



ELECTRO-MECHANICS

ILU600N102U1A Flickerless Power supply

PSDV600102A



■ Model Name : PSDV600102A
 ILU600N102U1A

■ Features :

- Class II Power Supply
- Flickerless, Dimmable
- Full-protection integrated: OCP/OVP/OTP/SCP/OLP
- Low Power Dissipation (Stand-by mode: <0.4Wh, No-load mode: <1W)
- Wide Vout : 27~50Vdc
- UL8750 / UL1310 (Suitable for Class 2 Wiring)
- Compliant with CB, CE, KC safety requirements for LED lighting
- Constant Current Type



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PSDV600102A**■ Electrical specification**

No.	Item	Min	Typ	Max	Unit	Remark	
1	Nominal Input Voltage	110		277	Vac		
2	Variable Input Voltage	100		300	Vac		
3	Maximum Input Current			0.8	Arms		
4	Nominal Input Frequency	50		60	Hz		
5	Variable Input Frequency	47		63	Hz		
6	Power Factor (PF)	0.9				1)	
7	Total Harmonic Distortion (THD)			28	%	1)	
8	Inrush Current	Meets NEMA 410				6)	
9	Output Voltage	30	42	50	Vdc		
10	Output Current	1000	1050	1100	mA		
11	Ripple Current			105	mA	20MHz Bandwidth, 2)	
12	Turn-on Delay			1000	ms	@Cold Start	
13	Electrical Efficiency	85	89		%	2)	
14	Minimum Dimming Range			105	mA	@Dim Input = 0V	
15	12V Output Voltage	10.8	12	13.2	V		
16	12V Output Current			200	mA		
17	No Load Power Dissipation			1	W	@ All Output Open	
18	Stand-by Power Consumption			0.4	W	@ Remote < 1Vdc	
19	Output Open LED Protection	-	-	60	Vdc	Auto-recovery	
20	Output Short Circuit Protection	-	-	-	-	Auto-recovery	
21	Over-temperature Protection	-	-	-	°C	Auto-recovery	
22	Case Temperature (tc)			80	°C		
23	Storage Temperature	-40		80	°C		
24	Operating Temperature	-20		50	°C		
25	Humidity	20		85	%		
26	Insulation Resistance	10			MΩ	500Vdc between Input & Output	
27	Differential Mode (Line to Line)	4			kV	4)	
28	Common Mode (Line to Ground)	8			kV		
29	Contact Discharge Test Voltage	2	4		kV	5)	
30	Air Discharge Test Voltage	4	8		kV	5)	
31	Dielectric Withstand Voltage	Input to Output	3,750	-	-	Vac	Apply for 1 minute 7)
32		Input to Case	(N/A)		Vac		
33		Output to Case	(N/A)		Vdc		

※ Terminal Block Wiring Method: Factory Wiring as per UL1310

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**Remarks**

- 1) Test Condition: 110/277Vac 50/60Hz Input, Typical Electric Load, Ambient Temperature 25°C, Measure at the end of PCB
- 2) Test Condition: 240Vac 60Hz Input, LED Max. Load, 30min Aging, Ambient Temperature 25°C
- 3) Minimum and maximum value is $\pm 5\%$ of typical value unless specified
- 4) Surge Specification above shall be 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) Input 120Vac, < 192Apeak, < 1.2ms, < 74A2sec
- 7) 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 shall be complied with the following standards:

No.	Item	Description
1	UL 8750, UL 1310	UL Safety Standards (Class 2 Output, 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 for LED Lighting
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

