



Features:

- Universal AC input / Full range (up to 305VAC)
- Protections: Short circuit / Over current / Over voltage / Over temperature
- · Built-in active PFC function
- · Cooling by free air convection
- Fully isolated plastic case with IP30 level (Note.8)
- · Class II power unit, no FG
- · Class 2 power unit
- IP67(optional, model NO.: LPF-16-12 P)
- · Suitable for LED lighting and moving sign applications
- · Compliance to worldwide safety regulations for lighting
- Suitable for dry / damp locations(wet location for LPF-16-12 P)
- · 3 years warranty























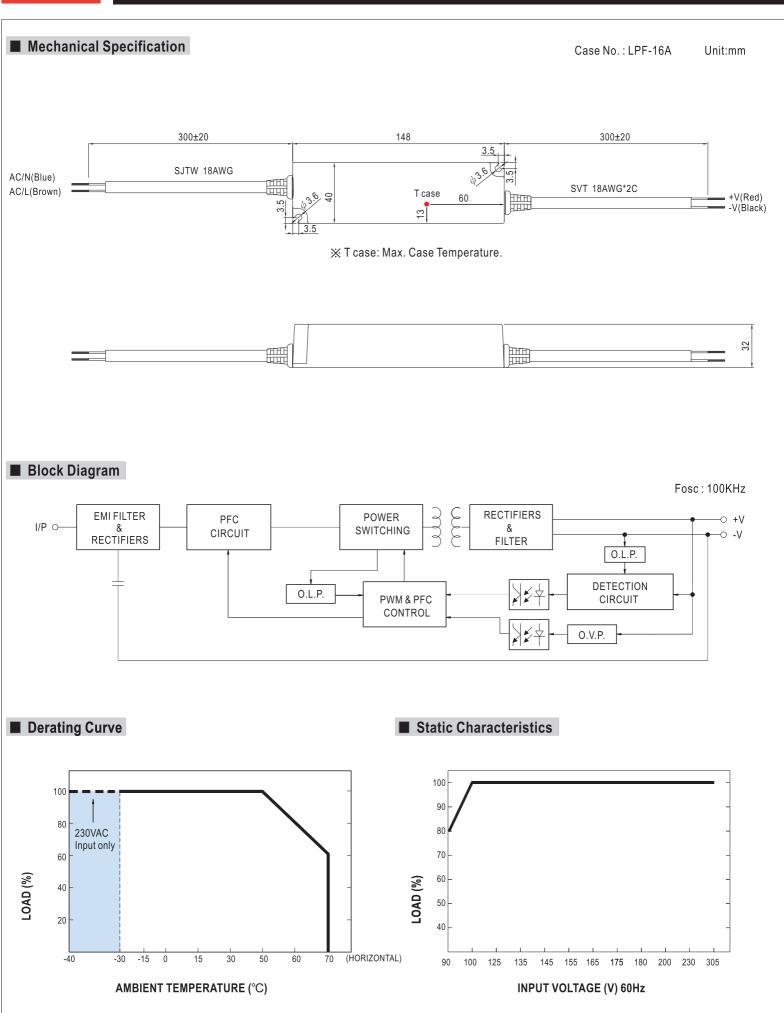
SPECIFICATION

MODEL		LPF-16-12	LPF-16-15	LPF-16-20	LPF-16-24	LPF-16-30	LPF-16-36	LPF-16-42	LPF-16-48	LPF-16-54	
ОИТРИТ	DC VOLTAGE	12V	15V	20V	24V	30V	36V	42V	48V	54V	
	CONSTANT CURRENT REGION Note.4	6~12V	7.5 ~ 15V	10 ~ 20V	12 ~ 24V	15 ~ 30V	18 ~ 36V	21 ~ 42V	24 ~ 48V	27 ~ 54V	
	RATED CURRENT	1.34A	1.07A	0.8A	0.67A	0.54A	0.45A	0.39A	0.34A	0.3A	
	RATED POWER	16.08W	16.05W	16W	16.08W	16.2W	16.2W	16.38W	16.32W	16.2W	
	RIPPLE & NOISE (max.) Note.2	150mVp-p	150mVp-p	150mVp-p	150mVp-p	200mVp-p	250mVp-p	250mVp-p	250mVp-p	350mVp-p	
	VOLTAGE TOLERANCE Note.3	±4.0%	±4.0%	±4.0%	±4.0%	±4.0%	±4.0%	±4.0%	±4.0%	±4.0%	
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	
	LOAD REGULATION	±2.0%	±1.5%	±1.0%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	
	SETUP, RISE TIME Note.6	1500ms, 80ms / 115VAC at full load 1500ms, 80ms / 230VAC									
	HOLD UP TIME (Typ.)	16ms at full load 230VAC /115VAC									
INPUT	VOLTAGE RANGE Note.5	90 ~ 305VAC 127 ~ 431VDC									
	FREQUENCY RANGE	47 ~ 63Hz									
	POWER FACTOR (Typ.)	PF>0.97/115VAC, PF>0.95/230VAC, PF>0.92/277VAC at full load (Please refer to "Power Factor Characteristic" curve)									
	EFFICIENCY (Typ.)	84%	84%	86%	86%	86%	86%	86%	86%	86%	
	AC CURRENT	0.4A / 115VAC									
	INRUSH CURRENT (Typ.)	COLD START 50A/230VAC									
	LEAKAGE CURRENT	<0.75mA / 240VAC									
PROTECTION	OVER CURRENT Note.4	95 ~ 108%									
		Protection type: 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	17.5 ~ 21V	23 ~ 27V	28 ~ 35V	34 ~ 40V	41 ~ 49V	46 ~ 54V	54 ~ 63V	59 ~ 66V	
		Protection type : Shut down and latch off o/p voltage, re-power on to recover									
	OVER TEMPERATURE	100°C±5°C (TSW1) Detect on U2									
	OVER TENII ERATORE	Protection type : Shut down o/p voltage, recover automatically after temperature goes down									
