



General

|                  |                         |
|------------------|-------------------------|
| Product Type     | Constant Voltage Driver |
| Length (mm)      | 352                     |
| Width (mm)       | 43                      |
| Height (mm)      | 30                      |
| Housing Color    | White                   |
| Housing Material | Plastic                 |
| Mounting         | Surface mounted         |
| Weight (g)       | 300                     |

Electronics

|                                |                 |
|--------------------------------|-----------------|
| Input Domain                   | AC              |
| Input Voltage                  | 220 ~ 240V AC   |
| Input Current max (A)          | 0.75A @ 230V AC |
| Output Voltage                 | 24V DC          |
| Output Current (mA) max/output | 6250            |
| Output Current Max. (A)        | 6.25            |
| Output Power Range (W)         | 0~150           |
| Power Factor at Full Load      | +0.98 @ 230VAC  |
| LED Outputs                    | 1               |
| Leakage current max. (mA)      | 0.5             |
| Standby Power Loss Max. (W)    | 0.5             |
| THD (at full load)             | 6% @ 230V AC    |
| Input Frequency                | 50 ~ 60Hz       |
| Inrush Current                 | 45A @ 230VAC    |

Lighting

|             |              |
|-------------|--------------|
| Color Range | Single Color |
|-------------|--------------|

Control

|                    |        |
|--------------------|--------|
| Output Signal      | PWM-CV |
| Control            | 0-10V  |
| Dimming Range      | 0~100% |
| Number of Channels | 1      |

Protection

|                  |    |
|------------------|----|
| Protection Class | II |
|------------------|----|

Environmental

|                       |                                               |
|-----------------------|-----------------------------------------------|
| Operating Temperature | -20 ~ +50 °C                                  |
| Ingress Protection    | IP20                                          |
| Safety Standards      | NEN-EN-IEC 61347-1,<br>NEN-EN-IEC 61347-2-13, |

CE IP20 5<sup>year</sup> warranty

Disclaimer

Due to the technical evolution and improvement of our products, the data provided in this document may be updated on a regular basis, and as such, confirmation of this information is strongly recommended prior to the order process. OneEightyOne is not responsible for any discrepancies in this document following changes in our products. We reserve the right to make technical changes to our products and to change information, at its sole discretion, without notice.

## LED Intelligent Driver (constant voltage)

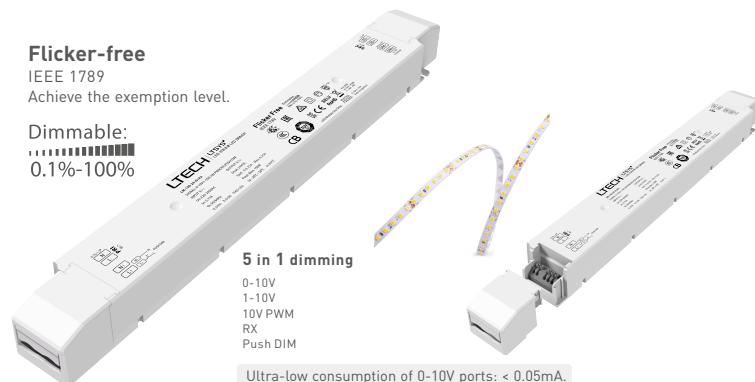
- Dimming interface: 0-10V(1-10V/10V PWM/RX), Push DIM
- Dimming range from 0-100%, LED start at 0.1% possible.
- With soft-on and fade in function, visual more comfortable.
- Automatic recognition of 0-10V, 1-10V input signal.
- 0-100% flicker-free ,High frequency exemption level.
- High efficient driver: efficiency 93%, PF>0.98, THD<6%.
- Ultra-low consumption of 0-10V ports: < 0.05mA.
- Dimming interface with photoelectric isolation, in line with the latest safety standards, more safe and reliable.
- In line with the EU energy efficiency ERP directive, standby power consumption < 0.5W
- Innovative thermal management technology, intelligent power life protection.
- Over-heat / Over voltage / Over load / Short circuit protection, recover automatically.
- Fully-protected plastic housing with design of dismountable end cover.
- Suitable for internal lights application for I /II/III
- Up to 50000-hour life time.
- 5 years warranty (Rubycon capacitor).

### Flicker-free

IEEE 1789  
Achieve the exemption level.

### Dimmable:

0.1%-100%



### 5 in 1 dimming

0-10V  
1-10V  
10V PWM  
RX  
Push DIM

Ultra-low consumption of 0-10V ports: < 0.05mA.



