

■ **Model Name :** PSDV700142U
 ILU700M142U1U

■ **Features :**

- Class II
- Flickerless
- Full-protection provided: OCP/OVP/OTP/SCP/OLP
- Low Power Dissipation (Stand-by mode : <0.5Wh)
- Wide Vout : 25 ~ 43Vdc
- UL8750 / UL1310 (Suitable for Class 2 Wiring)
- Compliant with CB, CE, UL safety requirements for LED lighting
- Constant Current Type
- Factory Wiring



E480967



SOLU M CO., LTD

150, Maeyoung-Ro, Youngtong-Gu, Suwon-Si, Gyeonggi-Do, Republic of Korea 443-743

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■ Electrical specification

No.	Item	Min	Typ	Max	Unit	Remark	
1	Nominal Input Voltage	120	220	277	Vac		
2	Variable Input Voltage	108	-	300	Vac		
3	Maximum Input Current	-	-	1	Arms		
4	Nominal Input Frequency	47	50/60	63	Hz		
5	Power Factor (PF)	90	-	-	%	1)	
6	Total Harmonic Distortion (THD)	-	-	20	%	1)	
7	Inrush Current	-	-	50	A		
8	Electrical Efficiency	87	89	-	%	2)	
9	Turn-on Delay	-	-	0.5	s	@Cold Start, 3)	
10	LED Output Current	1330	1400	1470	mA	@43Vdc Load	
11	LED Output Current Ripple	-	-	140	mA	20MHz Bandwidth, 2)	
12	LED Output Voltage	25	-	43	Vdc		
13	Adjustable of LED Current	1050	-	1400	mA	Rset	
14	12V Output Voltage	10.8	12	13.2	Vdc	2)	
15	12V Output Voltage Ripple	-	-	± 1.2	Vdc	20MHz Bandwidth, 2)	
16	12V Output Current	-	-	100	mA		
17	STBY Power Dissipation	-	-	0.5	Wh	LED Off_Remote Low	
18	Output Open LED Protection	-	54	59	Vdc	@Vpeak	
19	Output Short Circuit Protection	-	-	-	-	No Damage	
20	Storage Temperature	-40	25	80	°C		
21	Operating Temperature	-20	25	50	°C		
22	Case Temperature (Tc)	-	50	80	°C		
23	Humidity	20	-	85	%		
24	Insulation Resistance	10	-	-	MΩ	500Vdc between Input & Output	
25	Dielectric Withstand Voltage	Input to Output	3.11	-	-	kV	Apply for 1 minute 6)
26		Input to Case	3.11	-	-	kV	
27		Output to Case	0.5	-	-	kV	
28	Surge	Line to Line	4	-	-	kV	4)
29		Line to Ground	6	-	-	kV	4)
30	ESD	Contact Discharge	4	-	-	kV	5)
31		Air Discharge	8	-	-	kV	5)

※ Terminal Block Wiring Method : Factory Wiring as per UL1310

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Notes

- 1) Test Condition: 120~277Vac 50/60Hz Input, Max. dimming ,Ambient Temperature 25°C
- 2) Test Condition: 120~277Vac 60Hz Input, Max. dimming, 30min. Aging, Ambient Temperature 25°C, Measure at the cable-end
- 3) At least, Turn-On Time should be continued for 1sec.
- 4) Surge Specification above is higher than IEC/EN 61000-4-5. (Differential 1kV, Common 2kV)
- 5) ESD Specification above meets IEC/EN 61000-4-2 Requirements. (Contact 4kV, Air 8kV)
- 6) Determined by Paragraph 34.1.2, UL1310 or Paragraph 8.4.2, UL8750, EN61347-1, EN61347-2-13

Safety Standards

Including safety requirements above, the LED driver complies with the following safety standards:

