

16w 1-10v Dimmable Driver



Product Description

This 16W 1-10v Dimmable Driver is the perfect tool for dimming your LED lighting down.

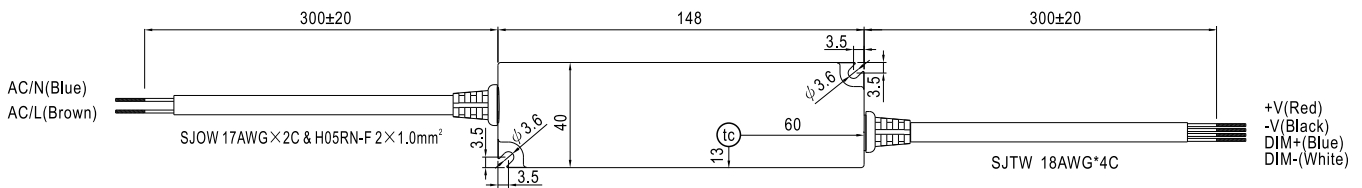
With a built in 3-in-1 dimming function, this driver also has an active Power Factor Correction (PFC). This is for improved power factor and quality as it reduces the load, increases energy efficiency and reduces electricity costs. It also decreases the chances of lighting failure.

Product Features

- Built-in 3 in 1 dimming function (1~10VDC, PWM signal or resistance)
- Built-in active PFC function
- Protections: Short circuit/ Overload/ Over voltage/ Over temperature
- Universal AC input (up to 305VAC) / Full Range
- Fully isolated plastic case with IP30 level
- Isolation class II, no F.G.
- Class 2 power unit
- IP30
- 5 years warranty



Technical Dimensions



• (tc) : Max. Case Temperature



Recommended Mounting Direction



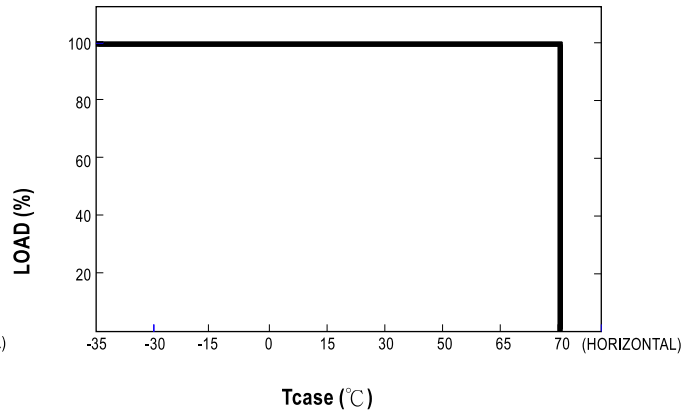
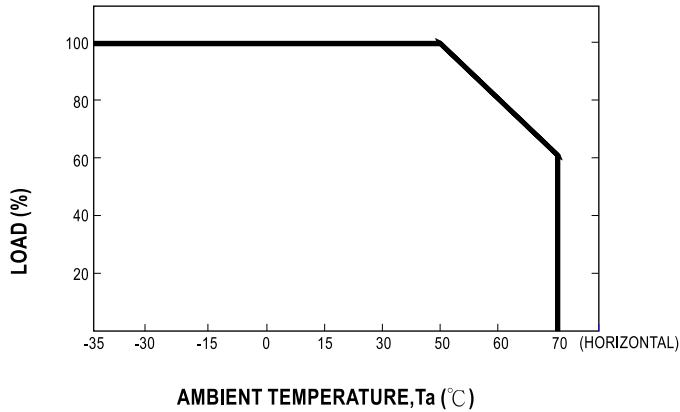
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Technical Specifications