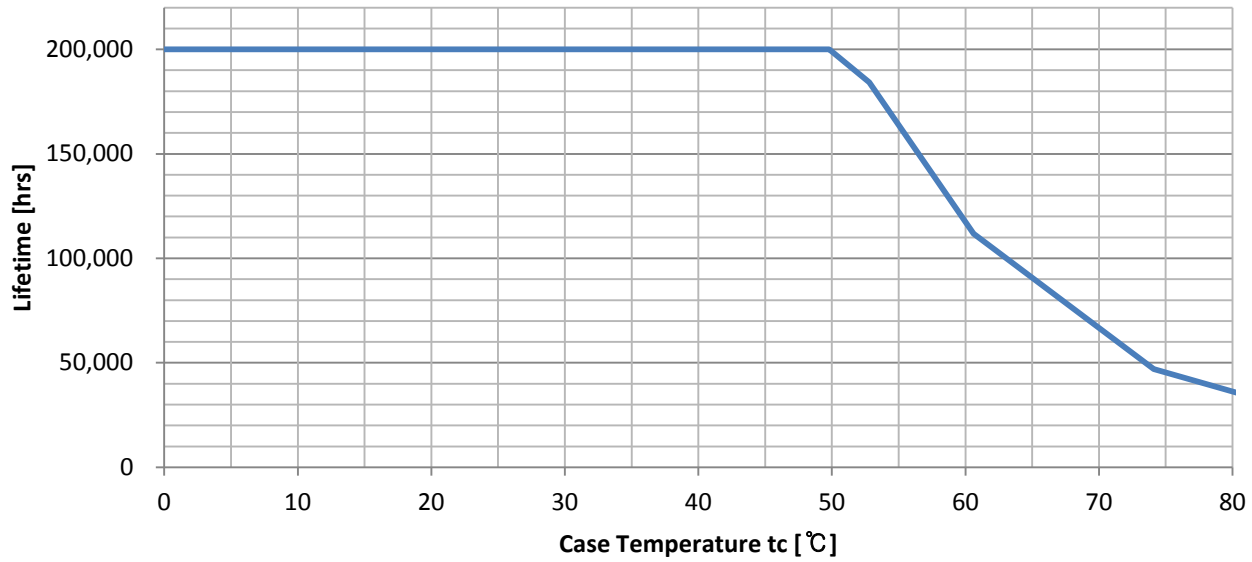
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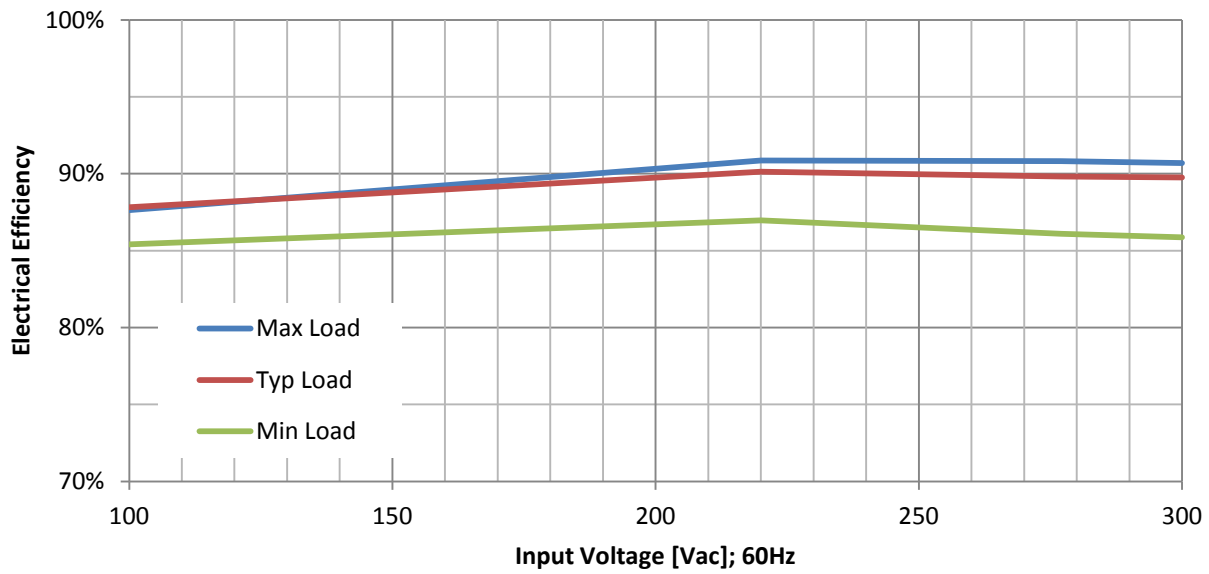