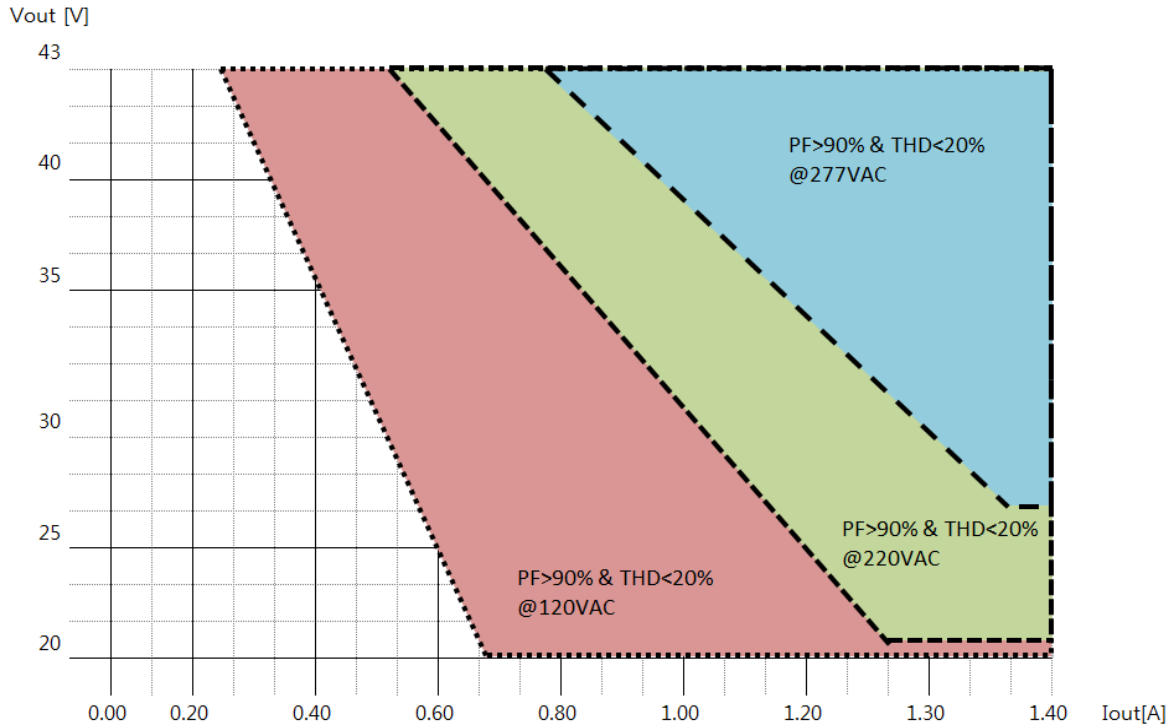
No.	Item	Description
1	UL8750, UL1310	UL Safety Standards (Class 2, Dry and Damp Location)
2	FCC Part 15, Class B	Conducted and Radiated Emission Test
3	IEC/EN 61347-1, IEC/EN 61347-2-13	IEC/EN Safety Standards
4	IEC/EN 55015	Conducted and Radiated Emission Test
5	IEC/EN 61000-3-2	Harmonic current emissions: Class C
6	IEC/EN 61000-3-3	Voltage Fluctuations and Flicker
7	IEC/EN 61000-4-2	Electrostatic Discharge (ESD): Contact 4kV, Air 8kV
8	IEC/EN 61000-4-3	Radio-frequency Electromagnetic Fields
9	IEC/EN 61000-4-4	Electrical Fast Transients (EFT)
10	IEC/EN 61000-4-5	Surges: Differential 1kV, Common 2kV
11	IEC/EN 61000-4-6	Injected Currents
12	IEC/EN 61000-4-8	Power Frequency Magnetic Fields
13	IEC/EN 61000-4-11	Voltage Dips and Short Interruptions

