





### ■ Features :

- 180~295VAC input range
- Multiple channel with constant current output
- Meet 4KV surge immunity level(EN61000-4-5)
- Protections: Short circuit / 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



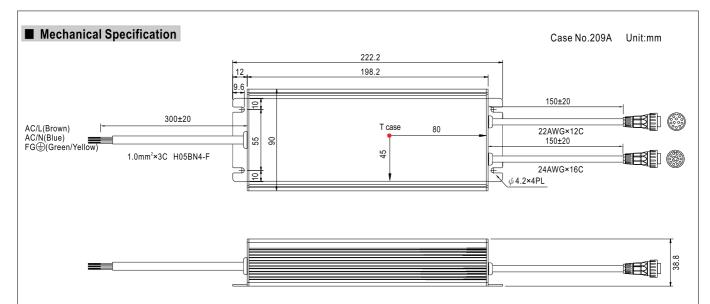
LDV-185-350A(Standard): IP67 rated. No timer dimming function.

LDV-185-350AD(Option): IP67 rated. Built-in timer dimming function, contact MEAN WELL for details.

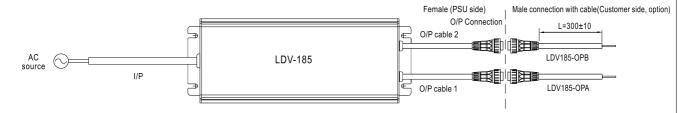
LDV-185-350A-CA(Option): Including PSU mating accessory (male waterproof connector with cable), contact MEAN WELL for details.

## **SPECIFICATION**

MODEL		LDV-185-350A	LDV-185-350B	LDV-185-350C	LDV-185-700A	LDV-185-700B	LDV-185-700C		
	SINGELE CHANNEL RATED CURRENT	350mA	350mA	350mA	700mA	700mA	700mA		
	DC VOLTAGE RANGE Note 5.	30 ~ 35V	35 ~ 40V	40 ~ 48V	30~35V	35~40V	40~48V		
OUTPUT	RATED POWER(max.) Note 3.	147W	168W	185W	147W	168W	185W		
OUTFUT	MAX CHANNEL Note 3.	12CH	12CH	12CH	6CH	6CH	6CH		
	SETUP, RISE TIME Note 2.	2500ms, 50ms							
	HOLD UP TIME	10ms / 230VAC							
	CONSTANT CURRENT ACCURACY								
	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)							
INPUT	EFFICIENCY (Typ.) Note 4.	≥88%							
	AC CURRENT	1.5A/230VAC 1.0A/277VAC							
	INRUSH CURRENT(max.)	COLD START 60A/230VAC							
,	LEAKAGE CURRENT	<0.75mA / 240VAC							
	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	OVER VOLIAGE	Protection type: Shut down o/p voltage with auto-recovery or re-power on to recovery							
PROTECTION	OVER TEMPERATURE	100°C±10°C(RTH2)							
	OVER TEINFERATURE	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							
	WORKING TEMP.	-30 ~ +70°C (Refer to "Derating curve" ),-40°C can power on							
	WORKING HUMIDITY	20 ~ 95% RH non-condensing							
ENVIRONMENT	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 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							
SAFETY &	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25°C/ 70% RH							
EMC	EMC EMISSION	· ·		ss C (≧75% load) ; EN					
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11; EN61547, EN55024, light industry level (surge 4KV), criteria A							
	MTBF	198.2Khrs min. MIL-HDBK-217F (25°C)							
OTHERS	DIMENSION	222.2*90*38.8mm (L*W*H)							
	PACKING	1.27 Kg; 12pcs/16.2k	(g/1.02CUFT						
NOTE	<ol> <li>All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</li> <li>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.</li> <li>Please do not exceed the rated power when choosing channel quantity and voltage range(350C/700C model).</li> <li>Efficiency is measured under 230VAC input with Pout-120W and each output channel connecting with the same quantity of LEDs(similar Vf sum).</li> <li>DC output voltage is measured between LED+~ LED</li> <li>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.</li> </ol>								



# **■** WATERPROOF CONNECTION



NOTE: 1.Cable 1 and 2 for 350mA models, Cable 1 for 700mA models

2. Each channel of LED- must be isolated

 $3.Pin1\sim4(LED+)$  &  $pin7\sim10(LED-)$  of cable 1 must be used when connected to LED loads, do not floating, or the PSU can't start up

### O/P Connection(Female)

Cable	Pin Configuration(female)	Pin	Pin definition	
	100 10 2		1~6	LED+
Cable 1	9 15 12 3 8 14 13 4 7 6 5	15Pin	7~12	LED— for each channel
			13~14	NC
			15	_V
Cable 2	10 ° 80	12Pin	1~6	LED+
- Casio -	13 O O TO		7~12	LED— for each channel

### Male Waterproof Output Connector With Cable(Customer side, optional)

LDV185-OPA	Pin Configuration(male)		Definition	Wire Color	Wire Stock	
Total Color	10100 9	2 3 4 5	LED+	PURPLE ORANGE YELLOW RED		
14   NC     15   -V   WHITE/YELLOW   1   GRAY   BLUE   BLUE   STAN   GRANGE   YELLOW/GREEN   ORANGE   YELLOW   PURPLE   CLEAR LUCITE   STAN   STAN	(3012000)	7 8 9 10 11	LED-	WHITE/RED BROWN WHITE/ORANGE GRAY CLEAR LUCITE/BLUE	24AWG*16C	
LDV185-OPB   2   3   LED+   YELLOW/GREEN   ORANGE   YELLOW   ORANGE   YELOW   ORANGE   YELLOW   ORAN		14				
\\\\^7\Circ\ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	90 10	3 4 5 6	LED+	BLUE YELLOW/GREEN ORANGE YELLOW PURPLE	22AWG*12C	
10 11 11 12 BLACK GREEN RED WHITE	70 0 1 12 3 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	8 9 10 11	LED-	WHITE/BLACK BLACK GREEN RED	22AWG 12C	

MEAN WELL offers male waterproof connectors with cable length of 300mm
as our standard mating accessories, This mating accessory needs to be
ordered together with LDV-185, please consult MEAN WELL for details.



#### ■ Block Diagram EMI FILTER RECTIFIERS PFC O LED+ POWER & RECTIFIERS CIRCUIT SWITCHING LÉD FILTER O LED-DRIVER O.L.P. O.T.P. DETECTION FG C O.L.P. PWM CIRCUIT PFC CONTROL CONTROL ■ Derating Curve **■** Static Characteristics 100 100 90 80 80 70 60 LOAD (%) LOAD (%) 40 50 20 (HORIZONTAL) 180 200 210 220 230 240 250 260 270 280 290 295 AMBIENT TEMPERATURE (°C) **INPUT VOLTAGE (V) 60Hz ■** Power Factor Characteristic Power factor will be higher than 0.9 when output loading is 75% or higher. **Constant Current Mode** 0. 98 0.96 0. 94 0. 92 277VAC 0.9 ◆ 230VAC 0.88 0.86 0.84 85% 100% 75% 80% 90% 95% 185W LOAD ■ EFFICIENCY vs LOAD (350C Model) 100 98 96 **EFFICIENCY (%)** 94 92 - 277VAC 90 88 -230VAC 86 84 82 80 60% 70% 80% 90% 100% LOAD