SELV Class 2  
RoHS



(The certification icon represents undergoing certification applications only, and final certification qualification subject to actual product.)



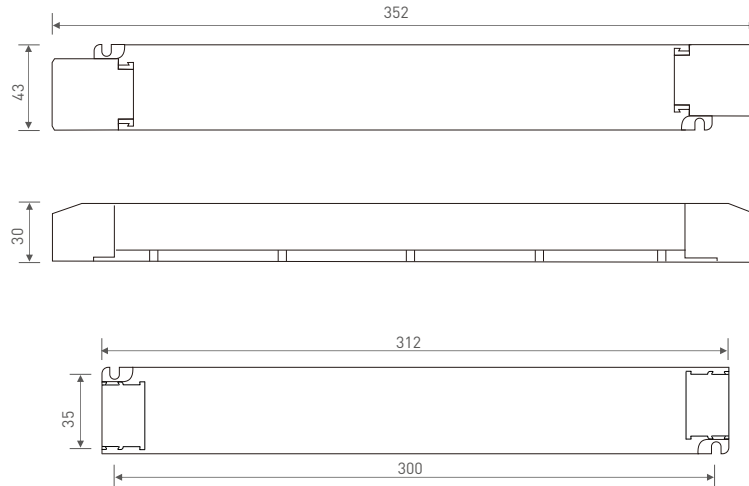
## Specification

| Model        |                           | LM-150-24-G1A2                                                                                             | LM-150-12-G1A2                                                                                             |
|--------------|---------------------------|------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| OUTPUT       | Output Voltage            | 24Vdc                                                                                                      | 12Vdc                                                                                                      |
|              | Output Voltage Range      | 24Vdc ± 0.5Vdc                                                                                             | 12Vdc ±0.5Vdc                                                                                              |
|              | Output Current            | Max. 6.25A                                                                                                 | Max. 12.5A                                                                                                 |
|              | Output Power              | Max. 150W                                                                                                  |                                                                                                            |
|              | Output Power Range        | 0~150W                                                                                                     |                                                                                                            |
|              | Strobe Level              | High frequency exemption level.                                                                            |                                                                                                            |
|              | PWM Frequency             | 3600Hz                                                                                                     |                                                                                                            |
|              | Dimming Range             | 0~100%, dimming depth: Max. 0.1%                                                                           |                                                                                                            |
|              | Overload Power Limitation | ≥ 102%                                                                                                     |                                                                                                            |
|              | Ripple & Noise            | Switch ripple≤200mV, noise≤500mV                                                                           | Switch ripple≤200mV, noise≤800mV                                                                           |
| INPUT        | Dimming Interface         | 0-10V(1-10V/10V PWM/RX), Push DIM                                                                          |                                                                                                            |
|              | Interface consumption     | <0.05mA @ 0-10V                                                                                            |                                                                                                            |
|              | Input Voltage             | 220-240Vac                                                                                                 | 200-280Vdc                                                                                                 |
|              | Frequency                 | 50/60Hz                                                                                                    |                                                                                                            |
|              | Input Current             | Max. 0.75A/230Vac                                                                                          |                                                                                                            |
|              | Power Factor              | PF>0.98/230Vac, at full load                                                                               |                                                                                                            |
|              | THD                       | <6% at 230Vac, at full load                                                                                |                                                                                                            |
|              | Efficiency (typ.)         | 93%                                                                                                        | 92%                                                                                                        |
|              | Standby Power Loss        | < 0.5W                                                                                                     |                                                                                                            |
|              | Inrush Current(typ.)      | Cold start 45A at 230Vac                                                                                   |                                                                                                            |
|              | Control surge capability  | L-N:2KV                                                                                                    |                                                                                                            |
|              | Leakage Current           | Max. 0.5mA                                                                                                 |                                                                                                            |
| ENVIRONMENT  | Working Temperature       | ta: -20°C ~ 50°C tc: 85°C                                                                                  |                                                                                                            |
|              | Working Humidity          | 20 ~ 95%RH, non-condensing                                                                                 |                                                                                                            |
|              | Storage Temp., Humidity   | -40°C ~ 80°C, 10~95%RH                                                                                     |                                                                                                            |
|              | Temp. Coefficient         | ±0.03%/°C (0-50°C)                                                                                         |                                                                                                            |
|              | Vibration                 | 10~500Hz, 2G 12min./1cycle, period for 72min. each along X, Y, Z axes.                                     |                                                                                                            |
| PROTECTION   | Over-heat Protection      | Intelligently adjusting or turning off the output current if the PCB temperature ≥ 110°C, auto recovers.   |                                                                                                            |
|              | Over Voltage Protection   | Shut down the output when non-load voltage ≥ 28V, re-power on to recover after fault condition is removed. | Shut down the output when non-load voltage ≥ 16V, re-power on to recover after fault condition is removed. |
|              | Over Load Protection      | Shut down the output when current load ≥ 102%, auto recovers.                                              |                                                                                                            |
|              | Short Circuit Protection  | Enter hiccup mode if short circuit occurs, auto recovers.                                                  |                                                                                                            |
| SAFETY & EMC | Withstand Voltage         | I/P-O/P: 3750Vac                                                                                           |                                                                                                            |
|              | Isolation Resistance      | I/P-O/P: 100MΩ/500VDC/25°C/70%RH                                                                           |                                                                                                            |
|              | Safety Standards          | IEC/EN61347-1, IEC/EN61347-2-13                                                                            |                                                                                                            |
|              | EMC Emission              | EN55015, EN61000-3-2 Class C, IEC61000-3-3                                                                 |                                                                                                            |
|              | EMC Immunity              | EN61000-4-2,3,4,5,6,8,11 EN61547                                                                           |                                                                                                            |
|              | Strobe Test Standard      | IEEE 1789                                                                                                  |                                                                                                            |
| OTHERS       | Dimension                 | 352×43×30mm(L×W×H)                                                                                         |                                                                                                            |
|              | Packing                   | 355×44×33mm(L×W×H)                                                                                         |                                                                                                            |
|              | Weight[G.W.]              | 430g±10g                                                                                                   |                                                                                                            |

