Programmable Multi-Channel Driver PMD-35A-S

SLP-DUA4350AUS



Key Features

- Programmable, adjustable constant output current which can be adjusted to match LED module requirements and selectable various functions : 0-10V Classic, Native White Tuning(Select Mode, Continuous Mode), Dim to Warm.
- 0-10V Classic, two 0-10V inputs allow to control the two output currents of each within the limit of the max. power.
- Native White Tuning, the driver does the current mixing based on one input. That allows the PMD to do white color tuning with only two wall sliders. One 0-10V input sets the mix of warm to cool and another 0-10V input sets the brightness level.
- Dim to Warm, the driver does the current mixing and make CCT to become warmer as the brightness level reduced.

Basic Features

Series.	Part Number	Max. Power	Function	Input Voltage	Output Voltage	Output Current	Certification
PMD-35A-S	SLP-DUA4350AUS	35W	0-10V	120~277Vac	10~50Vdc	0.35~1.4A	cUL

- Certification : UL8750, UL Class2 Power, 47 CFR Part15 Subpart B
- Protections : Short Circuit, Over Temperature, Open Lamp, Over Voltage
- ta Range : -20 ~ +50 °C
- Expected Lifetime : 50,000 hours at tc = 70 °C



PMD Series

Series.	Part Number	Max. Power	Function	Input Voltage	Output Voltage	Output Current	Certification
PMD-75C-LU	SLP-DUA47531WW	75W	0-10V, DALI	120~277Vac	10~50Vdc	0.35~1.4A	cUL, CE
PMD-75A-L	SLP-DUA47501US	75W	0-10V	120~277Vac	10~50Vdc	0.35~1.4A	cUL
PMD-75D-L	SLP-D2A475D1EU	75W	DALI	220~240Vac	10~50Vdc	0.35~1.4A	CE, ENEC
PMD-75D-LU	SLP-DUA475D1US	75W	DALI	120~277Vac	10~50Vdc	0.35~1.4A	cUL
PMD-55A-L	SLP-DUA45501US	55W	0-10V	120~277Vac	10~50Vdc	0.35~1.4A	cUL
PMD-55D-L	SLP-D2A455D1EU	55W	DALI	220~240Vac	10~50Vdc	0.35~1.4A	CE, ENEC
PMD-55D-LU	SLP-DUA455D1US	55W	DALI	120~277Vac	10~50Vdc	0.35~1.4A	cUL
PMD-55A-S	SLP-DUA4550AUS	55W	0-10V	120~277Vac	10~50Vdc	0.35~1.4A	cUL
PMD-35A-L	SLP-DUA43501US	35W	0-10V	120~277Vac	10~50Vdc	0.35~1.4A	cUL
PMD-35D-L	SLP-D2A435D1EU	35W	DALI	220~240Vac	10~50Vdc	0.35~1.4A	CE, ENEC
PMD-35D-LU	SLP-DUA435D1US	35W	DALI	120~277Vac	10~50Vdc	0.35~1.4A	cUL
PMD-35A-S	SLP-DUA4350AUS	35W	0-10V	120~277Vac	10~50Vdc	0.35~1.4A	cUL
PMD-25A-S	SLP-DUA0250AUS	25W	0-10V	120~277Vac	10~50Vdc	0.35~1.0A	cUL
PMD-25D-SU	SLP-DUA025DAWW	25W	DALI	120~277Vac	10~50Vdc	0.35~1.0A	cUL, CE, ENEC

Table of Contents

1.	Electrical Specification	 4
2.	Enclosure	 5
3.	Label	 6
4.	Connector	 6
5.	Packing	 7
6.	Protection	 8
7.	Operating Window	 9
8.	Performance	 9
9.	Precautions	 11



