



## 185W Multiple Channel Output Switching Power Supply

## LDV-185 series



### ■ Features :

- 180~295VAC input range
- Multiple channel with constant current output
- Meet 4KV surge immunity level(EN61000-4-5)
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Built-in active PFC function
- Cooling by free air convection
- IP67 design for indoor or outdoor installations
- Optional timer dimming function
- High efficiency up to 88%
- -40°C can power on
- Suitable for LED lighting and moving sign applications
- 3 years warranty

IP67

LDV-185-350A ☐ Blank : IP67 rated. No timer dimming function.  
D(option): IP67 rated. Built-in timer dimming function, contact MEAN WELL for details.

### SPECIFICATION

MODEL		LDV-185-350A <input type="checkbox"/>	LDV-185-350B <input type="checkbox"/>	LDV-185-350C <input type="checkbox"/>	LDV-185-700A <input type="checkbox"/>	LDV-185-700B <input type="checkbox"/>	LDV-185-700C <input type="checkbox"/>
OUTPUT	SINGLE CHANNEL RATED CURRENT	350mA	350mA	350mA	700mA	700mA	700mA
	DC VOLTAGE RANGE	30 ~ 35V	35 ~ 40V	40 ~ 48V	30~35V	35~40V	40~48V
	RATED POWER(max.) <small>Note 3.</small>	147W	168W	185W	147W	168W	185W
	MAX CHANNEL <small>Note 3.</small>	12CH	12CH	12CH	6CH	6CH	6CH
	SETUP, RISE TIME <small>Note 2.</small>	2500ms, 50ms					
	HOLD UP TIME	10ms / 230VAC					
CONSTANT CURRENT ACCURACY		±5%					
INPUT	VOLTAGE RANGE	180~ 295VAC					
	FREQUENCY RANGE	47 ~ 63Hz					
	POWER FACTOR	PF>0.95/230VAC      PF>0.92/277VAC at full load(please refer to "Power Factor Characteristic" Curve)					
	EFFICIENCY (Typ.) <small>Note 4.</small>	≥88%					
	AC CURRENT	1.5A/230VAC      1.0A/277VAC					
	INRUSH CURRENT(max.)	COLD START 60A/230VAC					
LEAKAGE CURRENT		<0.75mA / 240VAC					
PROTECTION	SHORT CIRCUIT	Channel shut down when each channel fault, re-power on to recovery					
	OVER VOLTAGE	41 ~ 50V	47 ~ 50V	54 ~ 63V	41~50V	47~50V	54~63V
	Protection type : Shut down o/p voltage with auto-recovery or re-power on to recovery						
	OVER TEMPERATURE	100°C±10°C(RTH2)					
	Protection type : Shut down o/p voltage, recovers automatically after temperature goes down						
OTP DIMMING		When the NTC (RTH3) temperature is higher than 90°C±10°C, PSU will enter dimming mode with decreasing output current					
ENVIRONMENT	WORKING TEMP.	-30 ~ +70°C (Refer to "Derating curve" ), -40°C can power on					
	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, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes					
SAFETY & EMC	SAFETY STANDARDS	IP67 approved; Design refer to EN61347-1,EN61347-2-13,UL8750					
	WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC I/P-FG:1.88KVAC O/P-FG:0.5KVAC 1minute					
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25°C/ 70% RH					
	EMC EMISSION	Compliance to EN55015,EN61000-3-2 Class C (≥75% load) ; EN61000-3-3					
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11; EN61547, EN55024, light industry level (surge 4KV), criteria A					
OTHERS	MTBF	198.2Khrs min. MIL-HDBK-217F (25°C)					
	DIMENSION	222.2*90*38.8mm (L*W*H)					
	PACKING	1.27 Kg; 12pcs/16.2Kg/1.02CUFT					
NOTE	1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. 2. 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. 3. Please do not exceed the rated power when choosing channel quantity and voltage range(350C/700C model). 4. Efficiency is measured under 230VAC input with Pout=120W and each output channel connecting with the same quantity of LEDs(similar Vf sum). 5. 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.						

