



## Features

- \* Universal Input 90~305Vac or 127-420Vdc
- \* High Efficiency up to 90%
- \* Meets EN55015, EN61000-3-2 Class C
- \* Meets LVD EN61347-1, EN61347-2-13
- \* Approval UL8750
- \* Active PFC Function
- \* IP67 Design for Indoor or Outdoor Installations (note7)
- \* Max. Output power 100W
- \* Dimming Function: Digital (Optional)
- \* Protections: Short circuit, Over Current Over Voltage and Over Temperature
- \* Constant Voltage and Constant Current
- \* No Load Power Consumption<0.5W (note10)
- \* 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.                      Optional Type

LDM100SXXX                -XX

Optional type:

### 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

### 04: Constant Current Mode (IP67)

Dimming: Digital meets IEC62386 part 102,207 ver.1

No adjustment for output voltage and output current

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

Dimming: Digital meets IEC62386 part 102,207 ver.1

With adjustment for output voltage and output current

Specifications are subject to change without notice

# 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 .....	0.75mA max. @277Vac
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 max.
Over Voltage Protection .....	TVS Component to Clamp
Over Current Limit .....	Constant Current Mode (note9)
Over Temperature Protection .....	110°C typ.
Altitude .....	2000m
Startup Time .....	0.5s max.
Rise Time .....	50ms typ.
MTBF.....	MIL-HDBK-217F, GB, at 25°C /115VAC...160Khrs typ.
Life Time .....	40000 Hours min. @Full Load, 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
Surge .....	±4kV
Safety.....	UL8750, LVD (EN 61347-2-13:2014+A1 :2017, EN 61347-1:2015)
Harmonic Current .....	EN61000-3-2 Class C (>60% Load)

## GENERAL SPECIFICATIONS:

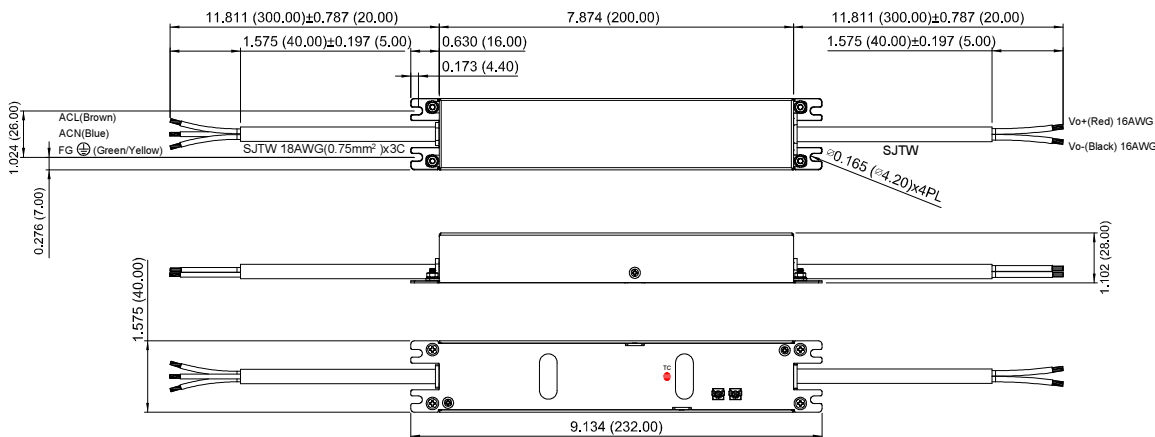
Isolation Voltage .....	I/P-O/P 3750Vac
Isolation Resistance .....	100MΩ min.
Operating Temperature .....	-40 ~ 70°C (See Derating Curve)
Storage Temperature .....	-40~85°C
Cooling .....	Natural Convection

## MECHANICAL CHARACTERISTICS:

Dimensions .....	9.134x1.575x1.102 Inches (232.00x40.00x28.00 mm)
Weight .....	504g typ.

## Mechanical Specification

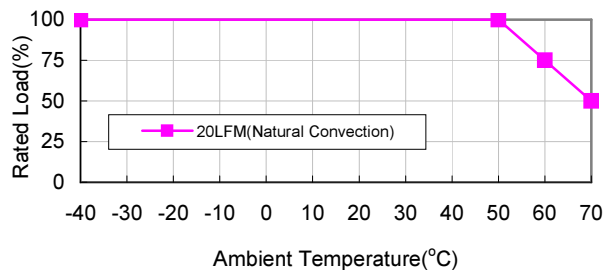
All Dimensions in Inches(mm)  
 Tolerance Inches:x.xxx±0.02  
 Millimeters:x.xx±0.5



\* TC: Max Case Temperature

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

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-04  
IP65 for model: LDM100sXXX-02, 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. No load power consumption<0.5W for LDM100SXXX-01, -02  
No load power consumption<1.5W for LDM100SXXX-04, -04A  
Stand by power consumption<0.5W for LDM100SXXX-04, -04A