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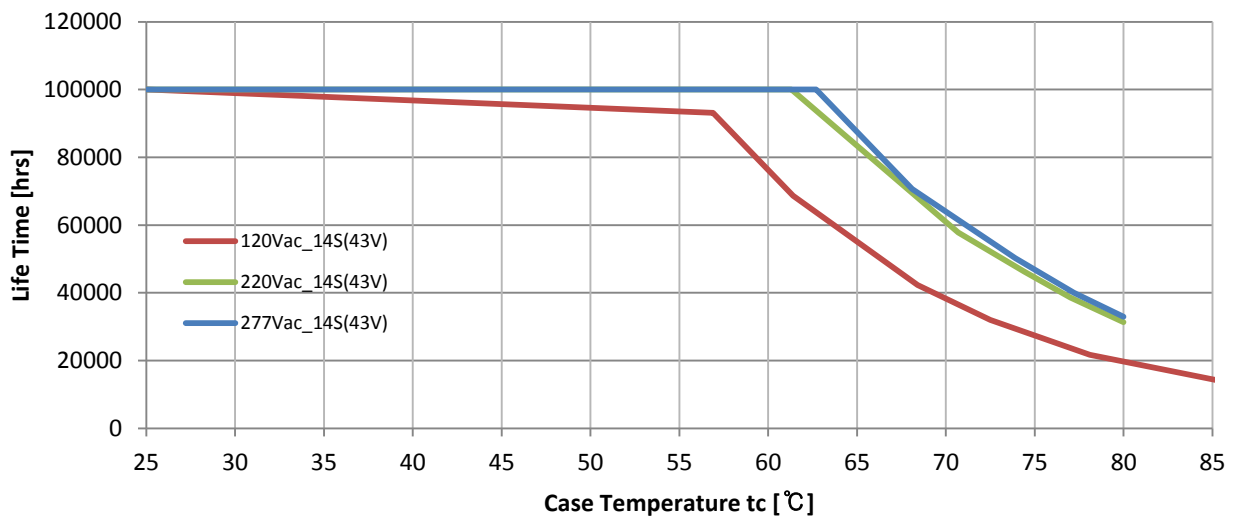
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■ Operating window



■ Life Time vs Tcase



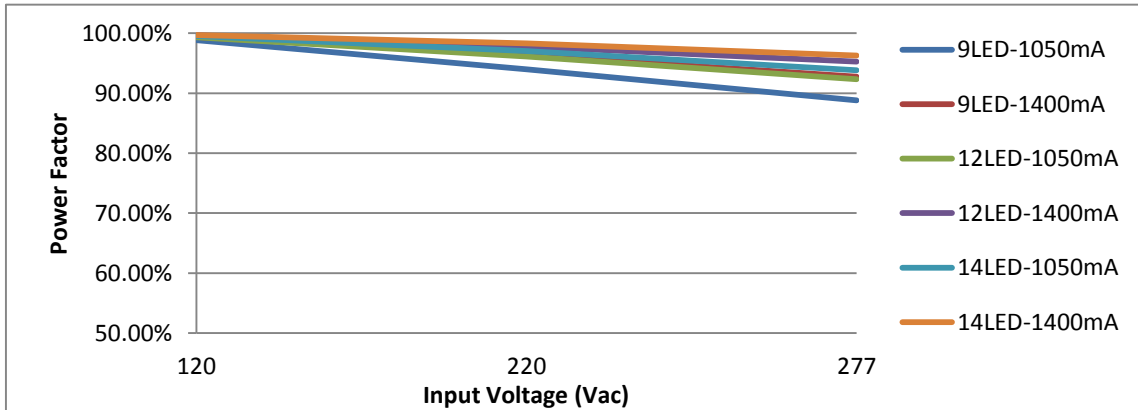
Remark) LED Driver has a rated lifetime of 50,000 hours @ Tc ≤ 65°C