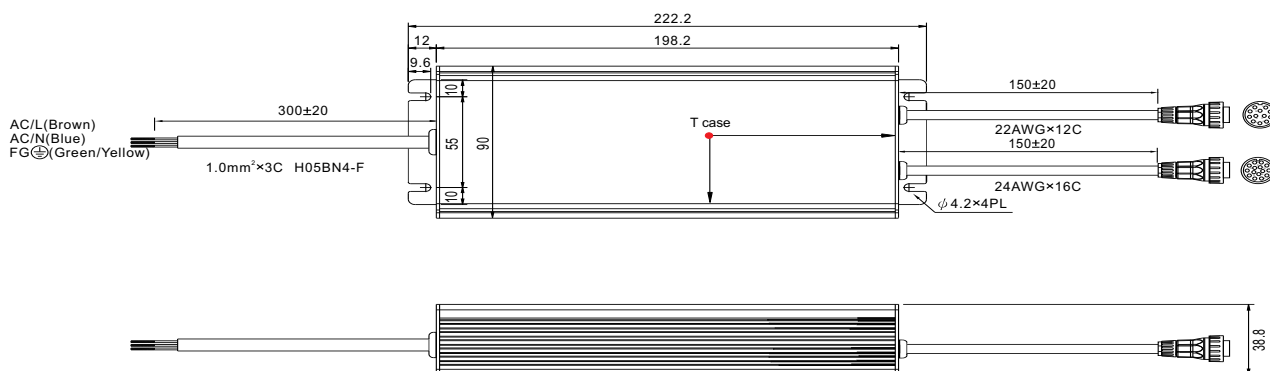
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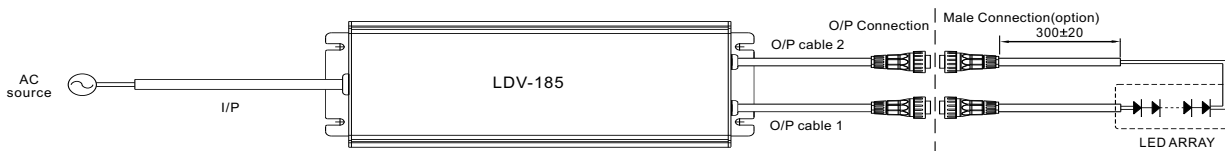
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## ■ Mechanical Specification





## ■ WATERPROOF CONNECTION

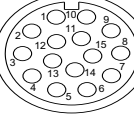
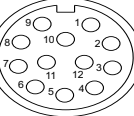


**NOTE:** 1.Cable 1 and 2 for 350mA models, Cable 1 for 700mA models  
2.Each channel of LED- must be isolated  
3.pin7-10 of Cable 1 must be connected and do not floating, or the PSU can't be start up

### O/P Connection

Cable	Pin Configuration(female)	Pin	Pin definition	
Cable 1		15Pin	1~6	LED+
			7~12	LED- for each channel
			13~14	NC
			15	-V
Cable 2		12Pin	1~6	LED+
			7~12	LED- for each channel

**Option for male connection(Contact MEAN WELL for details)**

Pin Configuration (male)	Pin Definition		Wire Color	Wire Stock
 BZ-LDV185-OPA	1	LED+	BLUE	24AWG*16C
	2		PURPLE	
	3		ORANGE	
	4		YELLOW	
	5		RED	
	6	LED-	WHITE	
	7		WHITE/RED	
	8		BROWN	
	9		WHITE/ORANGE	
	10		GRAY	
	11	NC	CLEAR LUCITE/BLUE	
	12		CLEAR LUCITE/PURPLE	
	13			
	14			
	15			
 BZ-LDV185-OPB	1	LED+	GRAY	22AWG*12C
	2		BLUE	
	3		YELLOW/GREEN	
	4		ORANGE	
	5		YELLOW	
	6	LED-	PURPLE	
	7		CLEAR LUCITE	
	8		WHITE/BLACK	
	9		BLACK	
	10		GREEN	
	11		RED	
	12		WHITE	

