



■ **Model Name : PSDV160351B**
ILW160N351N1B

■ **Features :**

- Class II
- UL8750 / UL1310 Class 2
- Flickerless
- Full-protection provided: OCP/OVP/OTP/SCP/OLP
- Low Power Dissipation @ No Load : <1.0W
- Wide Vout : 25 ~ 40Vdc
- Meets safety requirements for lighting
- Constant Current Type

한국표준협회



SOLUM Co., Ltd

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

TEL: +82-1588-0502, www.solu-m.com

■ Electrical specification

No.	Item	Min	Typ	Max	Unit	Remark	
1	Nominal Input Voltage	100		240	Vac		
2	Wide Input Voltage	90		264	Vac		
3	Maximum Input Current			0.35	Arms		
4	Nominal Input Frequency	50		60	Hz		
5	Wide Input Frequency	47		63	Hz		
6	Power Factor (PF)	0.9				1)	
7	Total Harmonic Distortion (THD)			13	%	1)	
8	Inrush Current	Meets NEMA 410					2)
9	Output Voltage	25	37	40	Vdc		
10	Output Current	326	350	375	mA	@40Vdc Load	
		326	350	375	mA	@37Vdc Load	
		335	360	385	mA	@25Vdc Load	
11	Ripple Current			35	mA	20MHz Bandwidth, 3)	
12	Turn-on Delay			1,000	ms	@Cold Start, 4)	
13	Electrical Efficiency	80	84		%	3)	
14	No Load Power Dissipation			1	W	@ LED OPEN	
15	Output Open LED Protection		42.5	50	Vdc	Auto-recovery	
16	Output Short Circuit Protection	-	-	-	-	Auto-recovery	
17	Over-temperature Protection	-	-	-	°C	Auto-recovery	
18	Case Temperature (Tc)			80	°C		
19	Storage Temperature	-20		80	°C		
20	Operating Temperature	-20		50	°C		
21	Humidity	20		85	%		
22	Insulation Resistance	10			MΩ	500Vdc between Input & Output	
23	Differential Mode (Line to Line)	2.5	5		kV	5)	
24	Common Mode (Line to Ground)	8			kV	5) 6)	
25	Contact Discharge Test Voltage	2	4		kV	7)	
26	Air Discharge Test Voltage	4	8		kV	7) 8)	
27	Dielectric Withstand Voltage	Input to Output	3,750			Apply for 1 minute 9)	
28		Input to Case	-	-	-		Vac
29		Output to Case	-	-	-		Vdc

SOLUM Co., Ltd

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

TEL: +82-1588-0502, www.solu-m.com

Application Notes

- 1) Test Condition: 90/264Vac 50/60Hz Input, Typical Electric Load, Ambient Temperature 25°C, Measure at the cable-end
- 2) Input 120Vac, < 192A_{peak}@1.2ms, < 74I²t
- 3) Test Condition: 240Vac 60Hz Input, LED Max. Load, 30min Aging, Ambient Temperature 25°C
- 4) At least, Turn-on Time should be continued for 1sec.
- 5) Surge Specification above is higher than IEC/EN 61000-4-5 (Differential 1kV, Common 2kV)
- 6) The metal case of the LED driver must be connected with F.G
- 7) ESD Specification above meets IEC/EN 61000-4-2 Requirements (Contact 4kV, Air 8kV)
- 8) The metal case of the driver should be grounded.
- 9) 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:

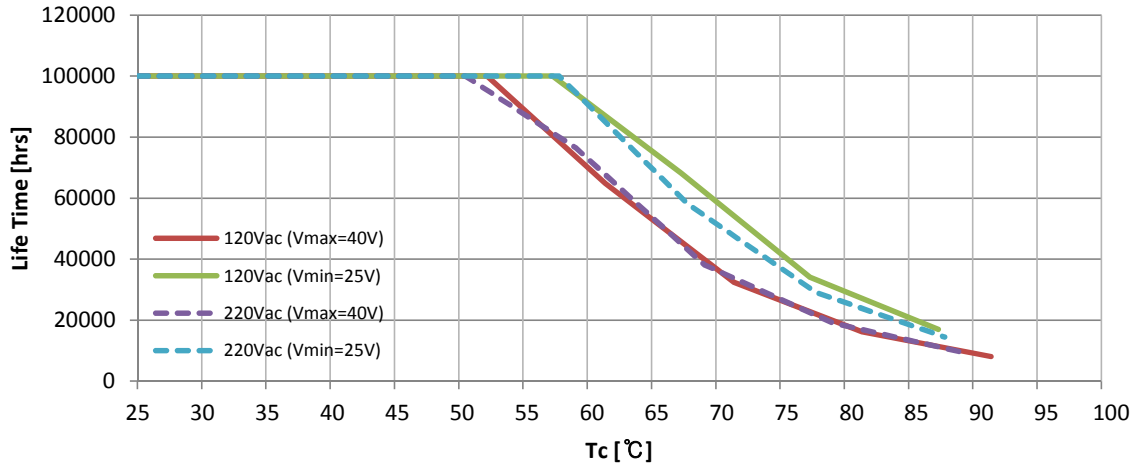
No.	Item	Description
1	UL8750, UL1310	UL Safety Standards (Class 2, Dry and Damp Location)
2	FCC Part 15, Class B	Conducted and Radiated Emission Test
3	IEC/EN 61347-1, IEC/EN 61347-2-13	IEC/EN Safety Standards
4	IEC/EN 55015	Conducted and Radiated Emission Test
5	IEC/EN 61000-3-2	Harmonic current emissions: 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

SOLUM Co., Ltd

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

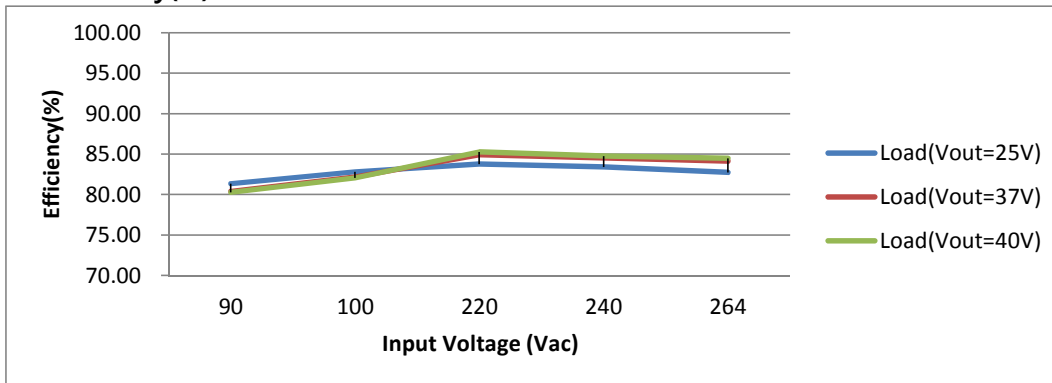
TEL: +82-1588-0502, www.solu-m.com

■ Life Time vs Tcase



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

■ Efficiency(%)

