



- Model Name : SLW320N571N1E
- Model Code : PSNV320571E  
PSNV320571F  
PSNV320571G (for SAMSUNG)  
PSNV320571H (for SAMSUNG)

- Features :
  - Class II
  - Flickerless
  - Full-protection provided: OCP/OVP/OTP/SCP/OLP
  - Low Power Dissipation @ No Load : <0.5W
  - Wide Vout : 23 ~ 46Vdc
  - Meets safety requirements for lighting
  - Constant Current Type

한국표준협회



제 16-0428호  
(KS C 7655)



SU11315-16025  
MSIP-REI-SLU-SLW320N571N1A



### 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             | 220   | 250  | Vac        |  |                          |
| 2   | Wide Input Voltage               | 90              | 220   | 275  | Vac        |  |                          |
| 3   | Maximum Input Current            | -               | -     | 0.45 | Arms       |  |                          |
| 4   | Nominal Input Frequency          | 50              | -     | 60   | Hz         |  |                          |
| 5   | Wide Input Frequency             | 47              | -     | 63   | Hz         |  |                          |
| 6   | Power Factor (PF)                | 90              | 95    | -    | %          | 1)                                       |                          |
| 7   | Total Harmonic Distortion (THD)  | -               | 12    | 20   | %          | 1)                                       |                          |
| 8   | Inrush Current                   | -               | -     | 30   | Arms       | Duration 500 $\mu$ s , 9) Meets NEMA 410 |                          |
| 9   | Output Voltage                   | 23              | 36    | 46   | Vdc        |  |                          |
| 10  | Output Current                   | 537             | 565   | 593  | mA         | @46Vdc Load                              |                          |
|     |                                  | 542             | 570   | 599  | mA         | @36Vdc Load                              |                          |
|     |                                  | 551             | 580   | 609  | mA         | @23Vdc Load                              |                          |
| 11  | Ripple Current                   | -               | 25    | 57   | mA         | 20MHz Bandwidth, 2)                      |                          |
| 12  | Turn-on Delay                    | -               | 300   | 500  | ms         | @Cold Start, 3)                          |                          |
| 13  | Electrical Efficiency            | 85              | 88    | -    | %          | 2)                                       |                          |
| 14  | No Load Power Dissipation        | -               | -     | 0.5  | W          | @ LED OPEN                               |                          |
| 15  | Output Open LED Protection       | -               | 58    | 59   | 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              | -     | -    | M $\Omega$ | 500Vdc between Input & Output            |                          |
| 23  | Differential Mode (Line to Line) | 2.5             | 5     | -    | kV         | 4)                                       |                          |
| 24  | Common Mode (Line to Ground)     | 8               | -     | -    | kV         | 4) 5)                                    |                          |
| 25  | Contact Discharge Test Voltage   | 4               | -     | -    | kV         | 6)                                       |                          |
| 26  | Air Discharge Test Voltage       | 8               | -     | -    | kV         | 6) 7)                                    |                          |
| 27  | Dielectric Withstand Voltage     | Input to Output | 3,750 | -    | -          | Vac                                      | Apply for 1 minute<br>8) |
| 28  |                                  | Input to Case   | 1,000 | -    | -          | Vac                                      |                          |
| 29  |                                  | Output to Case  | 500   | -    | -          | Vdc                                      |                          |

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## Application Notes

- 1) Test Condition: 100/250Vac 50/60Hz Input, Typical LED Load, Ambient Temperature 25°C, Measure at the cable-end
- 2) Test Condition: 220Vac 60Hz Input, LED Max. Load, 30min Aging, Ambient Temperature 25°C
- 3) At least, Turn-On Time should be continued for 0.5sec.
- 4) Surge Specification above is higher than IEC/EN 61000-4-5 (Differential 1kV, Common 2kV)
- 5) The metal case of the LED driver must be connected with F.G
- 6) ESD Specification above meets IEC/EN 61000-4-2 Requirements (Contact 4kV, Air 8kV)
- 7) The metal case of the driver should be grounded.
- 8) Determined by Paragraph 34.1.2, UL1310 or Paragraph 8.4.2, UL8750, EN61347-1, EN61347-2-13
- 9) NEMA 410 peak current requirement