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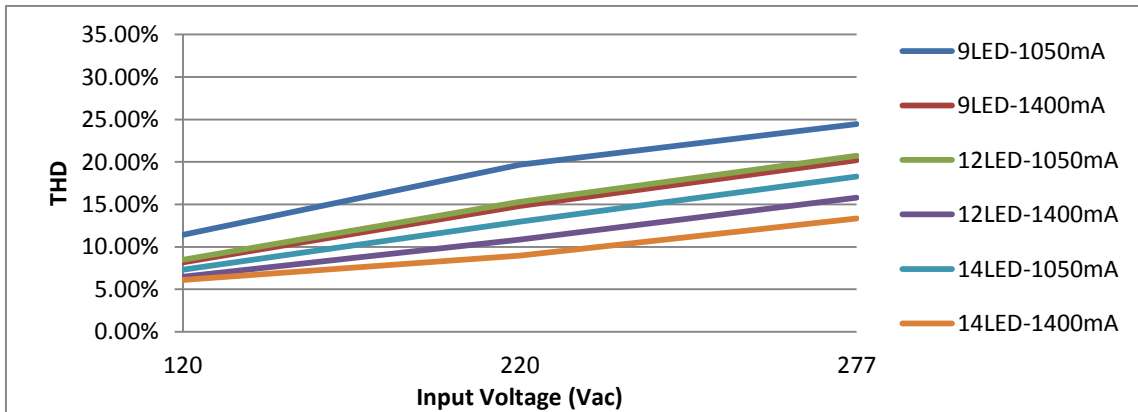
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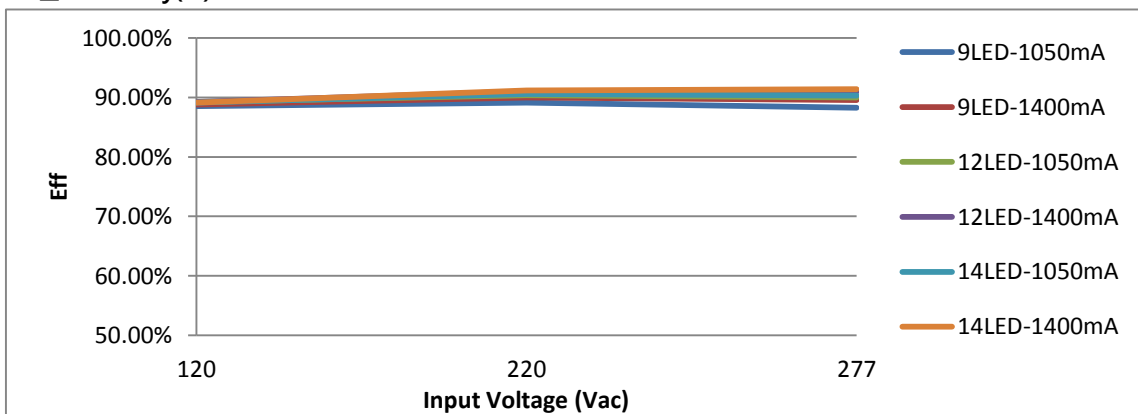
Power Factor



THD(%)



Efficiency(%)

