



LDM100S SERIES

100 WATT SINGLE OUTPUT AC-DC LED DRIVER

IP67

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



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	$\pm 0.05\%/\text{C}$ 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	$\pm 4kV$
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:

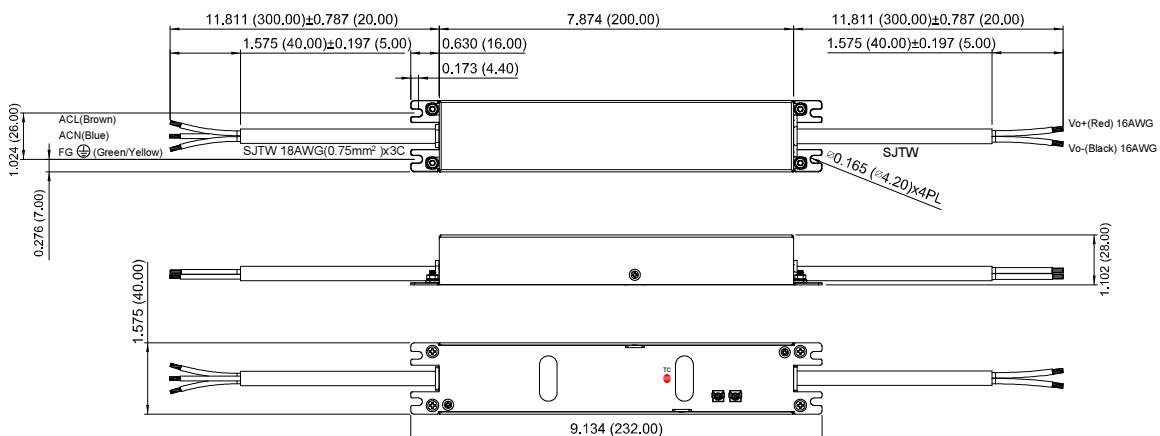
Isolation Voltage	I/P-O/P 3750Vac
Isolation Resistance	100MΩ min.
Operating Temperature	-40 ~ 70°C (See Derating Curve)
Storage Temperature	-40~85°C
Cooling	Natural Convection

MECHANICAL CHARACTERISTICS:

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

Mechanical Specification

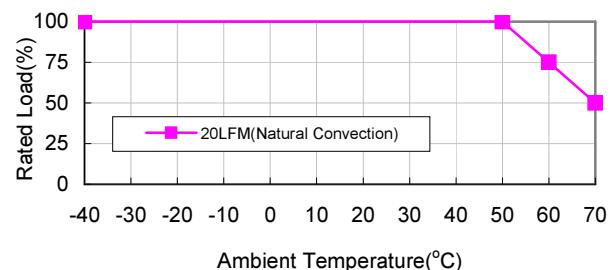
All Dimensions in Inches(mm)
Tolerance Inches:x.xxxx±0.02
Millimeters:x.xx±0.5



* TC: Max Case Temperature

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

Derating curve:



NOTE:

- Add a 0.1uF ceramic capacitor and a 10uF E.L. capacitor to output for ripple noise measuring @20MHz BW and 95% rated current.
- Voltage accuracy is set of 90% rated current.
- Line regulation is measured from high line to low line with 90% rated current.
- Load regulation is measured from 90% to 10% rated current.
- Can be adjusted by internal potentiometer.
- Output constant current accuracy $\pm 5\%$.
- IP67 for model: LDM100SXXX-01, LDM100SXXX-04
IP65 for model: LDM100sXXX-02, LDM100sXXX-04A
- Efficiency is measured 95% rated power at Vin=230VAC.
- Less than 50% typ. of the rated output voltage will enter hiccup mode.
- 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