Life Time vs Tcase



Remark) LED Driver has a rated lifetime of 50,000 hours @ $T_c \leq 70^\circ\text{C}$

Efficiency [%]

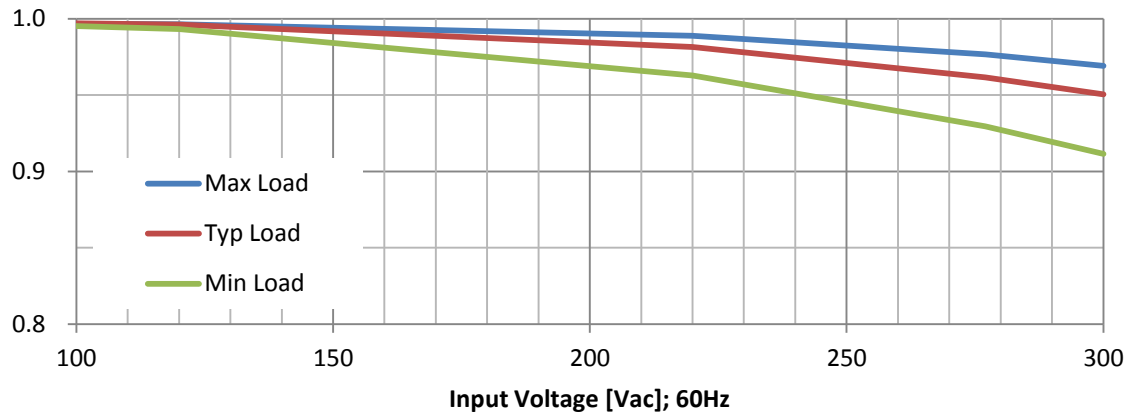


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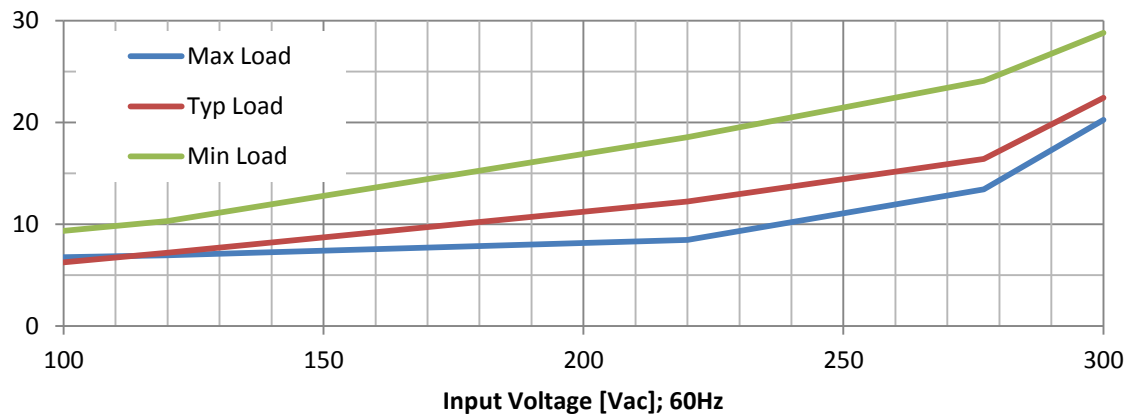
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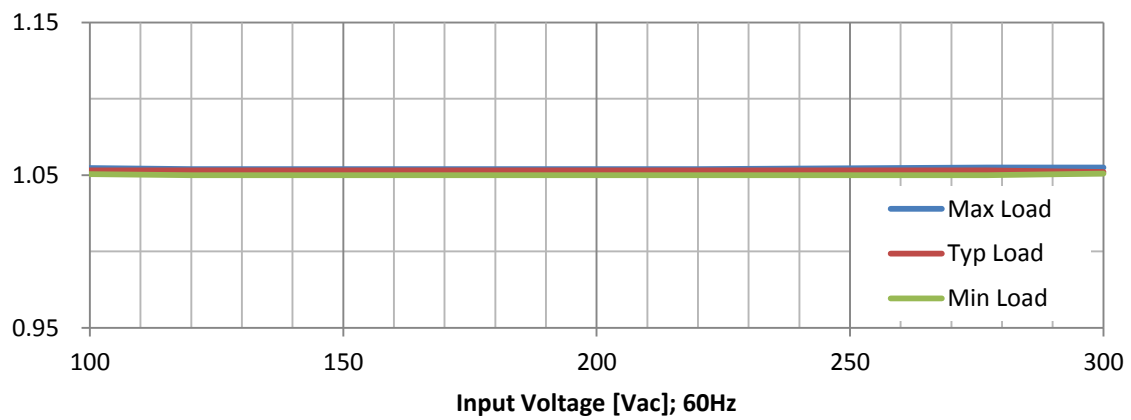
■ Power Factor