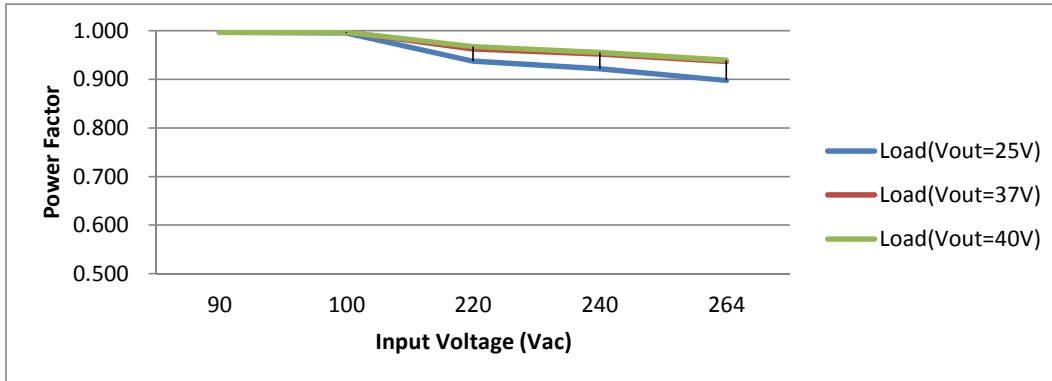


SOLUM Co., Ltd

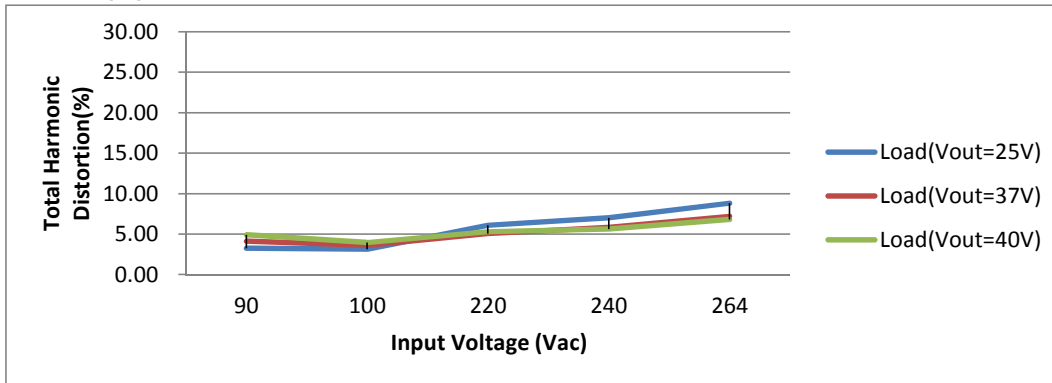
150, Maeyoung-Ro, Youngtong-Gu, Suwon-Si, Gyeonggi-Do, Republic of Korea 443-743

TEL: +82-1588-0502, www.solu-m.com

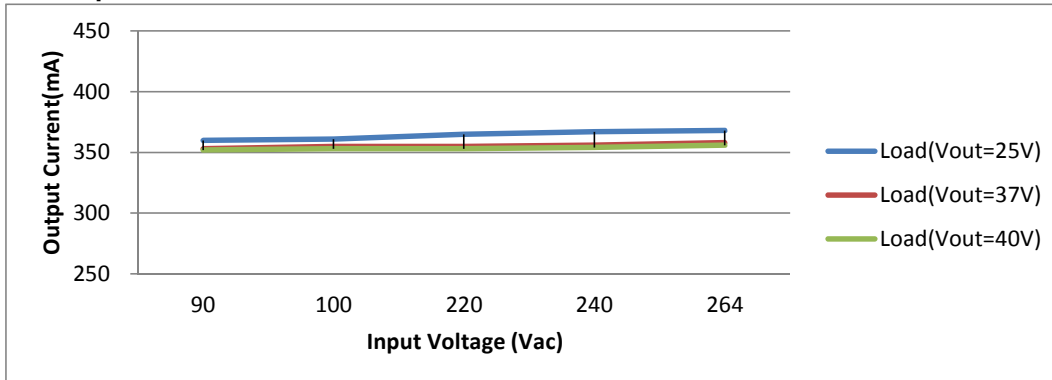
■ Power Factor



■ THD(%)



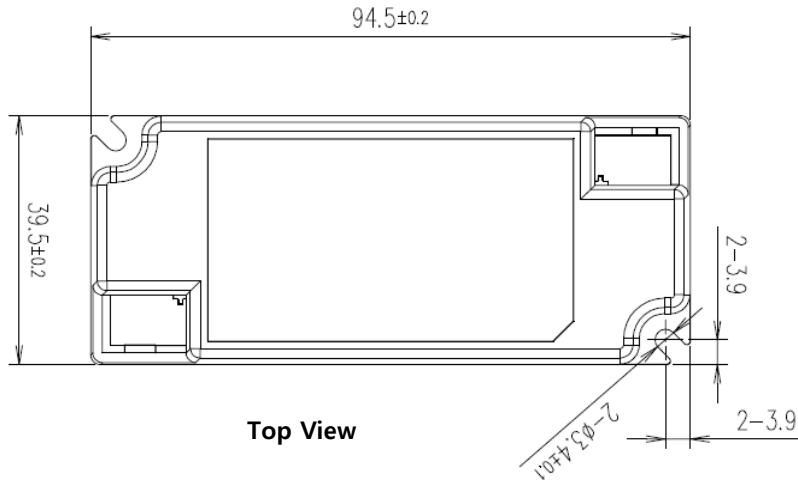
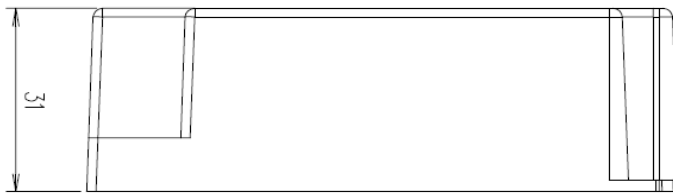
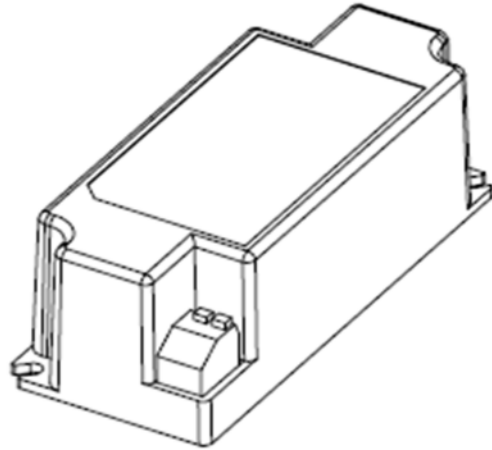
■ Output Current(mA)