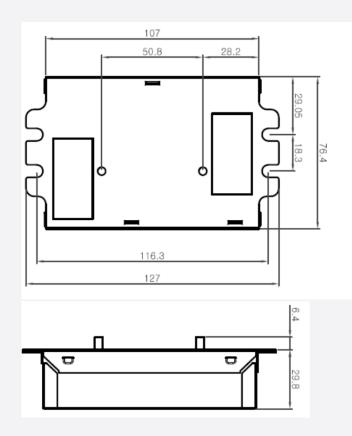
1. Electrical Specification

Autiala	Curreleal	Specification			11		
Article	Symbol	Min. Typ.		Max.	Unit	Note	
NPUT SPECIFICATIONS							
Nominal Voltage	Vin	120		277	Vac	Full input range	
Voltage Range		108		305	Vac		
Nominal Frequency	fin	50		60	Hz		
Frequency Range		47		63	Hz		
nput Current	lin			0.4	А	@ 120Vac	
nput Current	lin			0.18	А	@ 277Vac	
Total Harmonic Distortion	THD			20	%	@ full load, 120-277 Vac	
Power Factor	PF	0.9			-	@ full load, 120-277Vac	
Efficiency	Н	83	85		%	@ full load, 120-277 Vac,	
Protection Class			I		-	PE can be connected to either terminal or housing	
nrush Current				20	A _{pk}	t _{width} = Typ. 300 μs @ 50% Ipeak	
OUTPUT SPECIFICATIONS							
Nominal Voltage	Vo	10		50	Vdc	See graph	
Nominal Current	lo	0.35		1.4	A	2channel ±5 % tolerance (@ max current)	
Current Ripple				30	%	Output current ± 30%	
Nominal Power	Ро			35	W	Output wattage	
Auxiliary Power Voltage			24		V	For nIO Supply Power	
Auxiliary Power Current				100	mA	For nIO Supply power	
Turn on delay time	Td			1.0	S	AC on 90%	
Dimming SPECIFICATIONS							
Control 1			1 - 10			Analog	
Control 1 Range			1 - 100		%		
Dimming Technique			PWM				
Standby Power				0.5	W	Dimming Off	



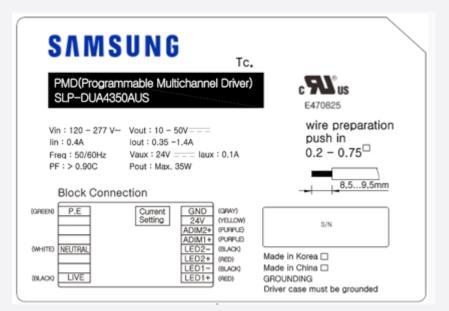
Article		Specification				Unit	N. 4	
		Symbol	Min.	Тур. Мах.		Unit	Note	
ENVIRONMENTAL SPEC	CIFICATIONS							
Ambient Temperature		ta	-20		50	°C		
Case Temperature		tc			70	°C	Measured at t_c point as indicated on the product label	
Storage Temperature		ts	-20		85	°C	Cool down before operating	
Relative Humidity			20		95	%	Not condensing	
Surge Transient	L/N				±2	kV	According to EN 61547	
Protection	LN / GND				±4	kV		
IP Rating				20		-	Suitable for indoor environment	
Expected Lifetime			50,000			h	$t_c = 70 \ ^{o}C$, full load	
Dimensions		L x W x H		127 x 76.4 x 29.	.8	mm		
Net Weight				330		g	± 10%	