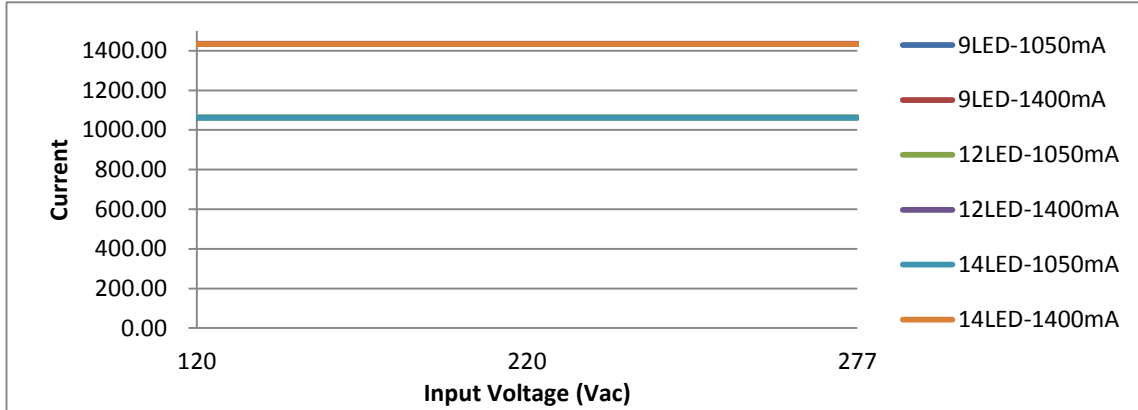


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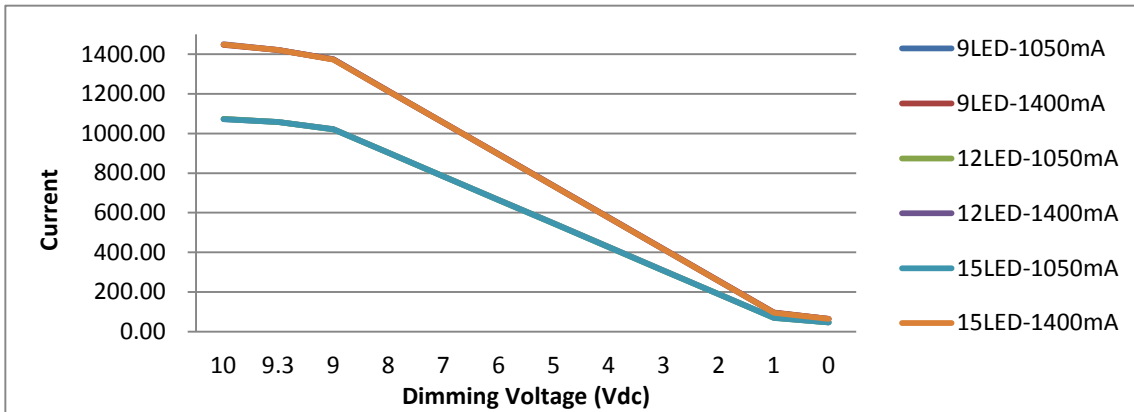
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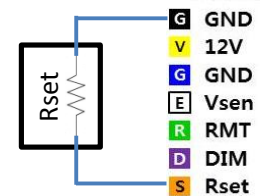
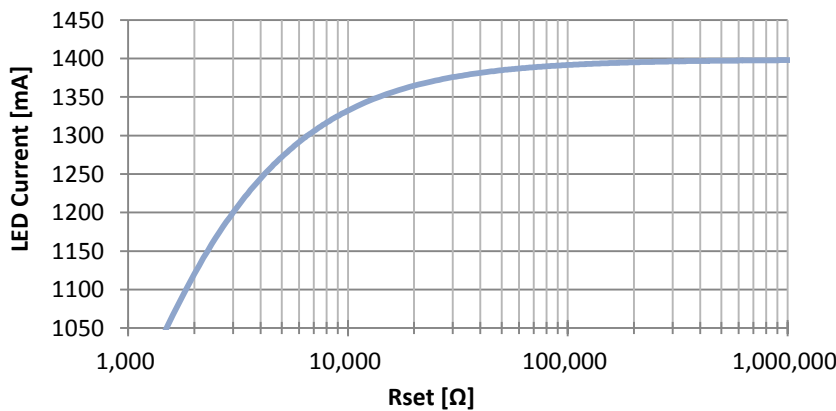
Output Current(mA)