Complied  $I^2t(A^2sec)$  @ peak  $\leq 2ms$

| Steady State Current (A) | Peak Current (A) 120 Vac | Pulse Width 120 Vac (ms) | $I^2t$ (A <sup>2</sup> sec) 120 Vac | Peak Current (A) 277 Vac | Pulse Width 277 Vac (ms) | $I^2t$ (A <sup>2</sup> sec) 277 Vac |
|--------------------------|--------------------------|--------------------------|-------------------------------------|--------------------------|--------------------------|-------------------------------------|
| 0.5                      | 75                       | 0.34                     | 11                                  | 77                       | 0.07                     | 11                                  |
| 1                        | 107                      | 0.48                     | 24                                  | 131                      | 0.71                     | 27                                  |
| 2                        | 144                      | 0.70                     | 41                                  | 205                      | 0.85                     | 76                                  |
| 3                        | 166                      | 0.89                     | 51                                  | 258                      | 0.98                     | 111                                 |
| 5                        | 192                      | 1.20                     | 74                                  | 320                      | 1.20                     | 205                                 |
| 8                        | 221                      | 1.25                     | 98                                  | 370                      | 1.25                     | 274                                 |
| 10                       | 230                      | 1.50                     | 106                                 | 430                      | 1.50                     | 370                                 |

## Safety Standards

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

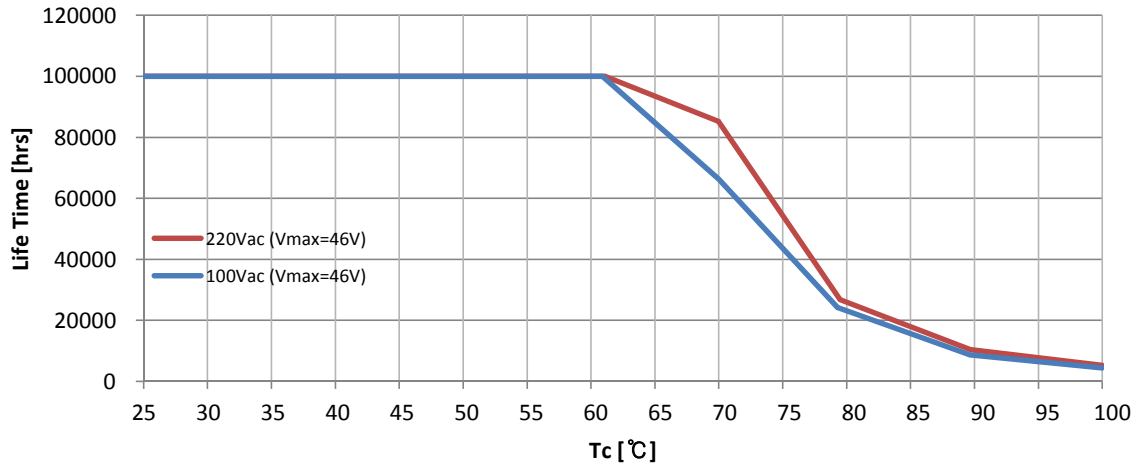
| No. | Item                              | Description  |
|-----|-----------------------------------|--|
| 1   | UL8750, UL1310                    | UL Safety Standards (Class 2, Dry and Damp Location) |
| 2   | FCC Part 15, Class B              | Conducted and Radiated Emission Test                 |
| 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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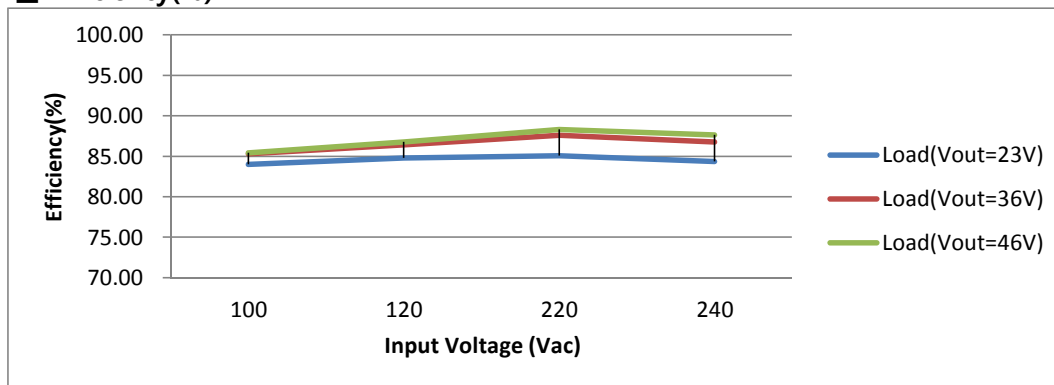
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### Life Time vs Tcase



