modaLIGHT®
SPECIFICATION

MP16 DRIVER

Specification grade 12V DC 132W LED driver. Universal input 100-277V AC for worldwide use. Durable anodized aluminum construction with heavy duty cables. Quality construction by MODA engineers ensures long life. Fully potted. Ergonomic design. Built-in Active PFC function. Fully protected from Over Current, Short Circuit, Over Voltage and Over Temperature. Cooling by free air convection. Wet location rated to IP67. Tested by UL.

OUTPUT

DC Voltage	12V
Constant Current Region	9 ~ 12V
Rated Current	11A
Rated Power	132W
Efficiency at 230v AC (Typ.)	88.0%
Voltage Tolerance	- 1% ~ 5%
Set Up Time (Max.)	0.8s / 230V AC, 1.0s / 115V AC, at full load

INPUT

Voltage Range	100-277V AC
Frequency Range	47 / 63 Hz
AC Current (Max.)	2A at 115V AC / 1A at 230V AC
Power Factor	> 0.98 at 115V AC / > 0.95 at 230V AC at Full Load. PF ≥ 0.9 at 75% Load
Inrush Current (Max.)	Cold Start 65A at 230V AC
Leakage Current	< 0.5mA / 240V AC

STANDARDS & CERTIFICATIONS

Safety Standards	UL8750, UL60950, EN61347-2-1,EN61347-2-13, Independent
Withstand Voltage	I/P-O/P:3.75Kv AC I/P-FG:1.88Kv AC O/P-FG:0.5Kv AC
Isolation Resistance	I/P-O/P, I/P-FG, O/P-FG:100M ohms/ 500v DC at 25°C
EMI Conduction & Radiation	Compliance to EN55015, FCC part 15
Harmonic Current	Compliance to EN61000-3-2 Class C (≥75% load), EN61000-3-3
EMS Immunity	Compliance to EN61000-4-2,3,4,5,6,11; EN61547, Light industry level, criteria A
Class	Class 1

Project Name:

Notes:

PHYSICAL

Dimensions	Length 8 7/10" (222mm) Width 2 7/10" (68mm) Height 1 1/2" (39mm)
Weight	2.2 lbs (988g)
Construction	Anodized Aluminum Construction
Thermal Management	Free Air Convection

ENVIRONMENT

Location	Wet Location Rated IP67 *Driver and exposed wires must be housed in enclosure.
Operation Temp.	- 30° C ~ 70° C (Refer to Output Load Derating Curve)
Operation Humidity	20% ~ 95% RH Non Condensing
Storage Temp.	- 4° ~ +80° C
Storage Humidity	10% ~ 90% RH
Vibration	10 ~ 500Hz, 2G 10min. /1cycle, Period for 60min. Each Along X,Y,Z Axis.

Note: With constant development of LED technology please refer to our website for current technical data

PROTECTIONS

Open Current	95 ~ 105% Rated Current. Type: Auto-Recovery After Fault Condition Disappeared
Short Circuit	Type: Hiccup Mode & Recovers After Fault Condition Disappeared.
Over Voltage	14 ~ 20V Type: Latch Mode (Re-Power on to Recover)
Over Temperature	Case: 95°C ± 10°C Type: Shutdown Mode (Re-Power on to Recover)

MODA TECHNOLOGY

modaDRIVER™

STANDARDS & CERTIFICATIONS

Due to continuous improvements and innovations, specifications may change without notice. Please refer to our website for current technical data. These figures are provided as a guideline only and may vary with differing power supplies and installtions. All rights reserved. E&OE.