■ THD [%]



■ Output Current [A]

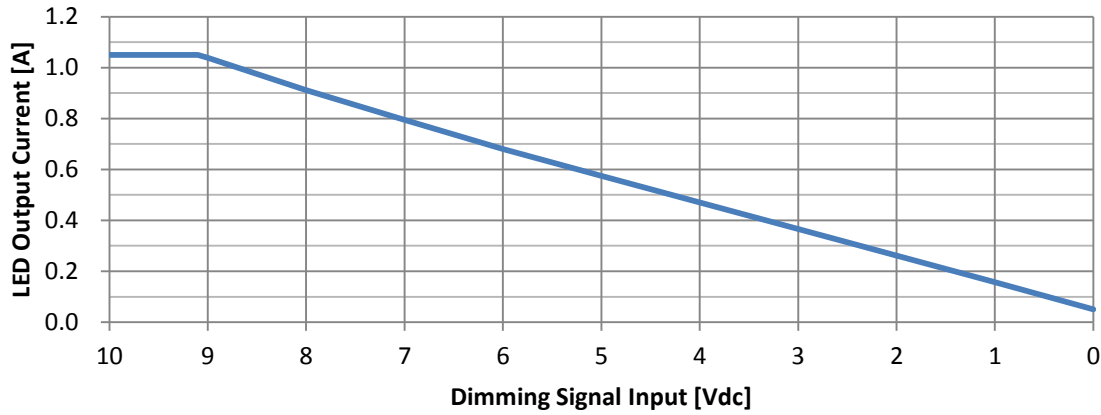


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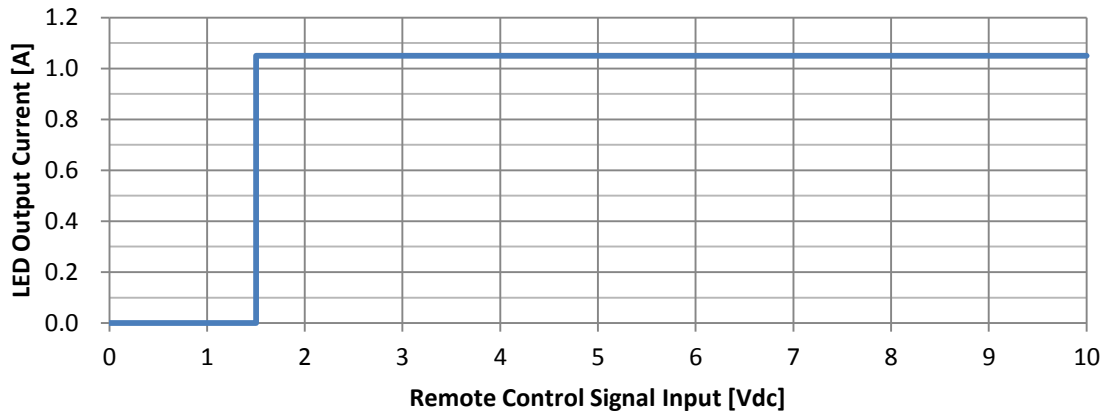
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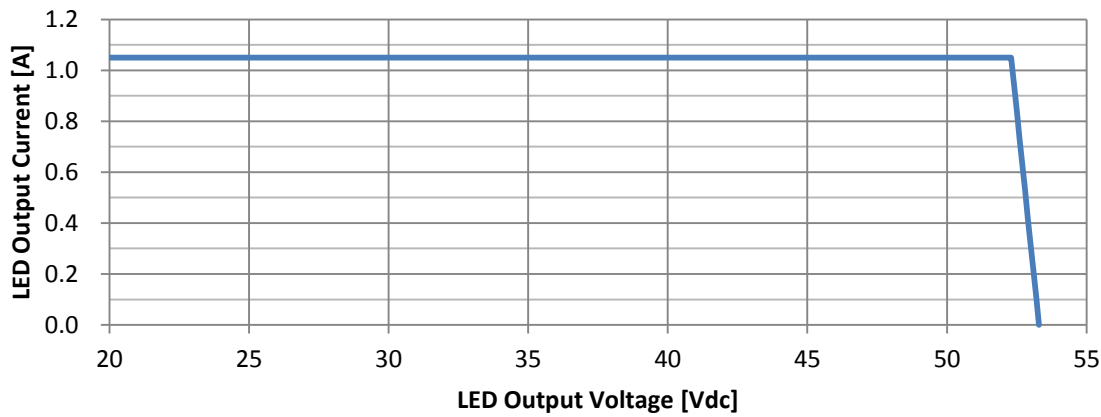
■ Dimming Curve