Dimming curve



Adjustable of Current

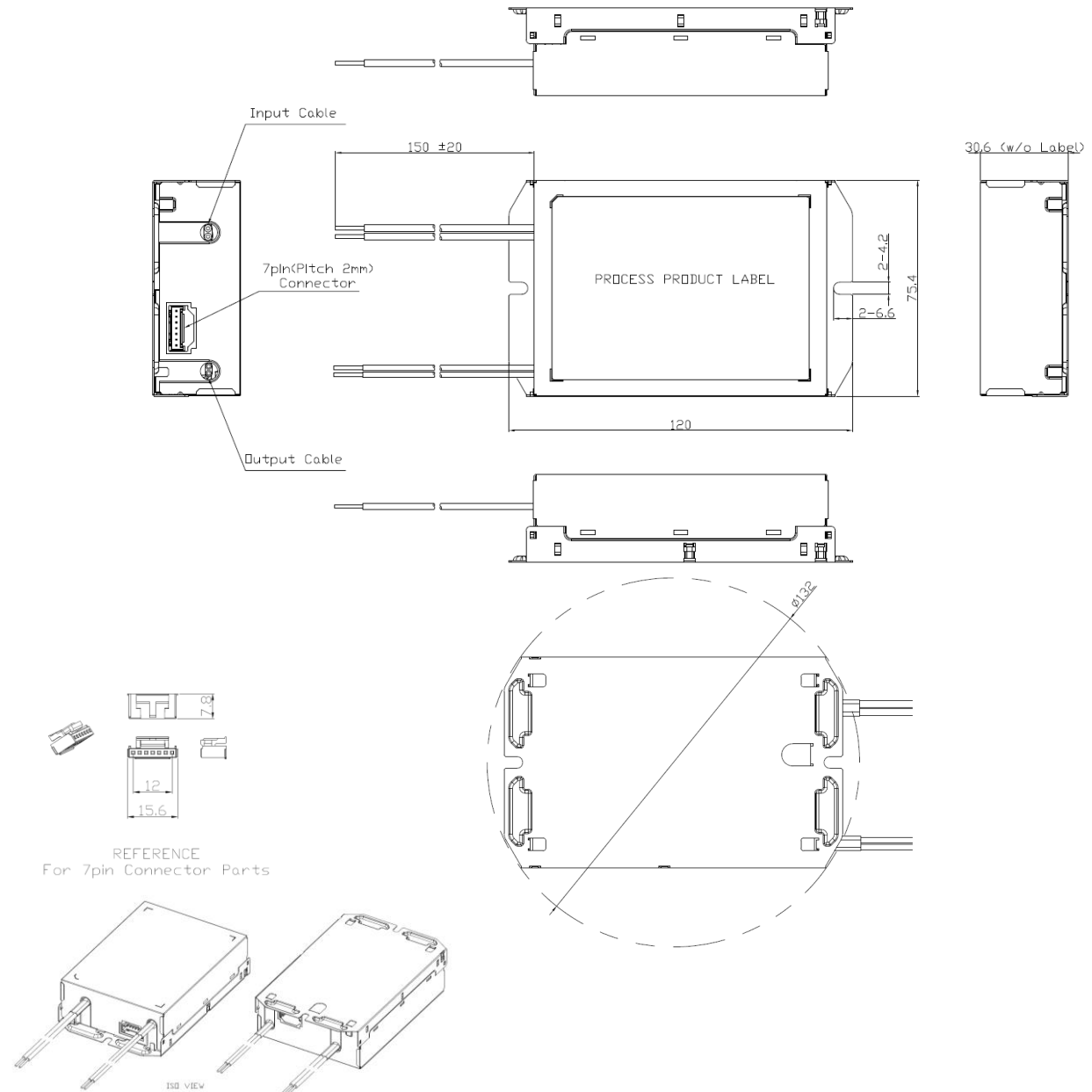


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■ Mechanical Specification



■ Enclosure Size

Unit	Width	Length	Height	Mount Length	Overall Length
mm	120.0	75.4	30.6	75.4	75.4
inch	4.72	2.97	1.20	2.97	2.97

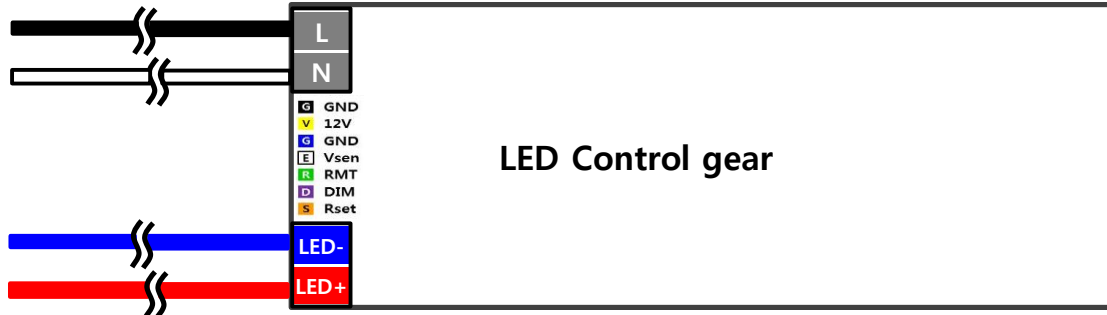
■ Case Material : Metal

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■ Wiring Diagram



※ Caution




- 1) Do not detach input and output wires after complete installation
- 2) Use wires certified by UL, CB
- 3) Wires should be less than 2m when installed in final equipment

