POWER SOURCE

DALI-2 & Push (2in1) Dimmable Constant Voltage LED Driver

DDV-300 series



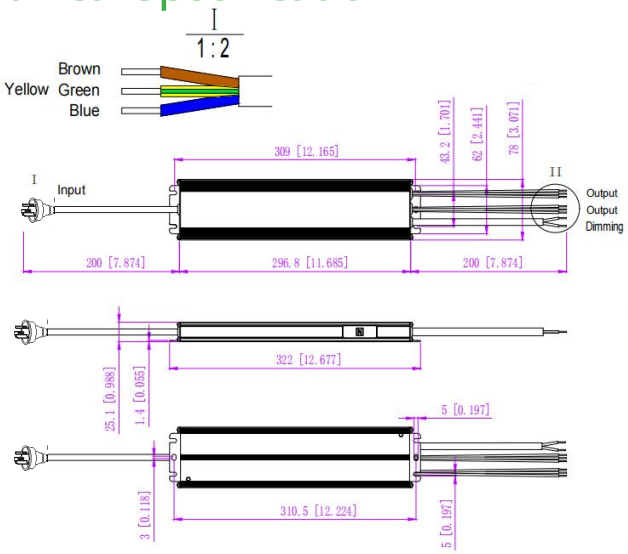
Features:

- Constant Voltage adjust with NFC
- AC Input Range: 100~277VAC
- Protections: Short Circuit/Over Load/Over temperature
- Flicker Free Dimming
- IP66 Design for outdoor installation
- RGB+CCT model
- DALI-2 dimming with Logarithmic curve (default) or Linear curve
- 5 year warranty

Model		DDV-300-24-RGBCW-AUP
Output	DC Voltage (V)	24V (24~25.5V adjuted via NFC)
	Voltage Tolerance	±0.5V
	Voltage Regulation	0.5%
	Rated Current	R+G+B+CW+WW = 12.5A
	Rated Power	300W
	Load Regulation	1%
	PWM Frequency	4KHz
Input	Voltage Range	110~277VAC
	Frequency Range	47~63Hz
	Power Factor	PF≥0.98@120VAC PF≥0.97@230VAC PF≥0.95@277VAC
	THD(Typ.) @ Full load	≤10%@120VAC ≤10%@230VAC ≤15%@277VAC
	Efficiency	90.4% @120VAC 92.9%@230VAC 93.8%@277VAC
	AC Current (Max.)	3.4A
	Inrush Current	26A, 104us@50%120VAC 98A, 26us@50%230VAC 118A, 92us@50%277VAC
	Leakage Current	<0.5mA
Protection	Short Circuit	Hiccup mode, recover automatically after fault condition is removed
	Over Load	≤120%, Hiccup mode, recover automatically after fault condition is removed
	Over Temperature	Shell surface temp. 100°C±10°C shut down o/p voltage,automatically recover after the temperature drops.
Environment	Working Temp.	-40 ~ +60°C (refer to de-rating curve)
	Working humidity	20 ~ 95%RH, non-condensing
	Storage TEMP., humidity	-40~+80°C,10~95%RH, non-condensing
	TEMP. coefficient	±0.03%/°C (0~50°C)
	Vibration	10 ~ 500Hz, 5G 12min./1 cycle, period for 72min. each along X,Y,Z axis
	Safety Standards	EN61347-1 EN61347-2-13
Safety & EMC	Withstand voltage	I/P-O/P:3.75KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC
	Isolation resistance	I/P-O/P:100MΩ / 500VDC / 25°C / 70%RH
	EMC emissions (Note 3.)	EN55015 EN61000-3-2,3 (≥50%)
	NET Weight.	1.05KG
Others	Dimensions	322*78*25.1mm (L*W*H)
	Packing	20PCS / CTN
Notes	1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. 2. Tolerance: Includes set up tolerance and load regulation. 3. The power supply is considered as a component that is operated in combination with final equipment. EMC performance could be affected by the complete installation. Original equipment manufacturers may need to conduct additional EMC testing and certification on the final equipment. 4. Loading range from 10% to 100% 5. Specifications are subject to change without prior notice. Contact ADM Systems to confirm any critical parameters.	