■ Remote On/Off Control



■ CC/CV Operation

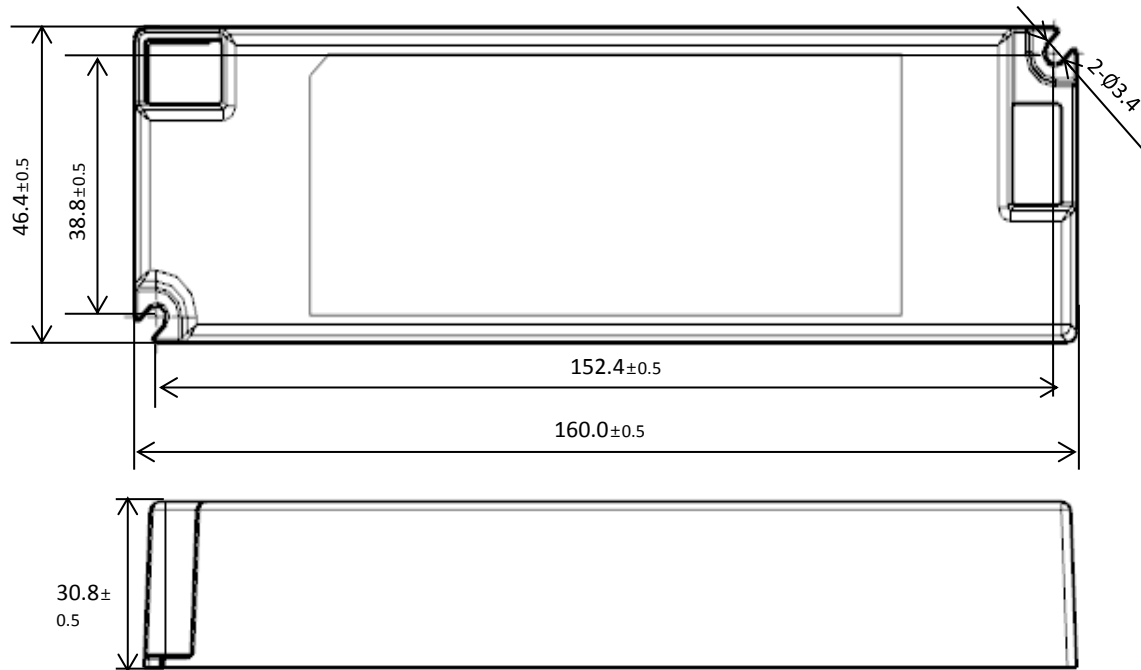


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■ Mechanical Specification



■ Enclosure Size

Unit	Width	Length	Height	Mount Length	Overall Length
mm	46.4	160.0	30.8	160.0	160.0
inch	1.83	6.30	1.21	6.30	6.30