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

### Efficiency(%)

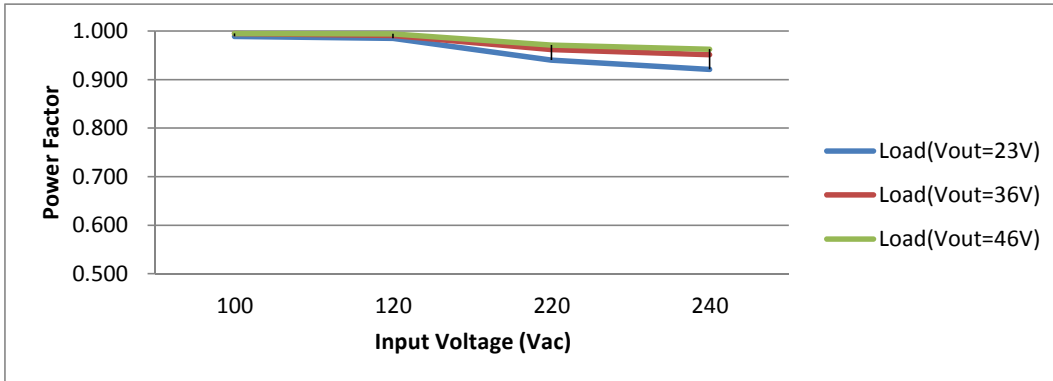


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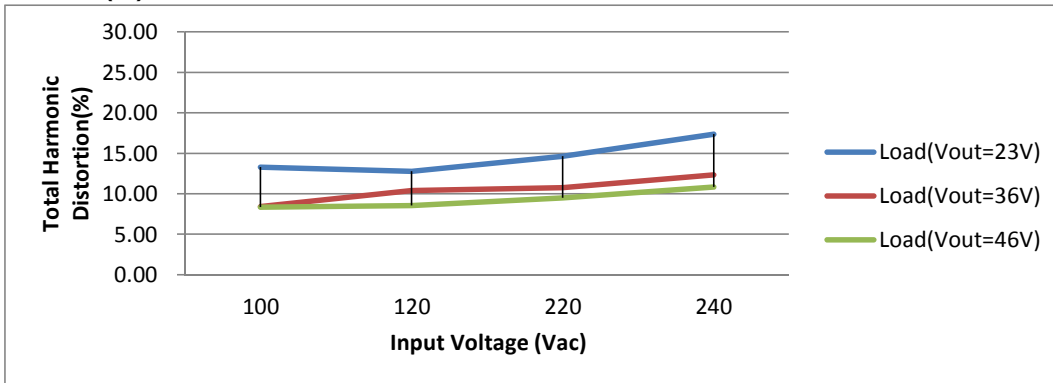
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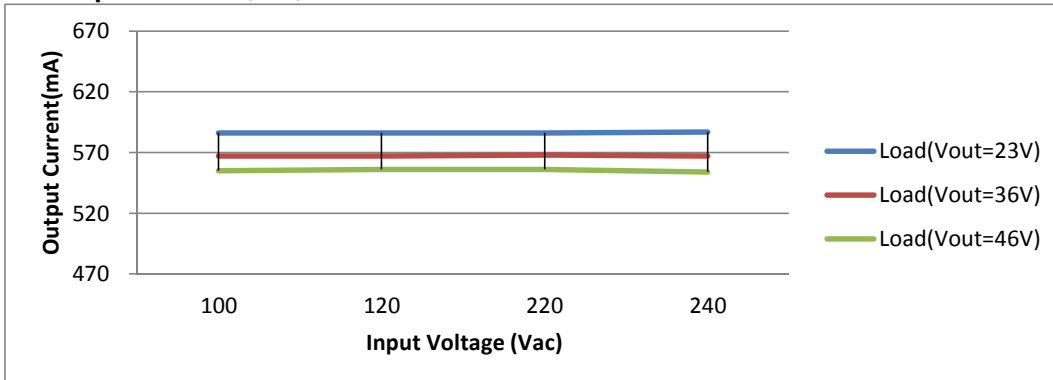
■ **Power Factor**



