



### ■ Features

- Constant Voltage PWM style output with user changeable frequency up to 4KHz compliant IEEE1789-2015 and EU Ecodesign SVM requirement
- Min. dimming level 0.01%
- Plastic housing with class II design
- Standby power consumption < 0.5W
- Integrated KNX control protocol
- No need KNX-DALI gateway
- Typical lifetime > 50000 hours
- 5 years warranty

### ■ Applications

- LED strip lighting
- Indoor LED lighting
- LED decorative lighting
- LED architecture lighting

### ■ GTIN CODE

MW Search: <https://www.meanwell.com/serviceGTIN.aspx>

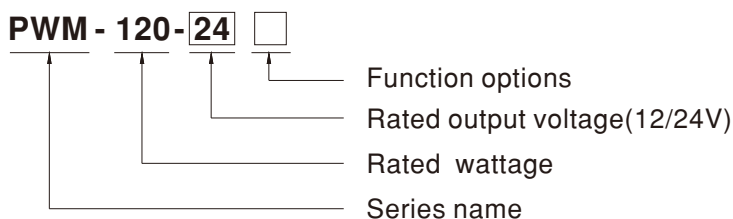
### ■ Description

PWM KN series is a 120W AC/DC LED driver featuring the constant voltage mode with PWM style output, which is able to maintain the colour temperature and the brightness homogeneity when driving all kinds of LED strips and constant voltage LED bulbs. The built-in KNX interface is to avoid using the complicated KNX-DALI gateway.

PWM KN operates from 90~305VAC and offers two models with output voltage 12V & 24V. Thanks to the high efficiency up to 90%, with the fanless design, the entire series is able to operate for -40°C ~ +90°C case temperature under free air convection.

The minimal dimming level low to 0.01% is suitable for low light level applications e.g. cinema. The output frequency is changeable up to 4KHz complaint IEEE1789-2015 no risk requirement and EU Ecodesign stroboscopic visibility measure (SVM) requirement providing a great solution for health concern due to light flickering.

### ■ Model Encoding



| Type  | Function                                    | Note       |
|-------|---|------------|
| KN    | KNX control technology                      | In stock   |
| KNBST | KNX control technology with BST14 connector | by request |