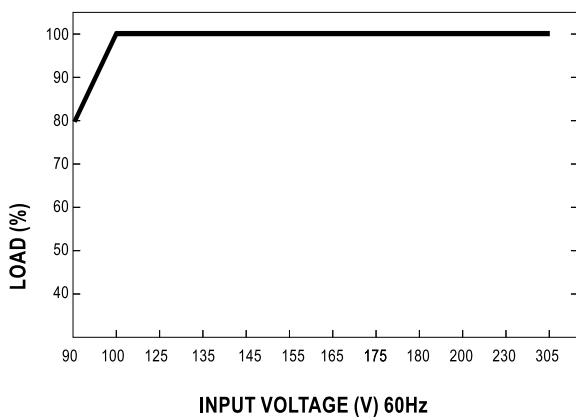
OUTPUT	DC VOLTAGE	12V	24V
	RATED CURRENT	1.34A	0.67A
	RATED POWER <small>Note.5</small>	16.08W	16.08W
	CONSTANT CURRENT REGION <small>Note.2</small>	6.6 ~ 12V	13.2 ~ 24V
	CURRENT RIPPLE	5.0% max. @rated current	
	CURRENT TOLERANCE	±5.0%	
	SETUP, RISE TIME <small>Note.6</small>	1500ms, 80ms / 115VAC	500ms, 80ms / 230VAC
	HOLD UP TIME (Typ.)	16ms/230VAC	16ms/115VAC
INPUT	VOLTAGE RANGE <small>Note.5</small>	90 ~ 305VAC 127 ~ 431VDC (Please refer to "STATIC CHARACTERISTIC" section)	
	FREQUENCY RANGE	47 ~ 63Hz	
	POWER FACTOR	PF ≥ 0.97/115VAC, PF ≥ 0.95/230VAC, PF ≥ 0.92/277VAC@full load (Please refer to "POWER FACTOR (PF) CHARACTERISTIC" section)	
	TOTAL HARMONIC DISTORTION	THD < 20% (@load ≥ 60%/115VAC, 230VAC; @load ≥ 75%/277VAC) (Please refer to "TOTAL HARMONIC DISTORTION (THD)" section)	
	EFFICIENCY (Typ.)	83%	84.5%
	AC CURRENT	0.4A / 115VAC	0.25A / 230VAC 0.2A/277VAC
	INRUSH CURRENT(Typ.)	COLD START 45A(twidth=200μs measured at 50% Ipeak) at 230VAC; Per NEMA 410	
	MAX. No. of PSUs on 16A CIRCUIT BREAKER	14 units (circuit breaker of type B) / 24 units (circuit breaker of type C) at 230VAC	
PROTECTION	LEAKAGE CURRENT	<0.75mA / 240VAC	
	OVER CURRENT	95 ~ 108% Constant current limiting, recovers automatically after fault condition is removed	
	SHORT CIRCUIT	Hiccup mode, recovers automatically after fault condition is removed.	
	OVER VOLTAGE	15 ~ 18V	28 ~ 35V
	OVER TEMPERATURE	Shut down and latch off o/p voltage, re-power on to recover Shut down o/p voltage, recovers automatically after temperature goes down	
ENVIRONMENT	WORKING TEMP.	Tcase=-35 ~ +70°C (Please refer to " OUTPUT LOAD vs TEMPERATURE" section)	
	MAX. CASE TEMP.	Tcase=+70°C	
	WORKING HUMIDITY	20 ~ 95% RH non-condensing	
	STORAGE TEMP., HUMIDITY	-40 ~ +80°C, 10 ~ 95% RH	
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 50°C)	
	VIBRATION	10 ~ 500Hz, 2G 12min./1cycle, period for 72min. each along X, Y, Z axes	
SAFETY & EMC	SAFETY STANDARDS <small>Note.8</small>	UL8750, CSA C22.2 No. 250.0-08, ENEC EN61347-1, EN61347-2-13 independent, EN62384, EAC TP TC 004, GB19510.1, GB19510.14 approved, IP67(optional); Design refer to UL60950-1, TUV EN60950-1	
	WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC	
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH	
	EMC EMISSION <small>Note.8</small>	Compliance to EN55015, EN61000-3-2 Class C (@load ≥ 55%); EN61000-3-3, GB17743 and GB17625.1, EAC TP TC 020	
	EMC IMMUNITY	Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11; EN61547, light industry level (surge immunity Line-Line 2KV), EAC TP TC 020	
OTHERS	MTBF	1249.2K hrs min. Telcordia SR-332 (Bellcore); 420.1Khrs min. MIL-HDBK-217F (25°C)	
	DIMENSION	148*40*32mm (L*W*H)	
	PACKING	0.21Kg; 40pcs/9.4Kg/ 1.02CUFT	
NOTE	<ol style="list-style-type: none"> All parameters NOT specially mentioned are measured at 230VAC input, rated current and 25°C of ambient temperature. Please refer to "DRIVING METHODS OF LED MODULE". Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. Tolerance : includes set up tolerance, line regulation and load regulation. De-rating may be needed under low input voltages. Please refer to "STATIC CHARACTERISTIC" sections for details. Length of set up time is measured at first cold start. Turning ON/OFF the driver may lead to increase of the set up time. The driver is considered as a component that will be operated in combination with final equipment. Since EMC performance will be affected by the complete installation, the final equipment manufacturers must re-qualify EMC Directive on the complete installation again. To fulfill requirements of the latest ErP regulation for lighting fixtures, this LED driver can only be used behind a switch without permanently connected to the mains. This series meets the typical life expectancy of >50,000 hours of operation when Tcase, particularly (Tc) point (or TMP, per DLC), is about 70°C or less. Please refer to the warranty statement on MEAN WELL's website at http://www.meanwell.com The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft). For any application note and IP water proof function installation caution, please refer our user manual before using. https://www.meanwell.com/Upload/PDF/LED_EN.pdf 		