■ **THD(%)**



■ **Output Current(mA)**

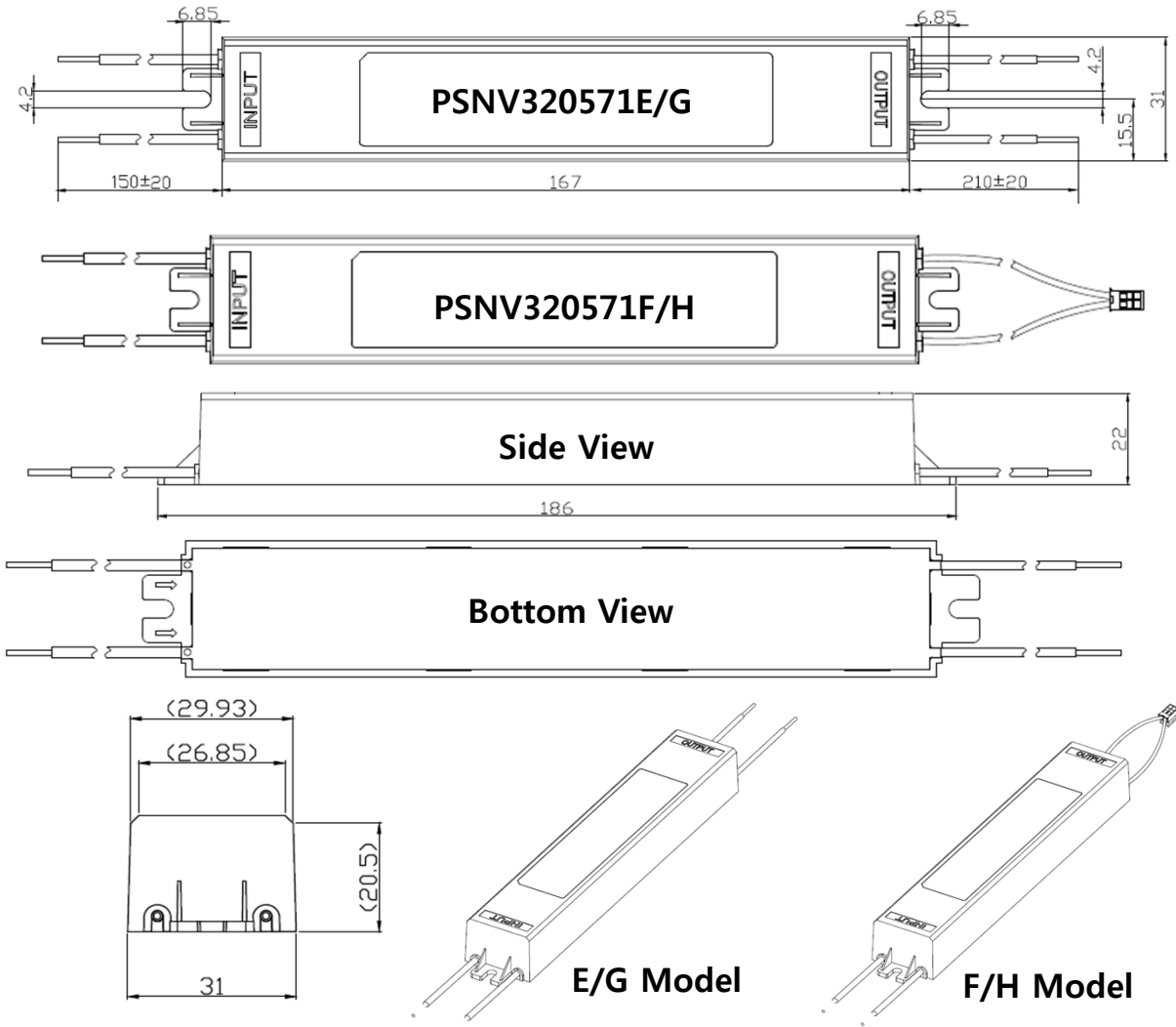


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### ■ Mechanical Specification