SOLUM Co., Ltd

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

TEL: +82-1588-0502, www.solu-m.com

■ Mechanical Specification

Top View

Side View

■ Enclosure Size

Unit	Width	Length	Height	Mount Length	Overall Length
mm	39.5	94.5	31.0	86.7	94.5
inch	1.56	3.72	1.22	3.41	3.72

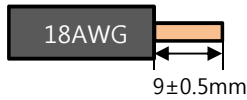
■ Case Material : PC

SOLUM Co., Ltd

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

 TEL: +82-1588-0502, www.solu-m.com

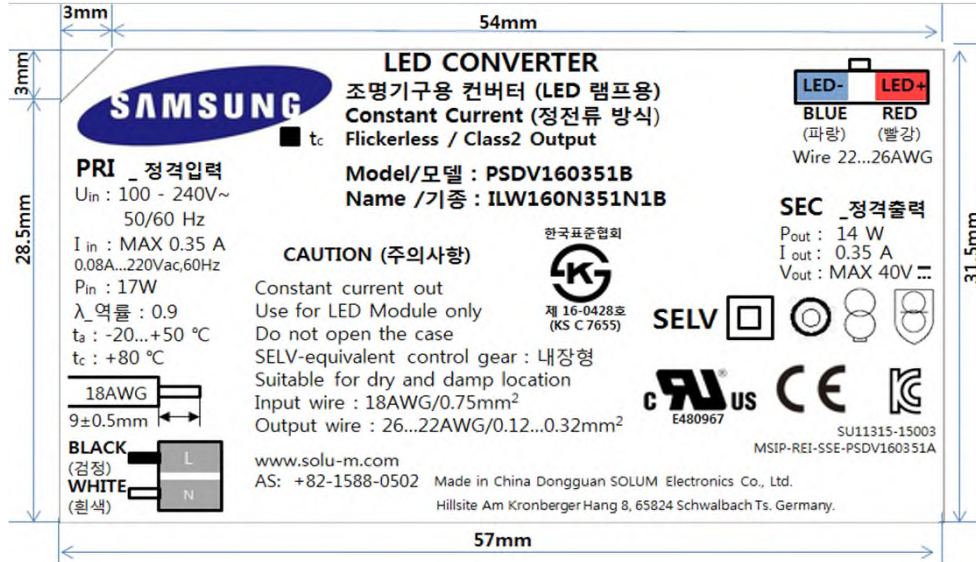
■ Wiring Diagram



CNT (B Type)	
Input	Output
Terminal Block (Pitch 3.5)	CNT (Pitch 2.0mm, 1R 3P)
Wire 18AWG	Wire 22-26AWG

Connector	Housing	Wire
SMW250-03A (yeonho)	SMH250-03A (yeonho)	22AWG
A2515WV0-3P-D (JWT)	A2515H00-3P (JWT)	

■ Rating Label Drawing




SOLUM Co., Ltd

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

TEL: +82-1588-0502, www.solu-m.com

Barcode Label

2016-01-01



C 1 1 4 1 0 7 1 4 2 0 0 0 1 REV.A03

→ DATE

→ BARCODE

→ LOTNO

→ 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 COUNTI _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	142	0001.. 9999	X01~99 : DEVELOPMENT A01~99: MP

Box Label

Material Code	ILW160N351N1B		→ USER Model Code
ITEM	PSDV160351B  REV. A**		→ SOLUM Model Code
LOT No	*****	MAKER	→ SOLUM LOT NO & Quantity of Products
Quantity [PCS]	84	SOLUM	
EXP. Date	20**.**.* ~ 20**.**.*		→ Product Date ~ After 5 years
	 ***** **		→ USER Barcode