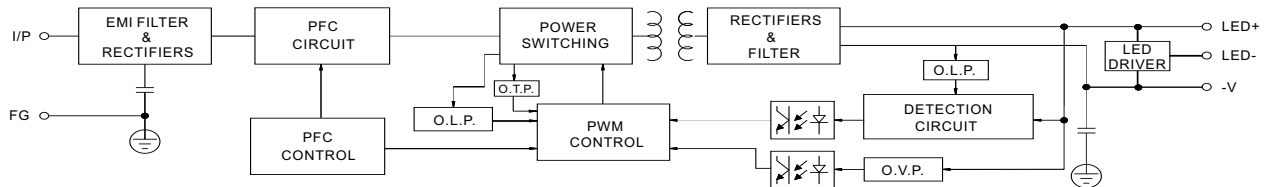
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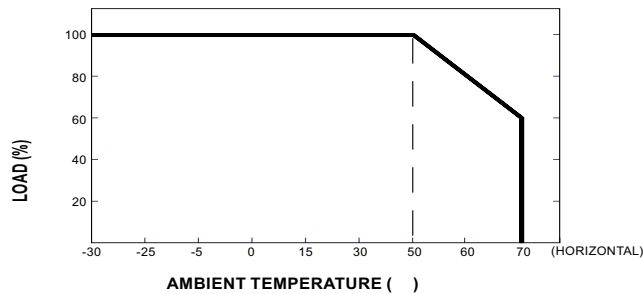
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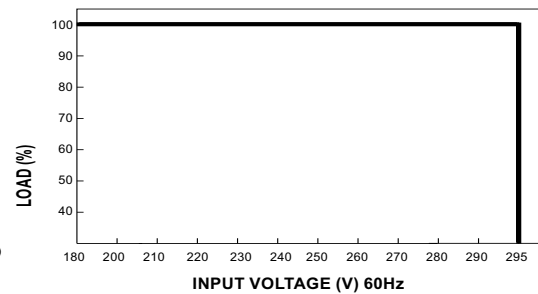
■ Block Diagram



■ Derating Curve



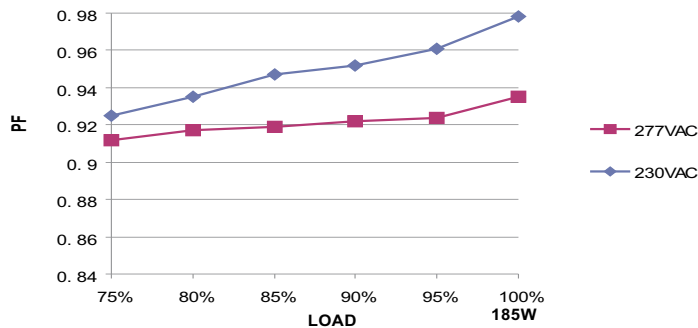
■ Static Characteristics



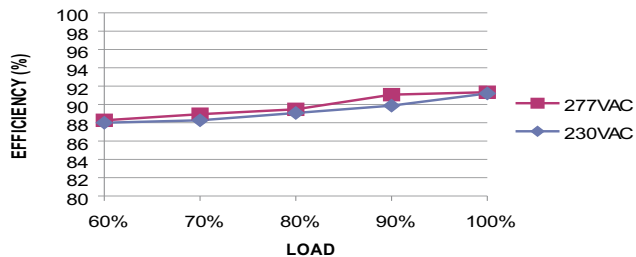
■ Power Factor Characteristic

Power factor will be higher than 0.9 when output loading is 75% or higher.

Constant Current Mode



■ EFFICIENCY vs LOAD (350C Model)



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