### ■ Enclosure Size

| Unit | Width | Length | Height | Mount Length | Overall Length |
|------|-------|--------|--------|--------------|----------------|
| mm   | 31.0  | 167.0  | 22.0   | 186.0        | 186.0          |
| inch | 1.22  | 6.57   | 0.87   | 7.32         | 7.32           |

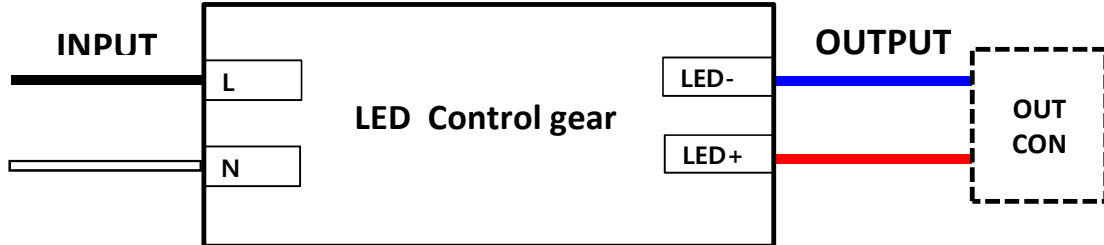
### ■ Case Material : PC

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■ **Wiring Diagram**



※ **Caution**

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

■ **Different by type**





























| Code        | Logo    | Cable end | Opposite side | Remark   |
|-------------|---------|-----------|---------------|--|
| PSNV320571E | SOLUM   | N.A       | -             | <b>SMH200-02</b><br> |
| PSNV320571F |         | SMH200-02 | SMW200-02     |  |
| PSNV320571G | SAMSUNG | N.A       | -             |  |
| PSNV320571H |         | SMH200-02 | SMW200-02     |  |