■ Case Material : PC

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■ Wiring Diagram



■ Output Connector Specification

WAFER	HOUSING	TERMINAL	WIRE
SMW200-12C YEONHO	SMH200-12C YEONHO	YST200-C YEONHO	AWG #22

Remark) Output wiring specifications may be changed without notification

■ Rating Label Drawing

BLACK (검정) L
WHITE (흰색) N

18AWG
9±0.5mm

PRI/INPUT/정격입력
Uin: 110 - 277V~
50/60Hz
Iin: 0.8A Max
Pin: 60W
PF(역률, λ) > 0.9

ta: -20 - 50°C
tc: 80°C

LED CONVERTER
조명기구용 컨버터 (LED 램프용)
Constant Current (정전류 방식)
Flickerless / 0-10V Dimmable
Low Standby Power Consumption
Suitable for Class 2 Wiring

Model/모델 : PSDV600102A
Name/기종 : ILU600N102U1A

E321686 SU11315-15004 MSIP-REI-SSE-PSDV600102A

www.samsungsem.com
A/S: +82-31-210-5114
Made in China Dongguan Samsung Electro-Mechanics

Connector Block

DIM	2	1	GND
RMT	4	3	GND
12V+	6	5	12V+
LED-	8	7	LED-
	10	9	
LED+	12	11	LED+

SEC/LED OUT/LED출력
Pout : 53 W
Iout : 1.050 A
Vout : MAX 50V $\overline{\text{~}}$

SEC/12V OUT/12V출력
Pout : 2.5 W
Iout : 0.200 A
Vout : MAX 13.2V $\overline{\text{~}}$

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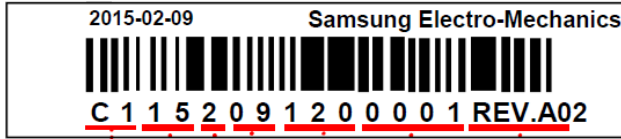


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PSDV600102A

Barcode Label



- MODEL / PRODUCTION
- 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 : DSEM C2 : Solytech C3 : IM C4 : Ap tech K1 : Korea	00~99	1...9,A,B	01~31	120	0001.. 9999	X01~99 : DEVELOPMENT A01~99: MP

Box Label

Material Code	ILU600N102U1A	
ITEM	PSDV600102A REV.A**	
LOT No	*****	MAKER
Quantity [PCS]		SEMCO
Exp. Date	20**.**.** ~ 20**.**.**	

- #1 Material Code : User Model Code
- #2 ITEM : SEMCO Model Code
- #3 LOT No : SEMCO LOT NO
- #4 Quantity : Quantity of Products
- #5 Exp. Date : Product Date ~ After 5 years
- #6 USER Barcode

Digit	Year			Month		Data		Factory		Fixed	
	1	2	3	4	5	6	7	8	9		
K	0	4	2	4		S	0	0	1		
K → 2012	01~12月		01~31日		D : DSEM						
L → 2013					S : Solytech						
M → 2014					M : IM						
N → 2015					A : Ap tech						

#6 USER Barcode

Digit	Quantity Per BOX									BOX Size	Serial No			Blank	Vender Code					Blank	Year	Month		Data		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	2	B	0	0	1		E	6	0	1				K	0	4	2	4	S	0	0	1
											A: Pallet B: BOX	001~999											K → 2012 L → 2013 M → 2014 N → 2015	01~12月	01~31日	D : DSEM S : Solytech M : IM A : Ap tech				

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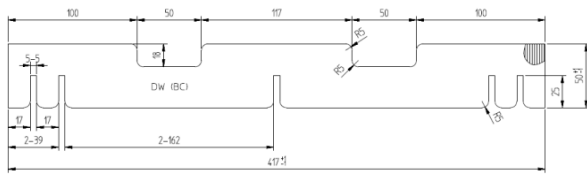
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■ Packing Drawing