2. Enclosure

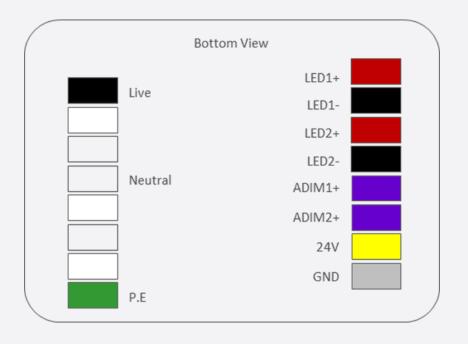




3. Label



4. Connector

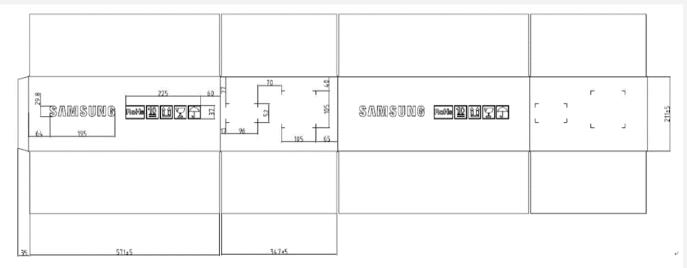




5. Packing

Material	Quantity	Dimension (mm)			
Widterfidi	(Max. pcs)	Length	Width	Height	
Outer Paper Box	40	571	347	211	

- Pallet
- 1100 x 1100 x 1200mm
- 1 Pallet : 20 Box = PSU 800ea (4 Box x 5 Floor)
- Box



Box Label



6. Protection

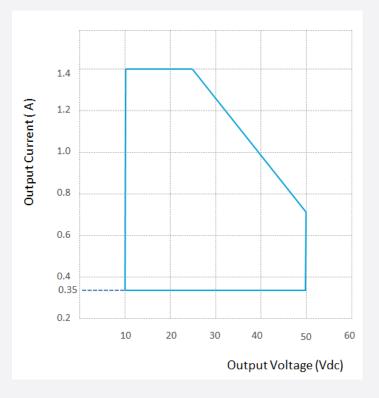
- ① Model Code
- Lot No.
- ③ Origin
- ④ Packing Quantity
- ⑤ Date of Manufacture (Weekly)
- ⑥ Date of Manufacture (Daily)



Items	Symbol	Condition	Function
Over Temperature Protection	OTP	Vin = Rated Voltage, Temp. exceeds 150 $^\circ\!\!\!C$	Current decreases (Auto Recovery)
Short Circuit Protection	SCP	Vin = Rated Voltage, LED short	No Output (Auto Recovery)
Open Lamp Protection	OLP	Vin = Rated Voltage, LED open	Vout = 60V Clamp (Auto Recovery)
Over Voltage Protection	OVP	Vin = Rated Voltage, F/B Open or Short	Vout = 60V Clamp (Auto Recovery)

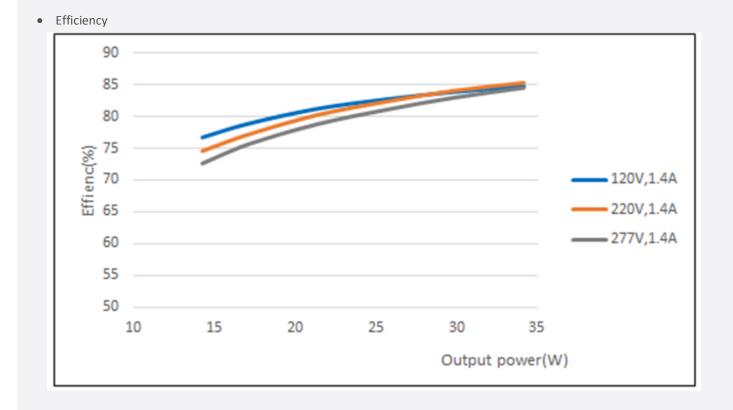


7. Operating Window



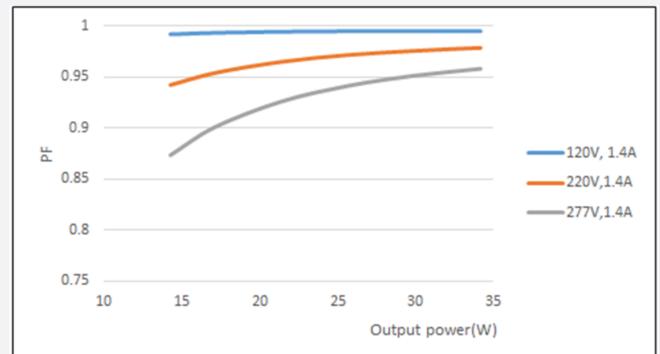
8. Performance

• Tested with connected LED load , Programmed for 1,400mA and at 25 °C ambient temperature.