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### Rating Label Drawing

|  |  |  |   |
|--|--|--|---|
| <h3>PSNV320571A</h3>   |  |  |   |
| <p><b>L</b> LIVE<br/>(흑색, Black)</p> <p><b>N</b> Neutral<br/>(백색, White)</p> <p><b>PRI_정격입력</b><br/>U<sub>in</sub> : 100 - 250V~<br/>50/60 Hz<br/>I<sub>in</sub> : Max. 0.45A<br/>0.145A..220Vac,60Hz<br/>P<sub>in</sub> : 32W<br/>λ<sub>c</sub>역률 : 0.9<br/>t<sub>c</sub> : 80 °C</p> | <p><b>SOLUM</b></p> <p><b>CAUTION (주의사항)</b><br/>Constant current out<br/>Use for LED Module only<br/>Do not open the case<br/>Suitable for dry and damp location<br/>내장형</p> <p>www.solu-m.com AS : +82-1588-0502<br/>SOLUM VINA COMPANY LIMITED<br/>Hillsite Am Kronberger Hang 8, 65824 Schwalbach Ts. Germany.</p>   | <p><b>LED CONVERTER</b><br/>조명기구용 컨버터 (직관형 LED 램프-컨버터외장형)<br/>Constant Current (정전류 방식)<br/>Flickerless / Class2 Output</p> <p><b>Model/모델 : SLW320N571N1E</b><br/><b>Name/기종 : PSNV320571E</b></p> <p>한국표준협회<br/>제 16-0428<br/>(KS C 7655)</p> <p>SELV     </p> <p>SU11315-16025<br/>MSIP-REI-SLU-SLW320N571N1A</p>           | <p>LED - (Blue,청색) </p> <p>LED + (Red,적색) </p> <p><b>SEC_정격출력</b><br/>P<sub>out</sub> : 26W<br/>I<sub>out</sub> : 0.57A<br/>V<sub>out</sub> : 23 - 46V...<br/>U<sub>out</sub> : 59V...<br/>(Open Lamp_무부하)</p> <p>t<sub>c</sub> ■</p>     |
| <h3>PSNV320571B</h3>   |  |  |   |
| <p><b>L</b> LIVE<br/>(흑색, Black)</p> <p><b>N</b> Neutral<br/>(백색, White)</p> <p><b>PRI_정격입력</b><br/>U<sub>in</sub> : 100 - 250V~<br/>50/60 Hz<br/>I<sub>in</sub> : Max. 0.45A<br/>0.145A..220Vac,60Hz<br/>P<sub>in</sub> : 32W<br/>λ<sub>c</sub>역률 : 0.9<br/>t<sub>c</sub> : 80 °C</p> | <p><b>SOLUM</b></p> <p><b>CAUTION (주의사항)</b><br/>Constant current out<br/>Use for LED Module only<br/>Do not open the case<br/>Suitable for dry and damp location<br/>내장형</p> <p>www.solu-m.com AS : +82-1588-0502<br/>SOLUM VINA COMPANY LIMITED<br/>Hillsite Am Kronberger Hang 8, 65824 Schwalbach Ts. Germany.</p>   | <p><b>LED CONVERTER</b><br/>조명기구용 컨버터 (직관형 LED 램프-컨버터외장형)<br/>Constant Current (정전류 방식)<br/>Flickerless / Class2 Output</p> <p><b>Model/모델 : SLW320N571N1E</b><br/><b>Name/기종 : PSNV320571F</b></p> <p>한국표준협회<br/>제 16-0428<br/>(KS C 7655)</p> <p>SELV     </p> <p>SU11315-16025<br/>MSIP-REI-SLU-SLW320N571N1A</p>           | <p>LED - (Blue,청색) </p> <p>LED + (Red,적색) </p> <p><b>SEC_정격출력</b><br/>P<sub>out</sub> : 26W<br/>I<sub>out</sub> : 0.57A<br/>V<sub>out</sub> : 23 - 46V...<br/>U<sub>out</sub> : 59V...<br/>(Open Lamp_무부하)</p> <p>t<sub>c</sub> ■</p>     |
| <h3>PSNV320571C</h3>   |  |  |   |