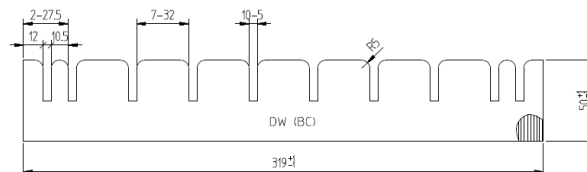
1. Out Box

Dimension	420(L) 322(W) 180(H) [mm]
Weight	10.5kg /BOX
Quantity	42EA /BOX

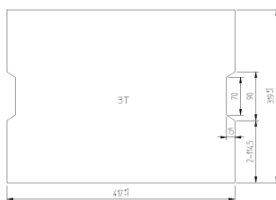
CROSS PAD (A)



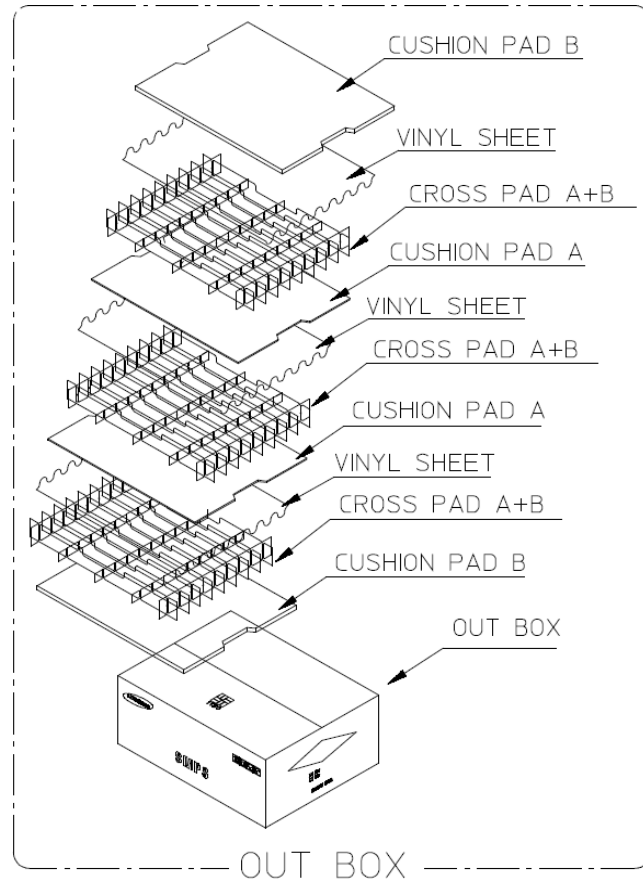
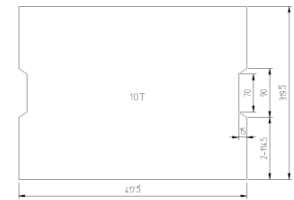
CROSS PAD (B)



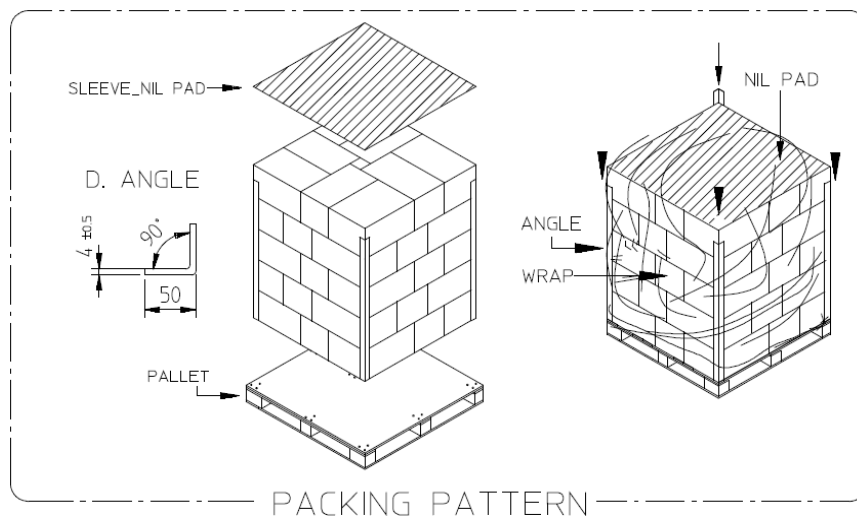
CUSHION PAD (A)



CUSHION PAD (B)



2. Pallet



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