

LED driver IS 40DP-700

(42W, 700mA, 0-10V)

FEATURES:

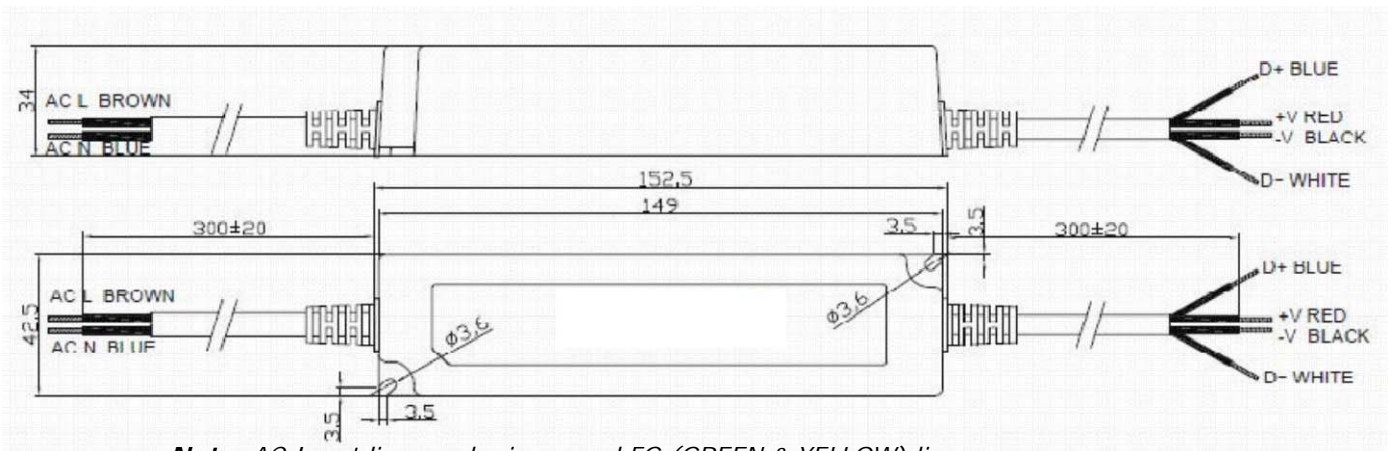
- 2 Optional dimming (PWM / Resistance)
- Universal AC input/Full range(100-277VAC)
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Built in active PFC function
- Fully encapsulated with IP67 level
- UL60950 Class 2 power unit, pass LPS
- Cooling by free air convection
- 100% full load burn-in test
- High reliability
- Suitable for LED lighting and moving sign applications
- Compliance to worldwide safety regulations for lighting
- Damp / wet location outdoor application
- 2 years warranty

SPECIFICATION:

OUTPUT	DC VOLTAGE	60V
	RATED CURRENT	700mA
	CONSTANT CURRENT REGION	36~60V
	RATED POWER	42W
	RIPPLE&NOISE(MAX)	3Vp-p
	CURRENT RIPPLE	<15%
	VOLTAGE TOLERANCE	±2%
	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	
INPUT	VOLTAGE RANGE	100-240VAC
	FREQUENCY RANGE	50~60Hz
	POWER FACTOR	PF>0.95/230VAC PF>0.99/115VAC at full load PF≥0.9 at 75 ~ 100% load, 115VAC / 230VAC
	EFFICIENCY(TYP)	88%
	AC CURRENT	0.65A / 115VAC 0.35A / 230VAC
	INRUSH CURRENT(MAX)	Cold-start current 65A/230V
	LEAKAGE CURRENT	<2mA/240VAC
PROTECTION	OVER CURRENT	95-108% Protection type: Hiccup model, recovers automatically after fault condition is removed
	SHORT CIRCUIT	Hiccup mode, recovers automatically after fault condition is removed
	OVER VOLTAGE	75~90V Protection type : Shut down o/p voltage, re-power on to recover
	OVER TEMPERATURE	Tj 140°C typically(IC1) Detect on main control IC Protection type : Shut down o/p voltage, recovers automatically after temperature goes down

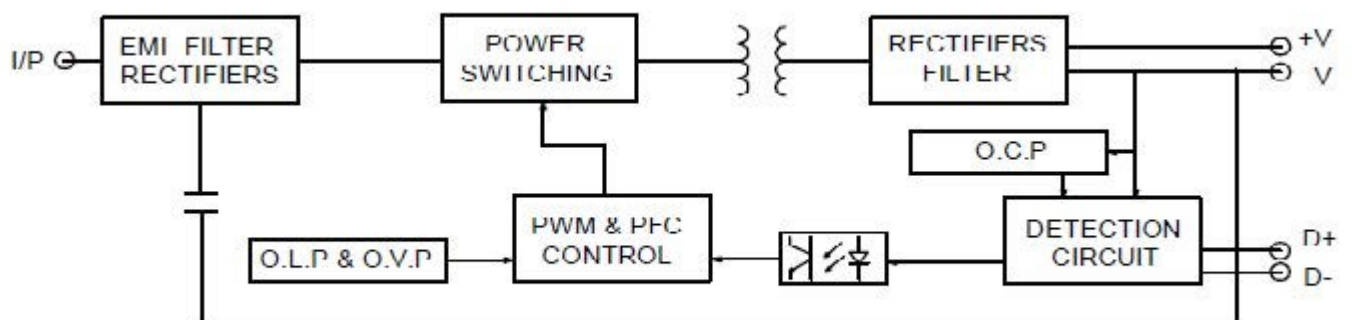
ENVIRONMENT	WORKING TEMP.	-30°C ~ +60°C @ full load ; +90°C @ 60% load
	WORKING HUMIDITY	20% ~ 95%RH non-condensing
	STORAGE TMP.,HUMIDITY	-40°C ~ +80°C, 10-95%RH
	TEMP.COEFFICIENT	±0.03%/°C (0-50°C)
	VIBRATION	10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes
SAFETY EMC	SAFETY STANDARDS	Design refer to UL1310 Class 2,TUV EN60950-1, EN61347-2-13, CAN/CSA C22.2 No. 223-M91, meet IP67
	WITHSTAND VOLTAGE	I/P-O/P; 3KVAC
	ISOLATION RESISTANCE	I/P-O/PI: > 100M Ohms/500VDC/25~70%RH
	EMI CONDUCTION & RADIATION	Compliance to EN55015, EN55022 (CISPr22) Class B
	HARMONIC CURRENT	Compliance to EN61000-3-2 Class C (≥75% load) ; EN61000-3-3
OTHERS	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN55024, EN61547, light industry level , criteria A
	MTBF	≥400KHours (25°C)
	DIMENSION	150*43*34mm (L*W*H))