| <p><b>L</b> LIVE<br/>(흑색, Black)</p> <p><b>N</b> Neutral<br/>(백색, White)</p> <p><b>PRI_정격입력</b><br/>U<sub>in</sub> : 100 - 250V~<br/>50/60 Hz<br/>I<sub>in</sub> : Max. 0.45A<br/>0.145A..220Vac,60Hz<br/>P<sub>in</sub> : 32W<br/>λ<sub>c</sub>역률 : 0.9<br/>t<sub>c</sub> : 80 °C</p> | <p><b>SAMSUNG</b></p> <p><b>CAUTION (주의사항)</b><br/>Constant current out<br/>Use for LED Module only<br/>Do not open the case<br/>Suitable for dry and damp location<br/>내장형</p> <p>www.solu-m.com AS : +82-1588-0502<br/>SOLUM VINA COMPANY LIMITED<br/>Hillsite Am Kronberger Hang 8, 65824 Schwalbach Ts. Germany.</p> | <p><b>LED CONVERTER</b><br/>조명기구용 컨버터 (직관형 LED 램프-컨버터외장형)<br/>Constant Current (정전류 방식)<br/>Flickerless / Class2 Output</p> <p><b>Model/모델 : SLW320N571N1E</b><br/><b>Name/기종 : PSNV320571G</b></p> <p>한국표준협회<br/>제 16-0428<br/>(KS C 7655)</p> <p>SELV     </p> <p>SU11315-16025<br/>MSIP-REI-SLU-SLW320N571N1A</p> | <p>LED - (Blue,청색) </p> <p>LED + (Red,적색) </p> <p><b>SEC_정격출력</b><br/>P<sub>out</sub> : 26W<br/>I<sub>out</sub> : 0.57A<br/>V<sub>out</sub> : 23 - 46V...<br/>U<sub>out</sub> : 59V...<br/>(Open Lamp_무부하)</p> <p>t<sub>c</sub> ■</p> |
| <h3>PSNV320571D</h3>   |  |  |   |
| <p><b>L</b> LIVE<br/>(흑색, Black)</p> <p><b>N</b> Neutral<br/>(백색, White)</p> <p><b>PRI_정격입력</b><br/>U<sub>in</sub> : 100 - 250V~<br/>50/60 Hz<br/>I<sub>in</sub> : Max. 0.45A<br/>0.145A..220Vac,60Hz<br/>P<sub>in</sub> : 32W<br/>λ<sub>c</sub>역률 : 0.9<br/>t<sub>c</sub> : 80 °C</p> | <p><b>SAMSUNG</b></p> <p><b>CAUTION (주의사항)</b><br/>Constant current out<br/>Use for LED Module only<br/>Do not open the case<br/>Suitable for dry and damp location<br/>내장형</p> <p>www.solu-m.com AS : +82-1588-0502<br/>SOLUM VINA COMPANY LIMITED<br/>Hillsite Am Kronberger Hang 8, 65824 Schwalbach Ts. Germany.</p> | <p><b>LED CONVERTER</b><br/>조명기구용 컨버터 (직관형 LED 램프-컨버터외장형)<br/>Constant Current (정전류 방식)<br/>Flickerless / Class2 Output</p> <p><b>Model/모델 : SLW320N571N1E</b><br/><b>Name/기종 : PSNV320571H</b></p> <p>한국표준협회<br/>제 16-0428<br/>(KS C 7655)</p> <p>SELV     </p> <p>SU11315-16025<br/>MSIP-REI-SLU-SLW320N571N1A</p> | <p>LED - (Blue,청색) </p> <p>LED + (Red,적색) </p> <p><b>SEC_정격출력</b><br/>P<sub>out</sub> : 26W<br/>I<sub>out</sub> : 0.57A<br/>V<sub>out</sub> : 23 - 46V...<br/>U<sub>out</sub> : 59V...<br/>(Open Lamp_무부하)</p> <p>t<sub>c</sub> ■</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<br>C2 : Solytech<br>K1 : Korea<br>H1 : SOLUM VINA | 00~99   | 1...9,A,B | 01~31   | PSNV320571E : 299<br>PSNV320571F : 300<br>PSNV320571G : 301<br>PSNV320571H : 302 | 0001..<br>9999 | X01~99 : DEVELOPMENT<br>A01~99: MP |