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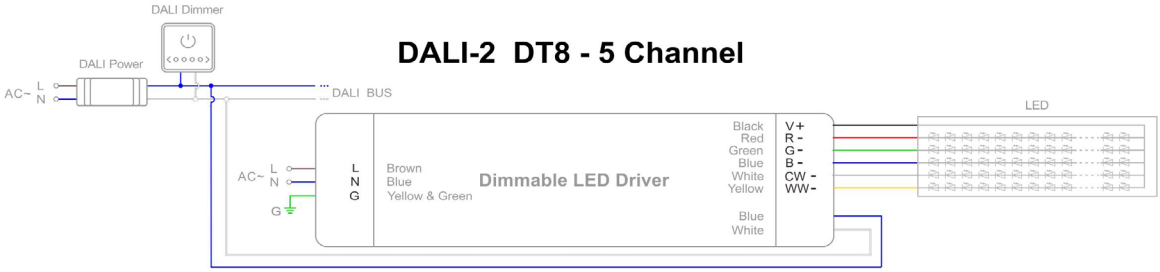
Mechanical Specification



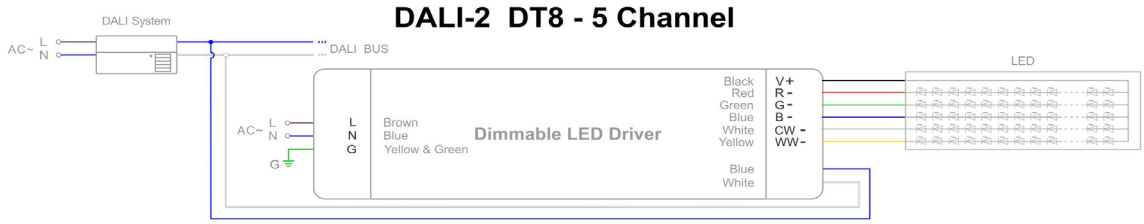
- Input cable 3*18AWG, the Black cable to (L), the White cable to (N), and the Green cable to (G).
- Output cable 3*12AWG(12V), 3*14AWG(24V), 3*16AWG(36V/48V), Black cable (+) to Positive side(+), Red (-),Green (-), Blue (-),White (-) and Yellow(-) to Negative side (-).
- Dimming wire 2*18AWG, Purple cable(DA1), Pink cable(DA2).

Dimming Operation and Connection Diagram

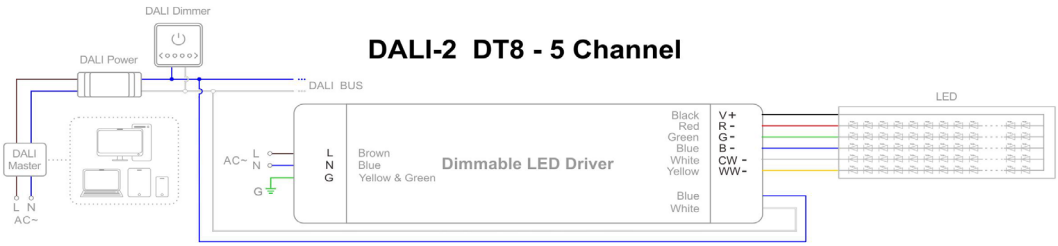
• Using DALI-2 dimming with DALI Power and dimmer



• Using DALI-2 dimming with DALI system and DALI bus



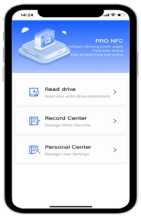
• Using DALI-2 dimming with intelligent device, DALI master and dimmer



NFC Function

• Address settings:

NFC setting address can be adjusted using a mobile device with the ProNFC app.