■ Control Signal Connector Specification

Wafer	Housing	Terminal	Wire
SMAW200A-07 YEONHO	SMH200-07 YEONHO	YST200 YENOHO	22~28AWG

Remark) Output wiring specifications may be changed without notification

■ Rating Label Drawing

<p>INPUT U_{in} : 120 - 277V~ 50/60 Hz L LIVE (Black) I_{in} : Max. 1.0A 0.33A...220Vac&P_{out} =63W N Neutral (White) 0.19A...220Vac&P_{out} =27W P_{in} : Max. 77W λ_{PF} : 0.9</p> <p>CONTROL SIGNAL G GND (Black) V 12V (Yellow) G GND (Blue) E Vsen (White) R RMT (Green) D DIM (Violet) S Rset (Orange)</p> <p>12V OUTPUT P_{out} : 1.5 W I_{out} : 0.100 A V_{out} : Max. 13.2V</p> <p>LED OUTPUT L LED - (Blue) P_{out} : 63 W I_{out} : 1.4A V_{out} : 25 - 43V ~ L LED + (Red) U_{out} : 59V ~ (Open Lamp)</p>	<p>SOLUM LED CONVERTER</p> <p>Model : ILU700M142U1U Name : PSDV700142U</p> <p>Constant Current Flickerless / Unified Dim. Adjustable Output Current_Rset Low Standby Power Consumption Suitable for Class 2 Wiring</p> <p>Caution Suitable for dry and damp location Install in accordance with national and local electrical code. Use for LED Module only Do not open the case</p> <p>ta: -20 - 50°C tc: 80°C</p> <p>tc</p> <p>  </p> <p>HillSite Am Kronberger Hang 8, 65824 Schwalbach Ts. Germany. www.solu-m.com AS: +82-1588-0502 Made in China Dongguan SOLUM Electronics Co., Ltd.</p>
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Barcode Label



DATE
 BARCODE
 LOT NO

- 7 DEVELOPMENT Rev X01~99
- MP Rev A01~99
- 6 SERIAL No _4 Digit
- 5 MODEL CODE _3 Digit
- 4 PRODUCTION DATE _2 Digit
- 3 PRODUCTION MONTH _1 Digit
- 2 PRODUCTION YEAR _2 Digit
- 1 PRODUCTION COUNTRY _2 Digit

Mean	1.PLANT	2. YEAR	3. MONTH	4. DATE	5. CODE	6. SERIAL	7. Revision No
Digit	2	2	1	2	3	4	
EX.	C1 : DGSM C2 : Solytech C3 : IM C4 : Ap tech K1 : Korea	00~99	1...9,A,B	01~31	256	0001.. 9999	X01~99 : DEVELOPMENT A01~99: MP

Box Label

Material Code	ILU700M142U1U		USER Model Code
ITEM	PSDV700142U REV. A**		SOLUM Model Code
LOT No	*****	MAKER	SOLUM LOT NO & Quantity of Products
Quantity [PCS]	30	SOLUM	
EXP. Date	20**.**.* ~ 20**.**.*		Product Date ~ After 5 years
	000000084B001 E601 P0315D001		USER Barcode

Digit	Year		Month		Date		Factory			Fixed		
	22	23	24	25	26	27	28	29	30			
P	0	1	0	1		D	0	0	1			
N→2015	01~12月		01~31日		D : DGSM							
P→2016					S : Solytech							
Q→2017					M : IM							
R→2018					A : Aptech							