### Box Label

|                |                         |       |                                       |
|----------------|-------------------------|-------|---------------------------------------|
| Material Code  | SLW320N571N1E           |       | → USER Model Code                     |
| ITEM           | PSNV320571*<br>REV. A** |       | → SOLUM Model Code                    |
| LOT No         | *****                   | MAKER | → SOLUM LOT NO & Quantity of Products |
| Quantity [PCS] | 80                      | SOLUM |                                       |
| EXP. Date      | 20**.**.** ~ 20**.**.** |       | → Product Date ~ After 5 years        |
| <br>*****      |                         |       | → USER Barcode                        |

| Year   | Month  | Date   | Factory         | Fixed |
|--------|--------|--------|-----------------|-------|
| 1      | 2      | 3      | 4               | 5     |
| 6      | 7      | 8      | 9               |       |
| Q      | 0      | 1      | 0               | 1     |
| P→2016 | 01~12月 | 01~31日 | D : Solum(DGSM) |       |
| Q→2017 |        |        | A : Aptech      |       |
| R→2018 |        |        | H : Solumvina   |       |

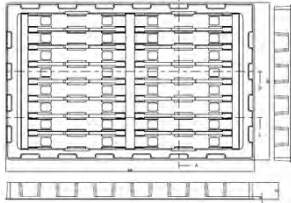
| Digit | Quantity Per BOX |   |   |   |   |   |   |   |   | BOX Size | Serial No.            |         |    |    | Blank | Vender Code |    |    |    | Blank | Year | Month  |        | Date   |                 | Factory |    |  | Fixed |    |    |    |
|-------|------------------|---|---|---|---|---|---|---|---|----------|-----------------------|---------|----|----|-------|-------------|----|----|----|-------|------|--------|--------|--------|-----------------|---------|----|--|-------|----|----|----|
|       | 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 | 8 | 0 | B        | 0                     | 0       | 1  |    | E     | 6           | 0  | 1  |    |       |      | Q      | 0      | 1      | 0               | 1       | H  |  |       | 0  | 0  | 1  |
|       |                  |   |   |   |   |   |   |   |   |          | A : Pallet<br>B : BOX | 001~999 |    |    |       |             |    |    |    |       |      | P→2016 | 01~12月 | 01~31日 | D : Solum(DGSM) |         |    |  |       |    |    |    |
|       |                  |   |   |   |   |   |   |   |   |          |                       |         |    |    |       |             |    |    |    |       |      | Q→2017 |        |        | A : Aptech      |         |    |  |       |    |    |    |
|       |                  |   |   |   |   |   |   |   |   |          |                       |         |    |    |       |             |    |    |    |       |      | R→2018 |        |        | H : Solumvina   |         |    |  |       |    |    |    |

### ■ Packing Drawing

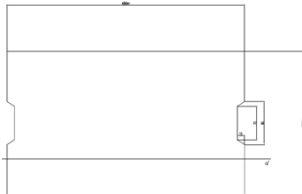
#### 1. Out Box

|           |                           |
|-----------|---------------------------|
| Dimension | 540(L) 355(W) 170(H) [mm] |
| Weight    | < 10Kg                    |
| Quantity  | 80EA / 1Box               |

TRAY



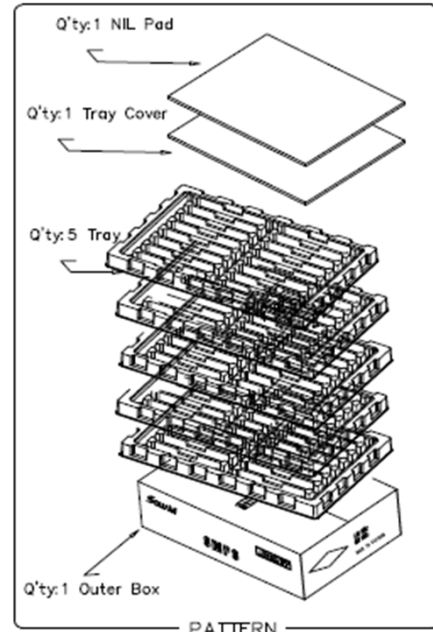
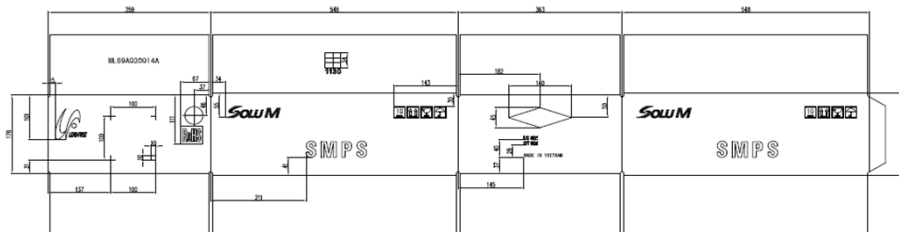
TRAY COVER



NIL PAD

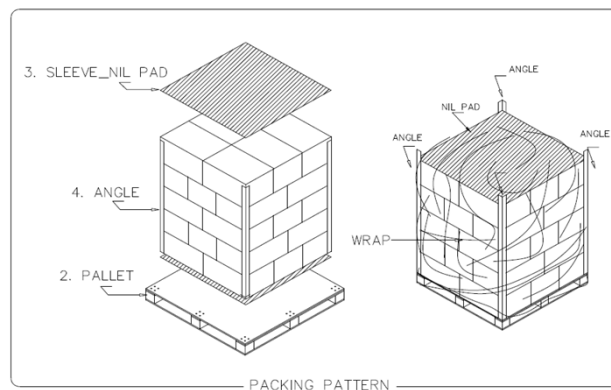


OUT BOX



#### 2. Pallet

|          |                 |
|----------|-----------------|
| Weight   | < 310Kg         |
| Quantity | 30BOX / 1Pallet |



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