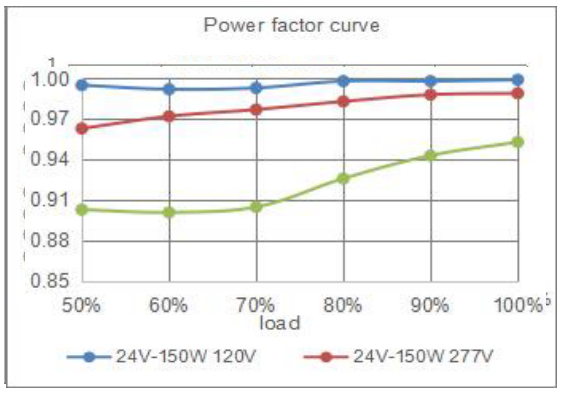


ProNFC APP

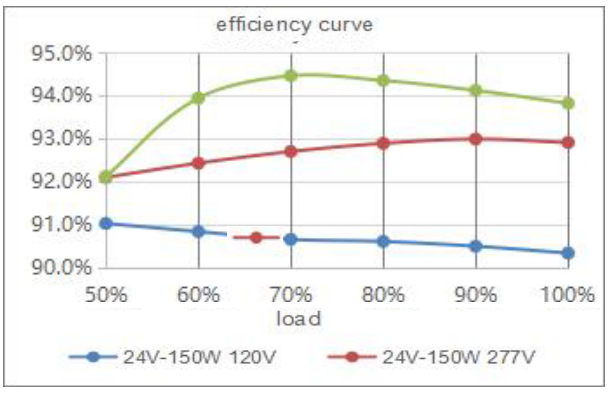
NFC Voltage Adjustment										
	level 1	**level 2**	**level 3**	**level 4**	**level 5**	**level 6**	**level 7**	**level 8**	**level 9**	**level 10**
24V	**24V**	**24.2V**	**24.3V**	**24.5V**	**24.7V**	**24.8V**	**25V**	**25.2V**	**25.3V**	**25.5V**

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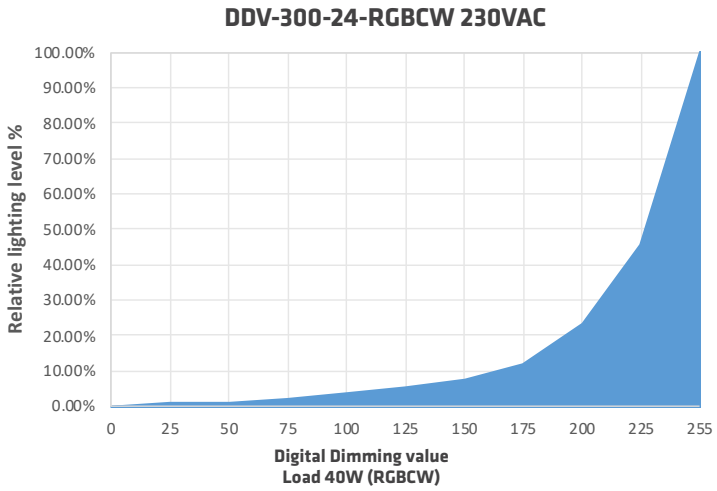
Power Factor Curve



Efficiency Curve

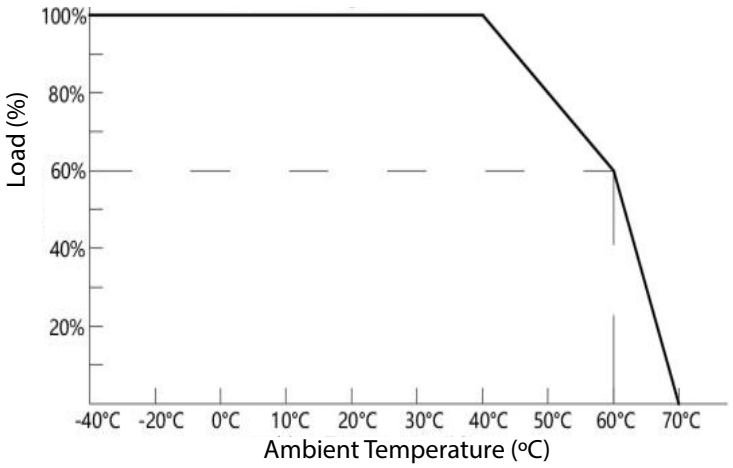


Direct Arc Power (DAP)



Illumination percentage test. Mode: DDV-300 230Vac Load: 40W(RGBCW)										
Dimming level	25	50	75	100	125	150	175	200	225	255
Illuminance percentage (%)	0.75%	0.99%	1.97%	3.51%	5.38%	7.40%	11.80%	23.12%	45.53%	100.00%

De-rating Curve



- If being used in higher ambient temperatures, ensure the load on the LED driver is de-rated in accordance with this chart. Failure to do so could lead to a premature failure, which is not covered by the warranty.

1) This LED driver should be installed by a qualified electrician.

2) Please make sure the LED driver is installed with adequate ventilation around it to allow for heat dissipation.

3) Ensure that all wiring is correct before testing in order to avoid damage to the LED driver, or the LEDs.