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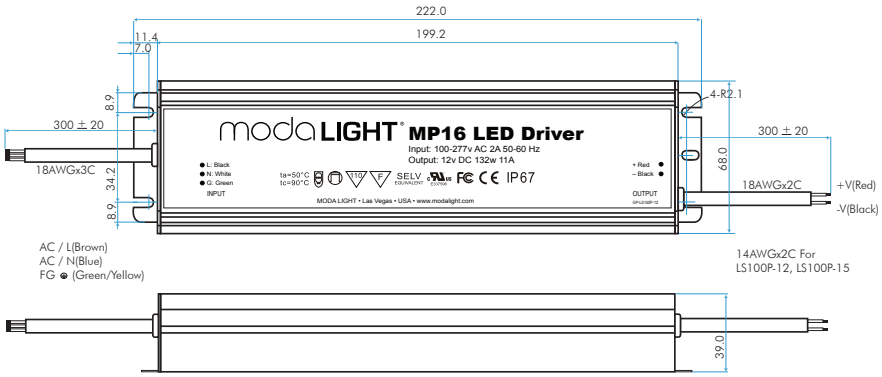
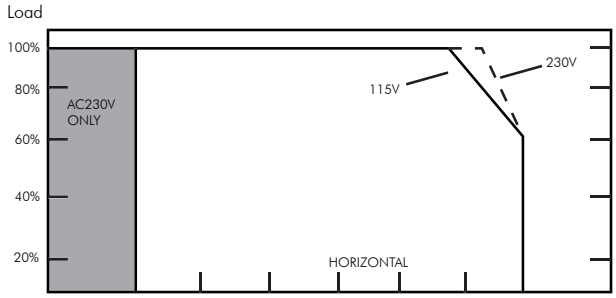
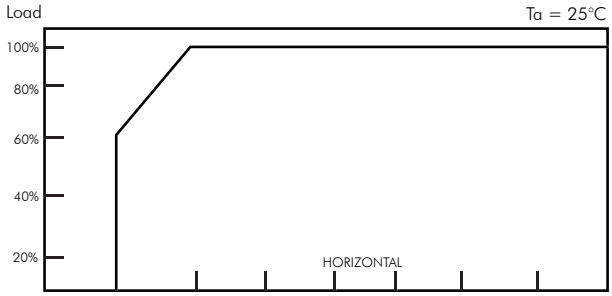
modaLIGHT® SPECIFICATION

MECHANICAL SPECIFICATION

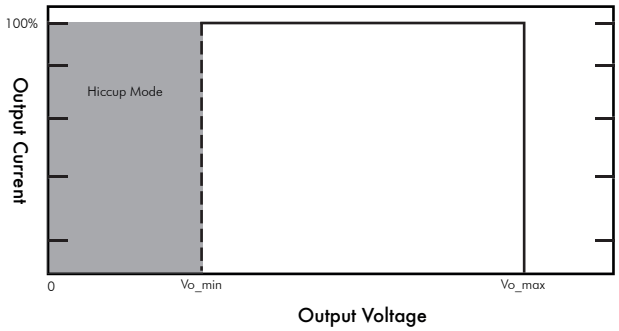


DERATING CURVE

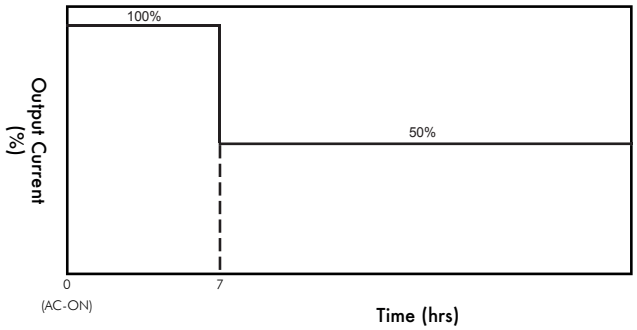




CONSTANT VOLTAGE / CONSTANT CURRENT CURVE



TIMER DIMMING



Note: The output current will return to 100% after the AC voltage is removed for a while and ON again.

WIRING DIAGRAM

Notes:

1. All specifications not specially mentioned are measured at 230v AC and 25°C ambient temperature.
2. Ripple & Noise are measured at 20MHz bandwidth by using a 12" twisted pair-wire terminated with 0.1uf & 47uf parallel capacitor
3. Voltage Tolerance: includes line regulation, load regulation and set-up tolerance.
4. Constant Current operation region is within 75%~100% rated output voltage. This is the suitable operation region for LED related applications, but please reconfirm special electrical requirements for some specific system design.
5. Please refer to derating curve.

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