ENVIRONMENT	WORKING TEMP.	-40 ~ +70°C (Refer to "Derating Curve")									
	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	UL8750, CSA C22.2 No. 250.0-08 (except for 48V, 54V), EN61347-1, EN61347-2-13 independent, EN62384 approved,									
		IP67 (optional) ; Design refer to UL60950-1, TUV EN60950-1									
	WITHSTAND VOLTAGE	1/P-O/P:3.75KVAC									
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25°C/ 70% RH									
	EMC EMISSION		Compliance to EN55015; EN61000-3-2 Class C (≥50% load); EN61000-3-3								
	EMC IMMUNITY	· ·	Compliance to EN61000-4-2,3,4,5,6,8,11; EN61547,light industry level(surge 2KV), criteria A								
OTHERS	MTBF		473.3Khrs min. MIL-HDBK-217F (25°C)								
	DIMENSION	148*40*32mn		, ,							
	PACKING	0.21Kg; 40pcs/9.4Kg/1.02CUFT									
NOTE	1 All parameters NOT special	0. 1			out rated lead	and 25°C of a	mbiant tampa	roturo			

NOTE

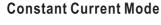
- 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
- 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
- 3. Tolerance : includes set up tolerance, line regulation and load regulation.
- 4. Constant current operation region is within 50% ~100% rated output voltage. This is the suitable operation region for LED related applications, but please reconfirm special electrical requirements for some specific system design.
- 5. Derating may be needed under low input voltages. Please check the static characteristics for more details.
- 6. Length of set up time is measured at cold first start. Turning ON/OFF the power supply may lead to increase of the set up time.
- 7. The power supply 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.
- 8. Suitable for indoor use.

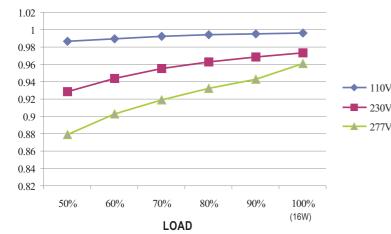






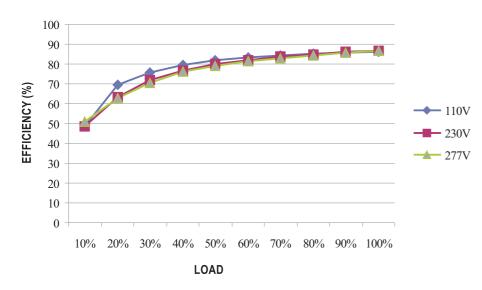
■ Power Factor Characteristic





■ EFFICIENCY vs LOAD (48V Model)

LPF-16 series possess superior working efficiency that up to 86% can be reached in field applications.

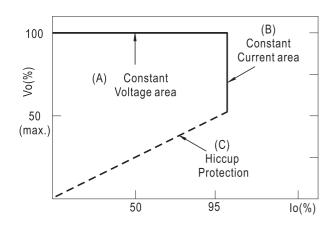


■ DRIVING METHODS OF LED MODULE

There are two major kinds of LED drive method "direct drive" and "with LED driver".

A typical LED power supply may either work in "constant voltage mode (CV) or constant current mode (CC)" to drive the LEDs.

Mean Well's LED power supply with CV+ CC characteristic can be operated at both CV mode (with LED driver, at area (A) and CC mode (direct drive, at area (B).



Typical LED power supply I-V curve