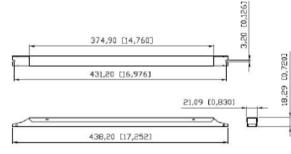
MDR-511-700-20-L8

U. 1 SZO.

Features

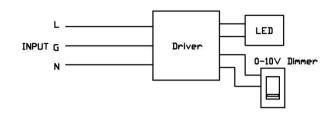
- Constant Current Output
- 0-10V Dimming
- Class 2 Compliance
- Damp Location
- 5 Year Warranty
- Hot Wire Protection
- Supporting DIM TO OFF Capability
- Soft-ON

Mechanical and Thermal				
Dimensions	L16.976" X W	0.83" X H0.72"		
Weight		223g		
Lead Wire Length		Terminals		
Max. Case Operation Temp.		80 °C		



*Dimension in Metric(Inch)

Wiring Diagram



Protection

-Auto-reset electronic short circuit

-Overload protection

-Class 2

-Inherent Thermal Protection

-Hot Wire Protection

Environmental Specifications

-Operating Temperature	-20° to 60°C
-Storage Temperature	-20° to 70°C
-MTBF	>100,000 hrs

-Lead Free SMT process

Note -

1. UL file No.:E340871



Macron Associate Co. – Power Supply Team NO.352, Perng-Yi Road, Taiping, Taichung, Taiwan 411 TEL: 886-4-22708357 FAX: 886-4-22767307 Email: macron@macrongroup.com C0416

1. Input – specification

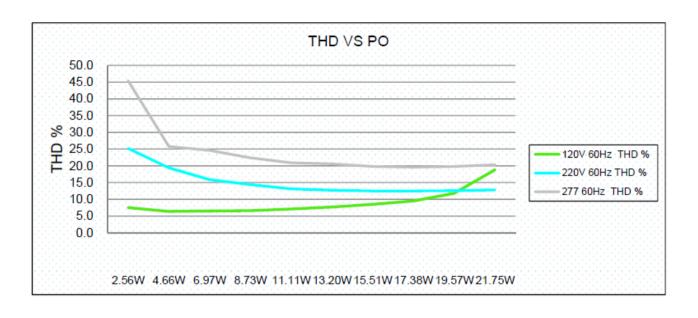
	Units	Minimum	Typical	Maximum	Notes
Input Voltage Range(Vin)	Vac	108	120-277	304	
Input Frequency Range	Hz	50	60	63	
Input Power	W		22		
Power Factor(PF)		0.9	>0.9		Nominal LED voltage
Input Current	A	-	-	0.18A@120VAC 0.08A@277VAC	
Inrush Current	A			10 A peak	According to IEC 60555
Total Harmonics Distortion (THD)				< 20%	At nominal input voltage and nominal LED voltage
Efficiency		-	> 80%	-	Efficiency is measured after driver has thermally stabilized + full load
Isolation	Meet UL1310/UL8750 for class 2 isolation power supply				

2. Output - specification

	Units	Minimum	Typical	Maximum	Notes
Output Voltage(Volt)	Vdc	20		30	
Output Current(lout)	mA		700		Adjustable current setting; please refer to the current setting table
Output Current Tolerance	%		±3		
Output Ripple Current	< 20% peak-to-peak of 700mA				${\leq}20\%$ pk-to-pk of the rated output current for all models with Vout max ${\geq}32V$
				f 700mA	${\leq}50\%$ pk-to-pk of the rated output current for all models with Vout max ${\leq}30V$
					At nominal LED voltage and nominal input voltage without dimming
Dimming Range	%	3%		100%	Please refer to Dimmer compatibility list
Star-up Time			750		With nominal LED voltage and without dimmer attached
	ms		800		With nominal LED voltage, with an recommended dimmer attached(see dimmer compatibility list) and at the full dimming conduction angle
Isolation	Meet UL1310/UL8750 for class 2 isolation power supply				
Operation Case Temperation	°C	-30		80C	

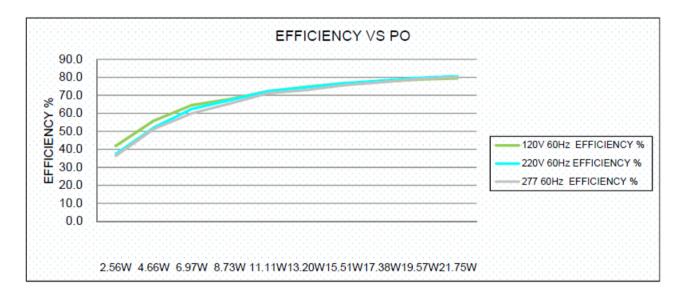
3. EMC / Protection / Compliance

Conducted and Radiated EMI		FCC CFR Title 47 Part 15 Class B and EN55022(CISPR 22) Class B compliant		
Immunity Compliance	ESD (Electrostatic Discharge)	IEC61000-4-2 6 kV contact discharge, 8 kV air discharge, level 3		
	Electrical Fast Transient	IEC61000-4-4	± 2 kV on AC power port for 1 minute, ± 1 kV on signal/control lines	
	Surge	IEC61000-4-5	$\pm 1 kV$ line to line/ $\pm 2 kV$ line to earth on AC power port, $\pm 0.5 kV$ for outdoor cables	
Transient Protection	Ring Wave		ANSI/IEEE c62.41-1-2002 & c62.41-2-2002 category A, 2.5kV ring wave	



THD of the driver VS Power Output (W)

Efficiency of the driver VS Power Output (W)



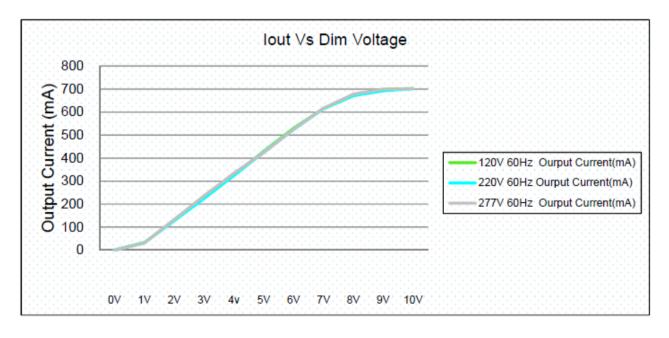


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P F VS PO 1.200 1.000 0.800 0.600 0.400 0.200 0.000 2.56W 4.66W 6.97W 8.73W 11.11W13.20W15.51W17.38W19.57W21.75W

Efficiency of the driver VS Power Output (W)

Lout of the driver VS Dim Voltage





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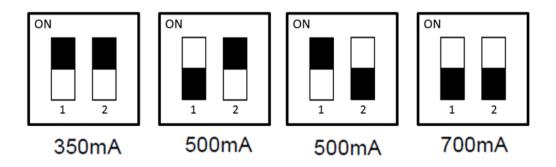
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C0416

Current Settings :

LED Current Tolerance over temperature and component variations is \leq 5% at any level.

The output current of the driver can be adjusted using the two dip switches provided on the top of the driver. The below pictures shows the switch positions required to set the current to different levels.



The driver will be shipped out of factory with both switches set to ON (350mA).