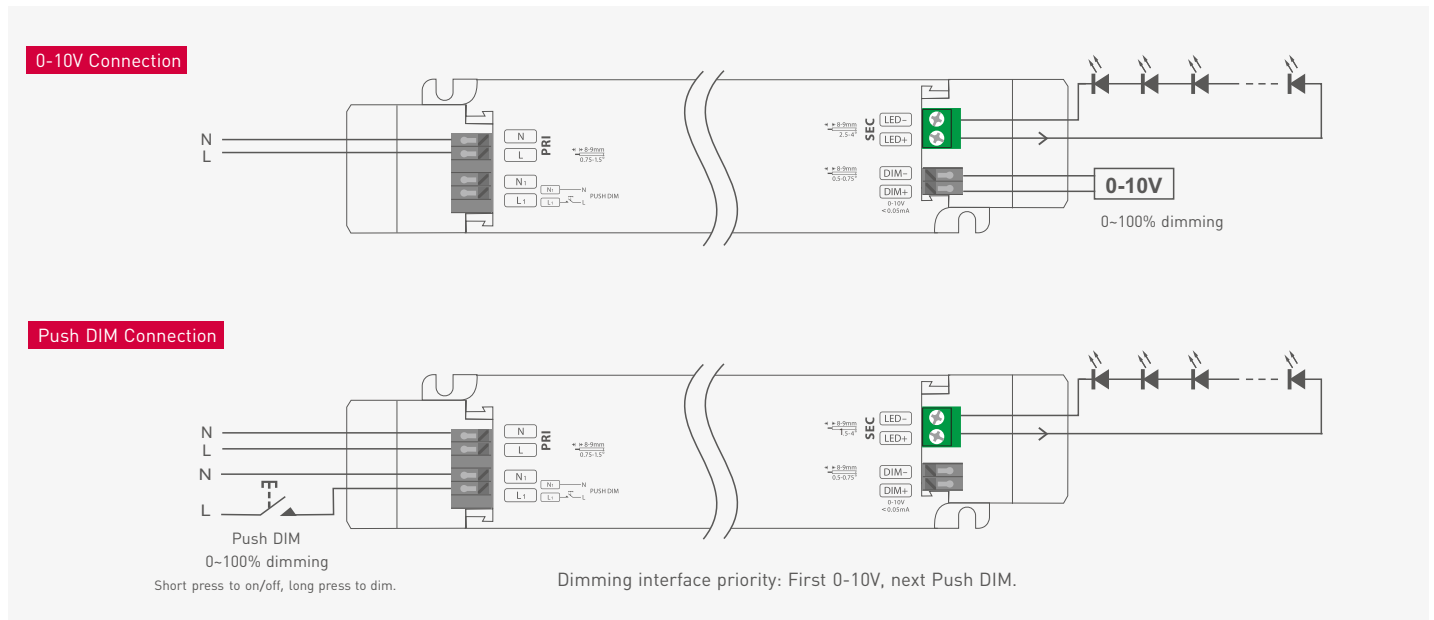
\* The driver is suitable for connecting resistor current-limiting LED fixture (e.g. LED strip). The inrush current will be dozens of times increased if connecting built-in constant current IC current-limiting LED fixtures, the driver will activate the overloaded protection (hiccup flickering). When you order, please remark controlling the constant current LED fixture (e.g. MR16 lamp, underground light, LED wall washer, constant current LED strip, etc.), then we can prepare the special programs.