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Output Load vs Temperature

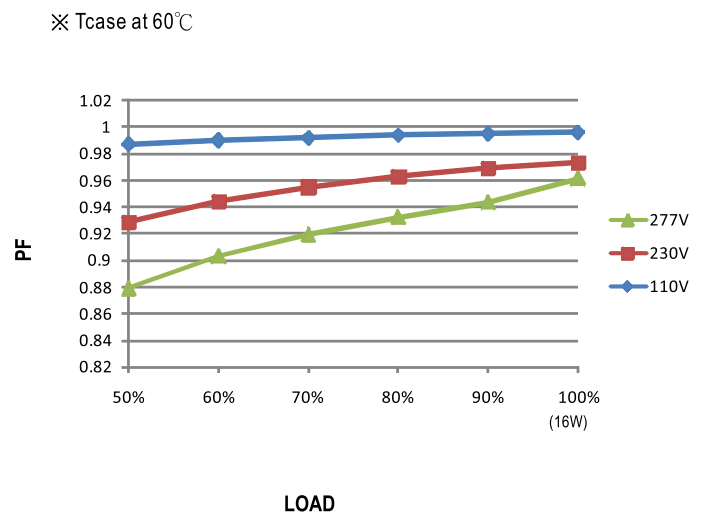


Static Characteristic



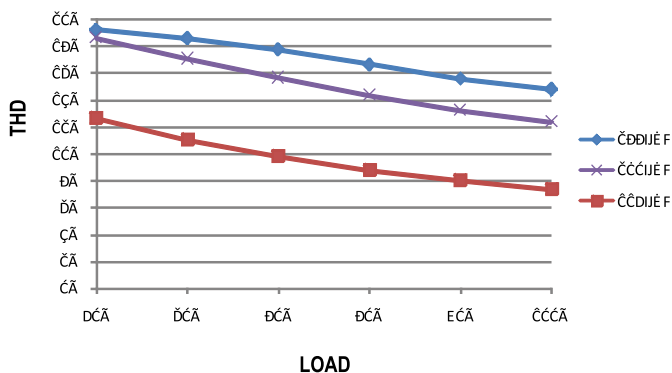
※ De-rating is needed under low input voltage.

Power Factor(PF) Characteristic



Total Harmonic Distortion

※ 48V Model, Tcase at 60°C



Efficiency vs Load

LPF-16D series possess superior working efficiency that up to 85% can be reached in field applications.

※ 48V Model, Tcase at 60°C

