

# ARPJ-DIM80700-R (56W, 700mA, 0-10V, PFC)

#### **FEATURES:**

- 3 Optional dimming(0-10V / PWM / Resistance)
- Universal AC input/Full range(100-260VAC)
- Protections: Short circuit / Overload / Over voltage/ Over temperature
- Built\_in active PFC function
- Fully encapsulated with IP65 level
- UL60950 Class 2 power unit, pass LPS
- Cooling by free air convection
- 100% full load burn-in test
- High reliability
- Suitable for LED lighting and moving sign applications
- · Compliance toworldwide safety regulations for lighting
- Damp / wet location outdoor application
- 2 years warranty

## **PARAMETERS:**

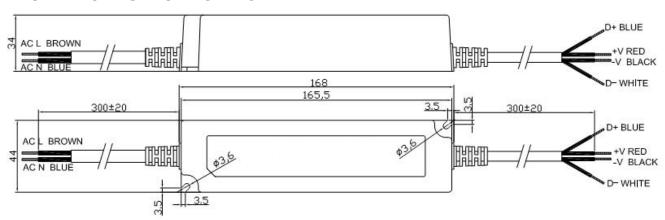
OUTPUT	DC VOLTAGE	80V							
	RATED CURRENT	700mA							
	CONSTANT CURRENT REGION	40~80V							
	RATED POWER	56W							
	RIPPLE&NOISE(MAX)	150mVp-p							
	CURRENT RIPPLE	<1%							
	LINE REGULATION	±1%							
	LOAD REGULATION	±2%							
	SETUP,RISE TIME	1000ms, 80ms / 230VAC 1000ms, 80ms / 115VAC at full load							
	HOLD UP TIME(Typ.)	60ms / 230VAC 30ms / 115VAC at full load							
	VOLTAGE RANGE	100-240VAC							
	FREQUENCY RANGE	47~63Hz							
	POWER FACTOR	PF>0.95/230VAC PF>0.99/115VAC at full load PF≥0.9 at 75 ~ 100% load, 115VAC / 230VAC							
INPUT	EFFICIENCY(Typ)	88%							
	AC CURRENT	0.65A / 115VAC							
	INRUSH CURRENT(MAX)	Cold-start current 65A/230V							
	LEAKAGE CURRENT	<2mA/240VAC							
		95-108%							
PROTECTION	OVER CURRENT	Protection type: Hiccup model,recovers automatically after fault condition is removed							
	SHORT CIRCUIT	Hiccup mode, recovers automatically after fault condition is removed							
		100~120V							
	OVER VOLTAGE	Protection type : Shut down o/p voltage, re-power on to recover							
		Tj 140°C typically(IC1) Detect on main control IC							
	OVER TEMPERATURE	Protection type: Shut down o/p voltage, recovers automatically after temperature goes down							





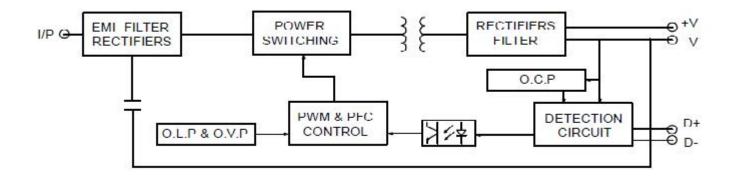
	WORKING TEMP.	$-30^{\circ}$ C ~ +60°C @ full load ; +90°C @ 60% load							
ENVIRONMENT	WORKING HUMIDITY	20% ~ 95%RH non-condensing							
	STORAGE TMP., HUMIDITY	−40°C ~ +80°C, 10-95%RH							
ENVIRONMENT	TEMP.COEFFICIENT	±0.03%/°C(0-50°C)							
	VIBRATION	10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes							
	SAFETY STANDARDS	Design refer to UL1310 Class 2,TUV EN60950-1, EN61347-2-13, CAN/CSA C22.2 No. 223-M91, meet IP65							
	WITHSTAND VOLTAGE	I/P-O/P:3.0KVAC (I/P-FG:1.5KVAC)							
	ISOLATION RESISTANCE	I/P-O/PI: > 100M Ohms/500VDC/25~70%RH							
SAFETY EMC	EMI CONDUCTION & RADIATION	Compliance to EN55015, EN55022 (CISPR22) Class B							
	HARMONIC CURRENT	Compliance to EN61000-3-2 Class C ( ≥75% load); EN61000-3-3							
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN55024, EN61547, light industry level , criteria A							
OTHERS	MTBF	≥400K Hours (25°C)							
OTHERS	DIMENSION	168*44*34mm (L*W*H))							

# **MECHANICAL SPECIFICATION:**



**Note:** AC Input line can be increased FG (GREEN & YELLOW) line

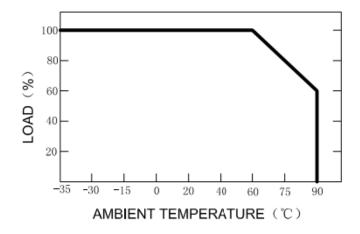
# **BLOCK DIAGRAM**



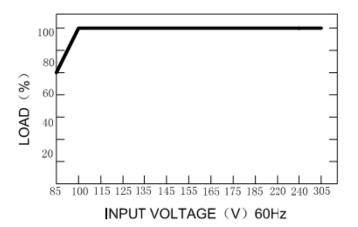


### **CHARACTERISTIC DIAGRAM:**

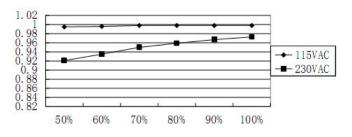
#### • LOAD & TEMPERATURE FEATURE



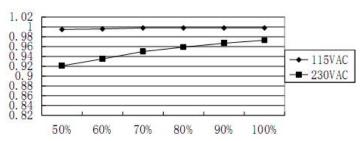
#### LOAD & AC INPUT VOLTAGE



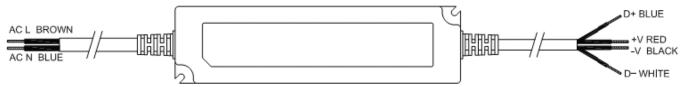
LOAD & POWER FACTOR



#### • LOAD & EFFICIENCY



## **DIMMER OPERATION:**



**Note:** Connected a resistor or 10V PWM signal between D+ and D- ,LED. Driver can output constant current.

# Adjust the value of the resistance value (Typical value)

Resistor value	10kΩ	20kΩ	30kΩ	40kΩ	50kΩ	60kΩ	70kΩ	80kΩ	90kΩ	100kΩ	Open
LED current	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	100%

10V PWM signal (Typical value)	Frequency range: >100Hz
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PWM signal	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	Open
LED current	100%	90%	80%	70%	60%	50%	40%	30%	20%	10%	0%	100%