## Dimensions

Unit: mm



## Wiring Diagram



## Push Dimming

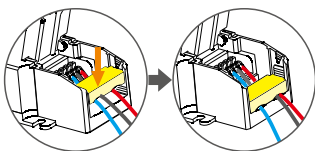


Reset switch

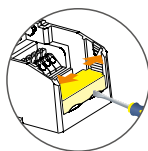
- On/off control: Short press.
- Stepless dimming: Long press.
- With every other long press, the light level goes to the opposite direction.
- Dimming memory: Brightness will be the same as previously adjusted when turning off and on again.

## Application of Protective Cover

Wire pressing board:

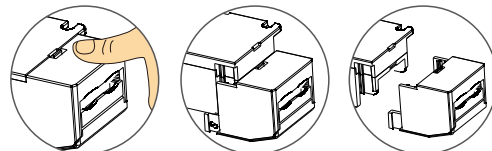


Push the wire pressing board to fix the wire.



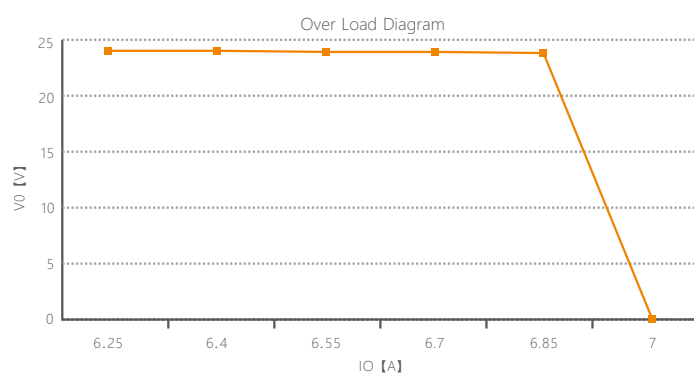
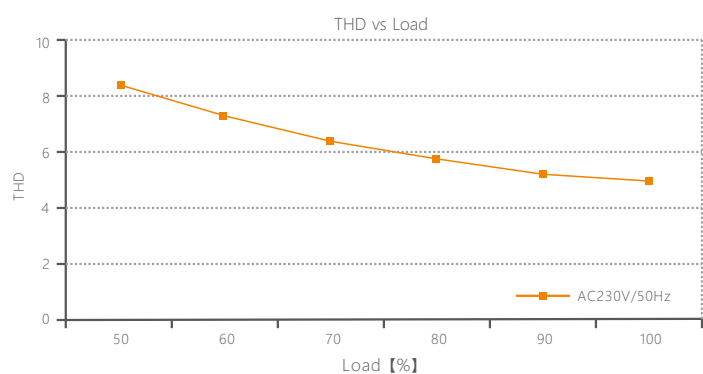
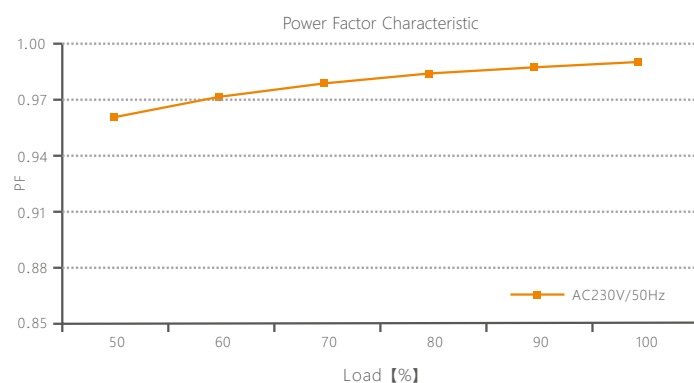
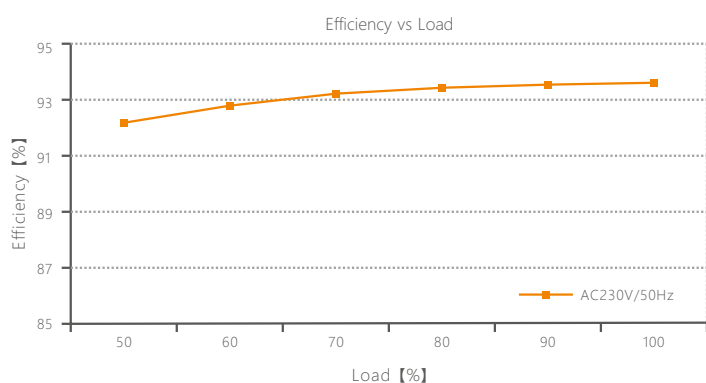
Push outward the side plate, meanwhile use the tool to uninstall the wire pressing board.