MECHANICAL SPECIFICATION:



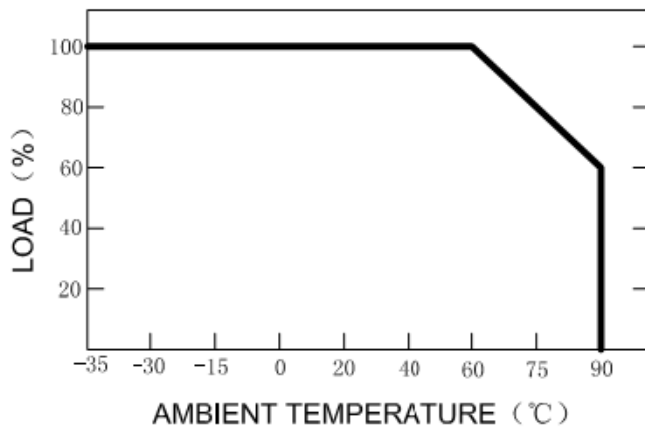
Note: AC Input line can be increased FG (GREEN & YELLOW) line

BLOCK DIAGRAM

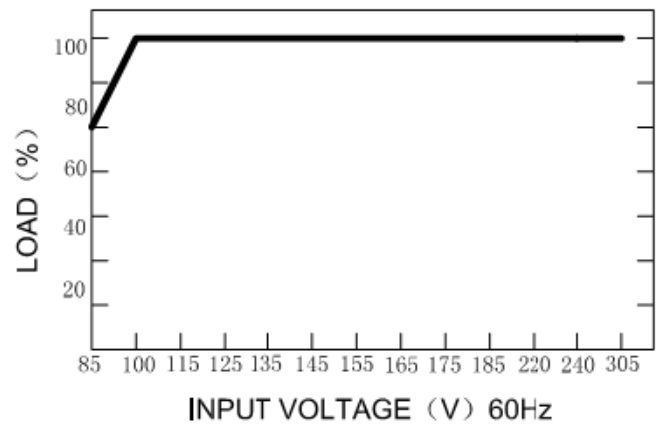


CHARACTERISTIC DIAGRAM:

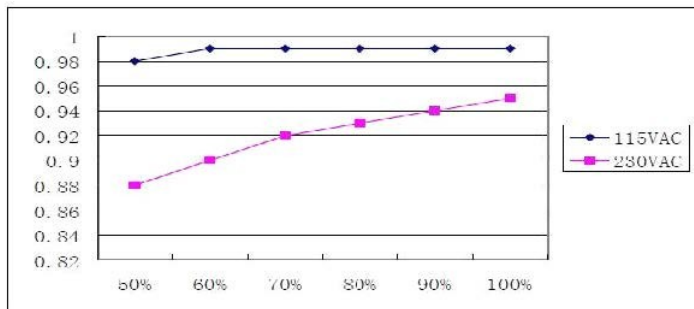
- LOAD & TEMPERATURE FEATURE



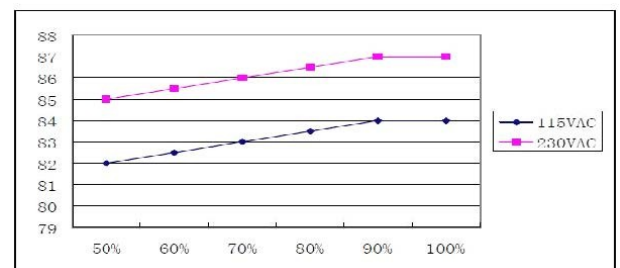
- LOAD & AC INPUT VOLTAGE



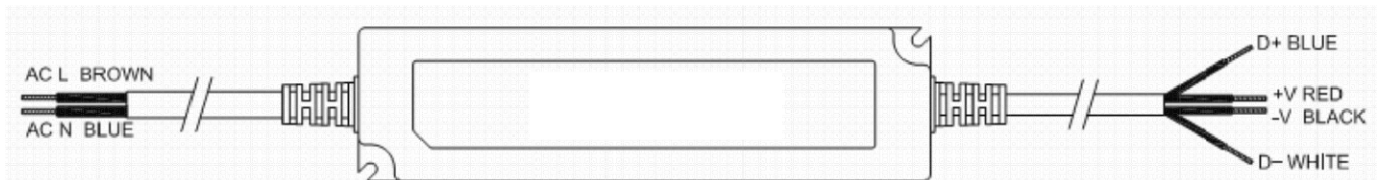
- LOAD & POWER FACTOR



- 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: >10kHz

0~10V	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	Open
LED current	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	100%