along X Y Z axes

## SAFETY AND EMC :

Emission and Immunity .....EN55015 ,CISPR22  
 EN61547, EN61000-3-2, EN61000-3-3  
 Isolation Voltage.....I/P-O/P 3750VAC  
 Surge.....4KV  
 Safety.....UL8750, EN61347-1,EN61347-2-13  
 Harmonic Current..... EN61000-3-2 Class C (>60% load)  
 Isolation Resistance.....100MΩ min

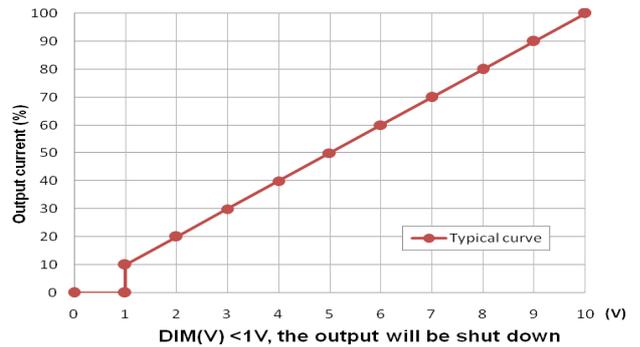
## GENERAL SPECIFICATIONS:

Operating Temperature .....-40 ~ 70°C (see Derating Curve)  
 Storage Temperature ..... -40~85°C  
 Cooling .....Natural Convection

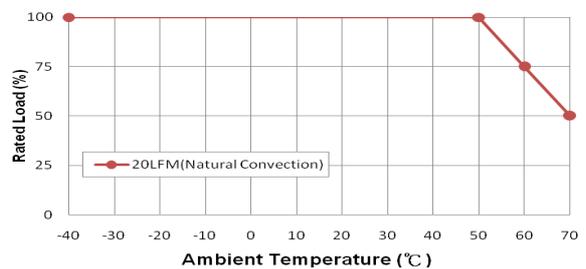
## MECHANICAL CHARACTERISTICS:

Dimensions ..... 1.5748x9.1338x1.1023nches (40x232x28mm)  
 Weight ..... 504g typ.

## 1~10V Dimming function for output current curve:



## Derating curve:

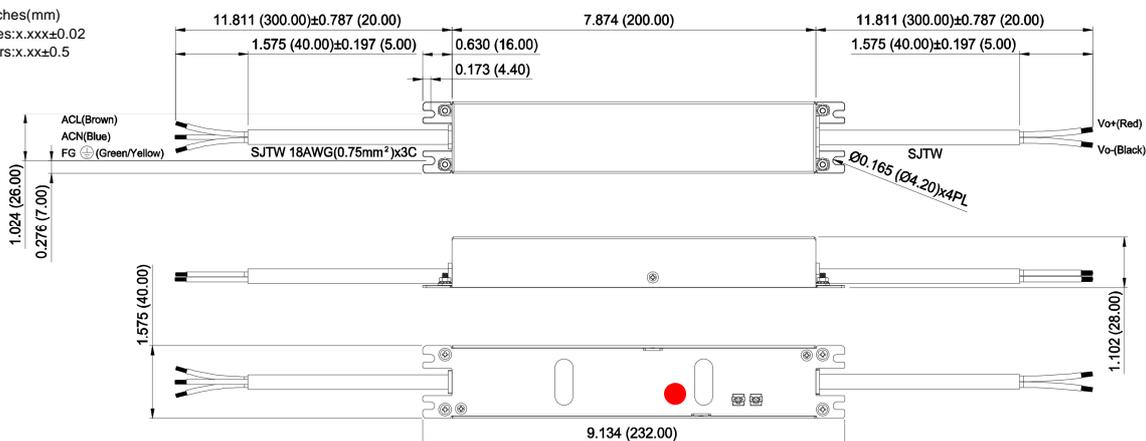


## NOTE:

1. Add a 0.1uF ceramic capacitor and a 10uF E.L. capacitor to output for Ripple, Noise measuring @20MHz BW and 95% rated current.
2. Voltage accuracy is set of 90% rated current.
3. Line regulation is measured from High Line to Low Line with 90% Rated current.
4. Load regulation is measured from 90% to 10% Rated current.
5. Can be adjusted by internal potentiometer.
6. Output Constant Current Accuracy ±5%
7. IP67 for model:LDM100SXXX-01, LDM100SXXX-03, LDM100SXXX-04  
IP65 for model: LDM100sXXX-02 , LDM100SXXX-03A, LDM100SXXX-04A
8. Efficiency is measured 95% rated power at Vin=230VAC.
9. Less than 50% (Typ.) of the rated output voltage will enter hiccup mode.
10. PWM function is signal reception, Non-Output PWM signal.
11. No load power consumption<0.5W for LDM100SXXX-01, -02  
No load power consumption<1.5W for LDM100SXXX-03, -03A, -04, -04A  
Stand by power consumption<1.0W for LDM100SXXX-03, -03A, -04, -04A

## Mechanical Specification

All Dimensions in Inches(mm)  
 Tolerance Inches:x.xxx±0.02  
 Millimeters:x.xx±0.5



TC

\* T case:Max. Case Temperature

Typical at 25°C, nominal line and 75% load, unless otherwise Specified

## Данный компонент на территории Российской Федерации

### Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

### Офис по работе с юридическими лицами:

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: [info@moschip.ru](mailto:info@moschip.ru)

Skype отдела продаж:

moschip.ru

moschip.ru\_4

moschip.ru\_6

moschip.ru\_9