Digit	Year	Month	Date	Factory	Fixed
		1 2 3 4 5	6	7 8 9	
	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	

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
	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 P→2016 Q→2017 R→2018	01~12月	01~31日	D : DGSM S : Solytech M : IM A : Aptech					

SOLUM Co., Ltd

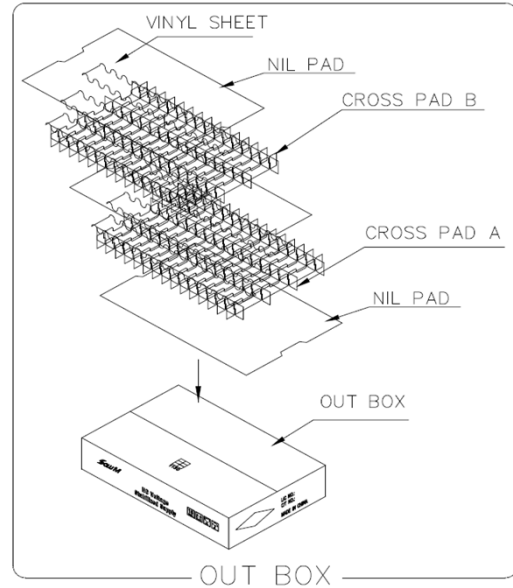
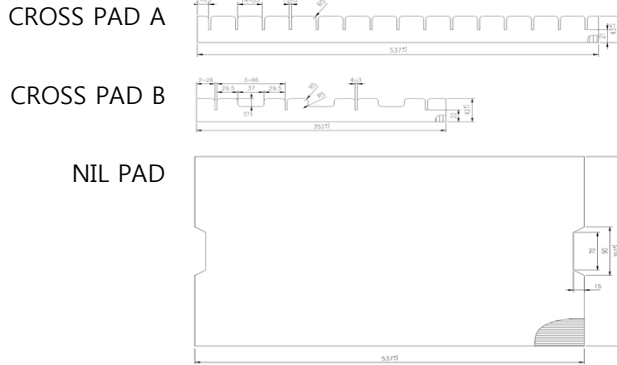
150, Maeyoung-Ro, Youngtong-Gu, Suwon-Si, Gyeonggi-Do, Republic of Korea 443-743

TEL: +82-1588-0502, www.solu-m.com

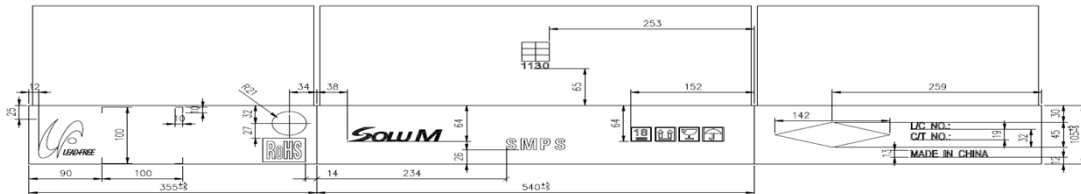
■ Packing Drawing

1. Out Box

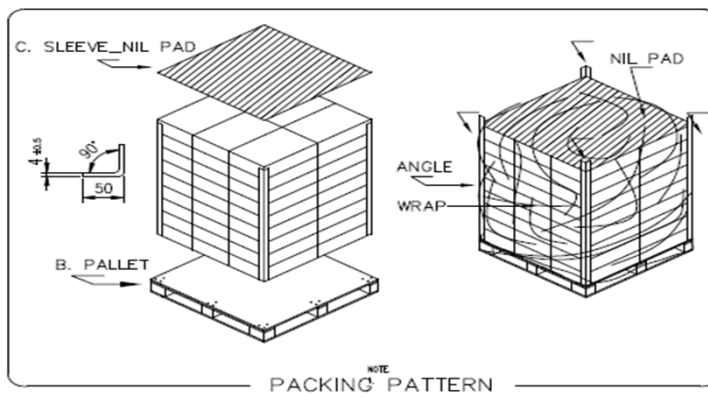
Dimmension	540(L) 355(W) 105(H) [mm]
Weight	< 10Kg
Quantity	84EA / 1Box



OUT BOX



2. Pallet



SOLUM Co., Ltd

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

TEL: +82-1588-0502, www.solu-m.com