#6 USER Barcode

Digit	Quantity Per BOX									BOX Size	Serial No.				Blank	Vender Code						Blank	Year			Month			Date			Factory			Fixed		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30							
	0	0	0	0	0	0	0	1	0	B	0	0	1		E	6	0	1				P	0	1	0	1	D	0	0	1							
										A : Pallet B : BOX		001~999										N→2015			01~12月			01~31日			D : DGSM						
P→2016																						S : Solytech															
Q→2017																						M : IM															
R→2018																						A : Aptech															

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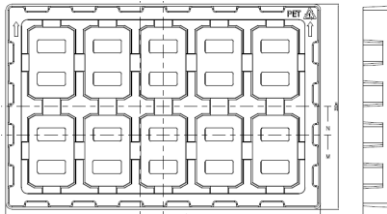
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■ Packing Drawing

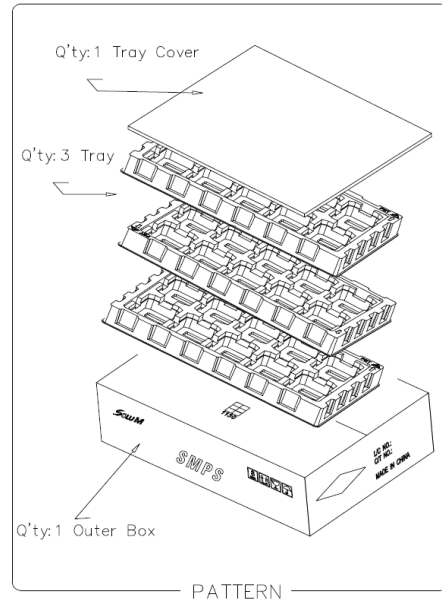
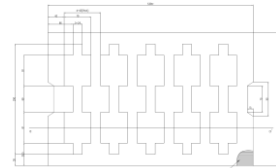
1. Out Box

Dimension	540(L) 355(W) 122(H) [mm]
Weight	< 11Kg
Quantity	30EA / 1Box

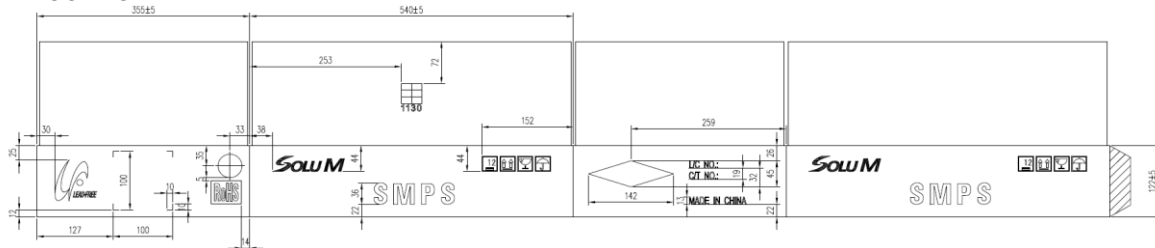
Tray



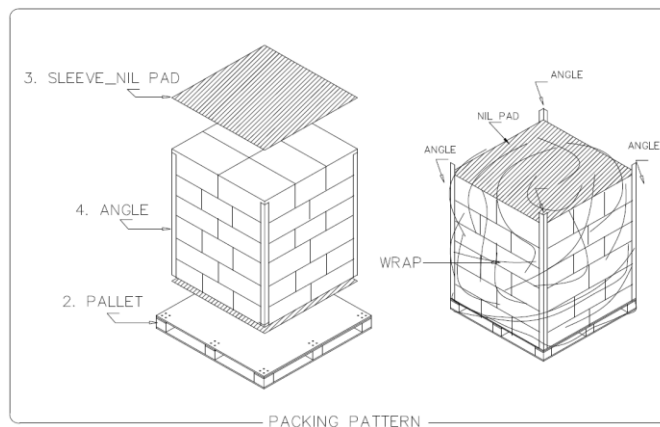
Tray Cover



OUT BOX



2. Pallet



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