Uninstall protective cover:

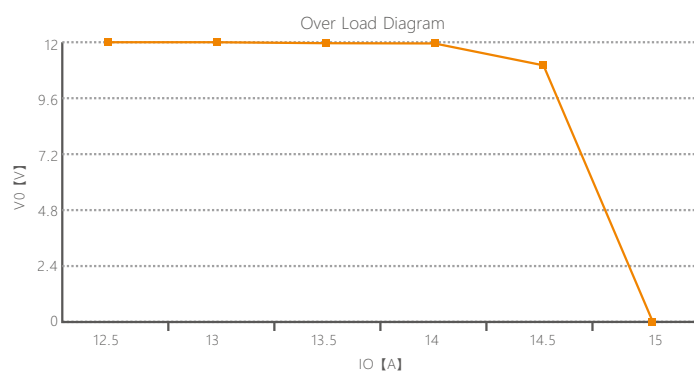
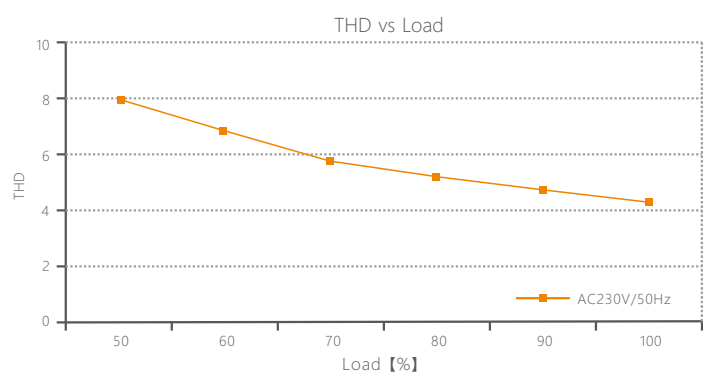
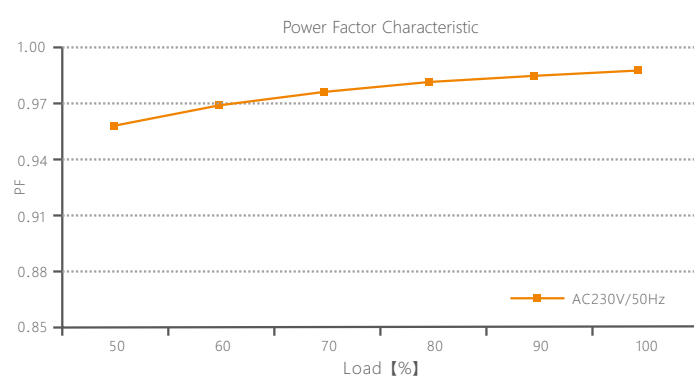
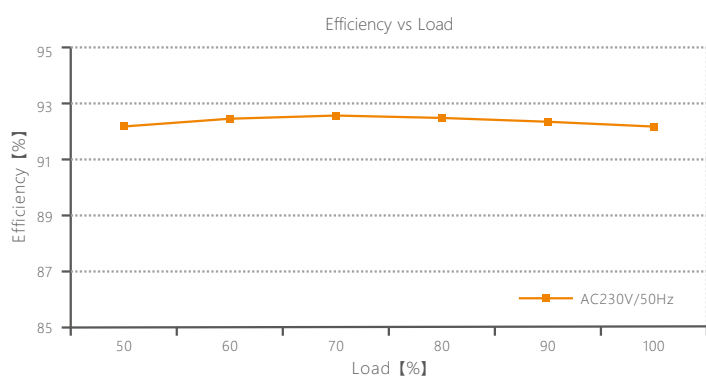


Break off the bottom left and right to remove the protective cover.

## Relationship Diagrams



LM-150-24-G1A2



LM-150-12-G1A2

Flicker Test Form