**SPECIFICATION**

| MODEL        |  | PWM-120-12 □  | PWM-120-24 □ |
|--------------|--|---|--------------|
| OUTPUT       | DC VOLTAGE   | 12V   | 24V          |
|              | RATED CURRENT  | 10A   | 5A           |
|              | RATED POWER  | 120W  | 120W         |
|              | DIMMING RANGE  | 0 ~ 100%  |              |
|              | PWM FREQUENCY (Typ.)   | 200~4000Hz user changable via ETS   |              |
|              | SETUP, RISE TIME <small>Note.2</small>   | 500ms, 80ms/ 230VAC or 115VAC   |              |
|              | HOLD UP TIME (Typ.)  | 16ms/230VAC or 115VAC   |              |
| INPUT        | VOLTAGE RANGE <small>Note.3</small>  | 90 ~ 305VAC    127 ~ 431VDC<br>(Please refer to "STATIC CHARACTERISTIC" section)  |              |
|              | FREQUENCY RANGE  | 47 ~ 63Hz   |              |
|              | POWER FACTOR (Typ.)  | PF>0.97/115VAC, PF>0.96/230VAC, PF>0.94/277VAC @ full load<br>(Please refer to "POWER FACTOR (PF) CHARACTERISTIC" section)  |              |
|              | TOTAL HARMONIC DISTORTION  | THD< 20% (@load≥60%/115VAC, 230VAC; @load≥75%/277VAC)<br>(Please refer to "TOTAL HARMONIC DISTORTION" section)              |              |
|              | EFFICIENCY (Typ.)  | 88.5%   | 90%          |
|              | AC CURRENT (Typ.)  | 1.3A / 115VAC    0.65A / 230VAC    0.55A / 277VAC   |              |
|              | INRUSH CURRENT (Typ.)  | COLD START 60A(twidth=520μs measured at 50% Ipeak) at 230VAC; Per NEMA 410  |              |
|              | MAX. NO. of PSUs on 16A CIRCUIT BREAKER  | 4 units (circuit breaker of type B) / 6 units (circuit breaker of type C) at 230VAC   |              |
|              | LEAKAGE CURRENT  | <0.25mA / 277VAC  |              |
|              | STANDY POWER CONSUMPTION   | <0.5W   |              |
| PROTECTION   | OVERLOAD   | 108 ~ 130% rated output power<br>Hiccup mode, recovers automatically after fault condition is removed                       |              |
|              | SHORT CIRCUIT  | Shut down o/p voltage, re-power on to recover   |              |
|              | OVER VOLTAGE   | 15 ~ 17V  | 28 ~ 34V     |
|              | OVER TEMPERATURE   | Shut down o/p voltage, re-power on to recover   |              |
| ENVIRONMENT  | WORKING TEMP.  | Tcase=-40 ~ +90°C (Please refer to " OUTPUT LOAD vs TEMPERATURE" section)   |              |
|              | MAX. CASE TEMP.  | Tcase=+90°C   |              |
|              | WORKING HUMIDITY   | 20 ~ 95% RH non-condensing  |              |
|              | STORAGE TEMP., HUMIDITY  | -40 ~ +80°C, 10 ~ 95% RH  |              |
|              | TEMP. COEFFICIENT  | ±0.03%/°C (0 ~ 45°C, except 0 ~ 40°C for 12V)   |              |
|              | VIBRATION  | 10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes   |              |
| SAFETY & EMC | SAFETY STANDARDS <small>Note.5</small>   | ENEC BS EN/EN61347-1, BS EN/EN61347-2-13, BS EN/EN62384 independent, GB19510.14,GB19510.1, EAC TP TC 004 approved           |              |
|              | KNX STANDARDS  | Certified protocol  |              |
|              | WITHSTAND VOLTAGE  | I/P-O/P:3.75KVAC  |              |
|              | ISOLATION RESISTANCE   | I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH  |              |
|              | EMC EMISSION <small>Note.6</small>   | Compliance to BS EN/EN55015, BS EN/EN61000-3-2 Class C (@load≥60%) ; BS EN/EN61000-3-3, GB17743 and GB17625.1,EAC TP TC 020 |              |
| EMC IMMUNITY | Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11; BS EN/EN61547, light industry level (surge immunity Line-Line 2KV),EAC TP TC 020   |   |              |
| OTHERS       | MTBF   | 1915.2K hrs min. Telcordia SR-332 (Bellcore) ; 205.8K hrs min. MIL-HDBK-217F (25°C)   |              |
|              | DIMENSION  | 191*63*37.5mm (L*W*H)   |              |
|              | PACKING  | 0.80Kg; 15pcs/13.0Kg/0.87CUFT   |              |
| NOTE         | <p>1. All parameters NOT specially mentioned are measured at 230VAC input, rated current and 25°C of ambient temperature.</p> <p>2. De-rating may be needed under low input voltages. Please refer to "STATIC CHARACTERISTIC" sections for details.</p> <p>3. Length of set up time is measured at first cold start. Turning ON/OFF the driver may lead to increase of the set up time.</p> <p>4. The driver 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.</p> <p>5. This series meets the typical life expectancy of &gt;50,000 hours of operation when Tcase, particularly (Tc) point (or TMP, per DLC), is about 75°C or less.</p> <p>6. Please refer to the warranty statement on MEAN WELL's website at <a href="http://www.meanwell.com">http://www.meanwell.com</a></p> <p>7. The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft).</p> <p>8. For any application note and IP water proof function installation caution, please refer our user manual before using.<br/><a href="https://www.meanwell.com/Upload/PDF/LED_EN.pdf">https://www.meanwell.com/Upload/PDF/LED_EN.pdf</a></p> <p>※ Product Liability Disclaimer : For detailed information, please refer to <a href="https://www.meanwell.com/serviceDisclaimer.aspx">https://www.meanwell.com/serviceDisclaimer.aspx</a></p> |   |              |