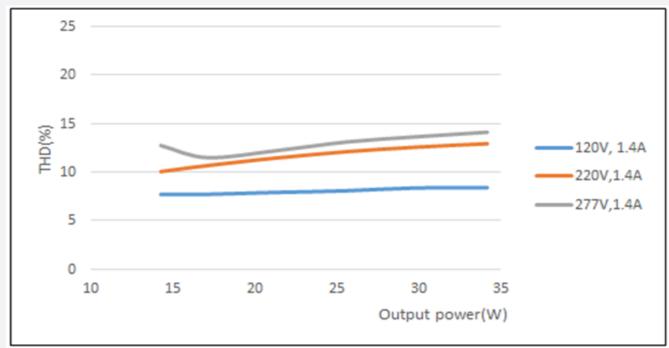








• Total Harmonic Distortion

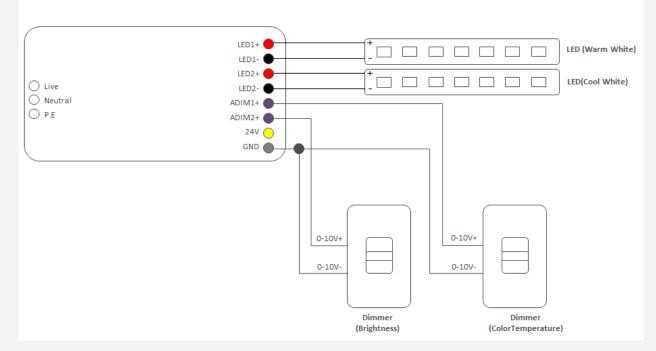




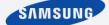


9. Precaution

- To prevent the LED Driver from any defect, please handle and store it with care
 - Do not drop or give shock
 - o Do not store in very humid location or at extreme temperature
 - Do not open or disassemble the product
- Static electricity or surge voltage may damage the components inside LED Driver, as such please observe proper antielectrostatic working process
 - People handing the Driver should be well grounded (e.g. using ESD wrist band) and wear anti-static working clothes and gloves
 - All related devices and instruments in the production line should be well grounded (e.g. working table, measuring equipment, assembly jigs)
- Incorrect installation of the LED driver can cause irreparable damage to the LED driver and the connected LEDs. Pay attention when connecting the LEDs: polarity reversal results in damages the LED driver
 - Observe the correct polarity of output terminal : Please refer to the connection diagram as below



- Avoid input voltage exceeds the maximum rating, which will cause damage to the circuit and result in malfunction
- Specifications are subject to change without notice



Legal and additional information.

About Samsung Electronics Co., Ltd.

Samsung Electronics Co., Ltd. inspires the world and shapes the future with transformative ideas and technologies. The company is redefining the worlds of TVs, smartphones, wearable devices, tablets, cameras, digital appliances, medical equipment, network systems, and semiconductor and LED solutions. For the latest news, please visit the Samsung Newsroom at news.samsung.com.

Copyright $\ensuremath{\mathbb{C}}$ 2016-2017 Samsung Electronics Co., Ltd. All rights reserved.

Samsung Electronics reserves the right to modify, at its sole discretion, the design, packaging, specifications, and features shown herein without notice at any time.

Samsung Electronics Co., Ltd. 95, Samsung 2-ro, Giheung-gu Yongin-si, Gyeonggi-do, 446-711 KOREA

www.samsungled.com



>>Samsung Semiconductor(三星半导体)