

## LED Intelligent Driver

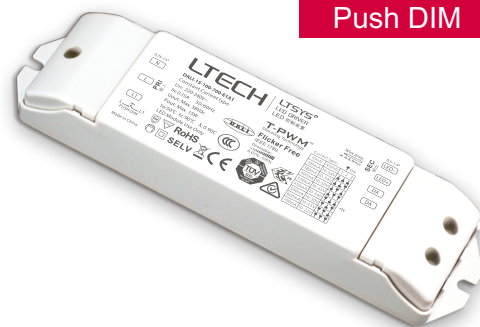
- Dimming interface: DALI, Push DIM
- T-PWM™ digital dimming.
- Dimming range: 0~100%, LED start at 0.01% possible.
- 0-100% flicker-free (IEEE 1789 standard).
- Innovative thermal management technology, intelligent power life protection.
- DALI dimming curve can be either linear or logarithmic.
- Multi-current & wide voltage, suitable for different power LED.
- Non-load output voltage 0V to prevent damages to LED caused by poor contact.
- Short circuit / Over-heat / Over load / Non-load protection, recover automatically.
- DALI bus standard: IEC62386-101, 102, 207.
- Suitable for internal lights application for I / II / III.
- 5 years warranty (Rubycon capacitor).

**T-PWM™**  
Super depth dimming technology

**Flicker-free**  
IEEE 1789



TUV Certificate No. B 17 06 01119 001  
RCM Equipment registration No: E2017013627 Ref: ESV170365  
ENEC Certificate No. U6 17 07 01119 004  
CE EMC Certificate No. BST1702498520001Y-1EC-1  
LVD Certificate No. BST1709992470001Y-1SC-2



Dimmable:  
0.01-100%

5 years  
warranty



**RoHS**

**SELV**



**Class 2**

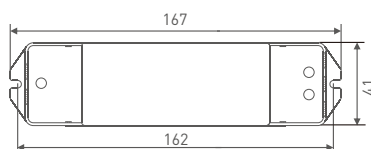


### Specification

| Model        |                          | DALI-15-100-700-E1A1                                                                                      | DALI-25-150-900-E1A1                                         | DALI-36-200-1200-E1A1                                          |
|--------------|--------------------------|-----------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|----------------------------------------------------------------|
| OUTPUT       | Output Voltage           | 10-54Vdc                                                                                                  |                                                              |                                                                |
|              | Max Output Voltage       | 58Vdc                                                                                                     |                                                              |                                                                |
|              | Non-load Output Voltage  | 0Vdc                                                                                                      |                                                              |                                                                |
|              | Output Current           | 100-700mA                                                                                                 | 150-900mA                                                    | 200-1200mA                                                     |
|              | Output Power             | 1-15W                                                                                                     | 1.5-25W                                                      | 2-36W                                                          |
|              | Strobe Level             | Almost flicker-free / High frequency exemption assessment level.                                          |                                                              |                                                                |
|              | Dimming Range            | 0~100%, LED start at 0.01% possible.                                                                      |                                                              |                                                                |
|              | PWM Dimming Frequency    | ≤3600Hz (frequency conversion dimming)                                                                    |                                                              |                                                                |
|              | Current Accuracy         | ±5%                                                                                                       |                                                              |                                                                |
|              | Ripple & Noise           | ≤2V (no dim)                                                                                              |                                                              |                                                                |
| INPUT        | Dimming Interface        | DALI, Push DIM                                                                                            |                                                              |                                                                |
|              | Input Voltage Range      | 220-240Vac ±10%                                                                                           |                                                              |                                                                |
|              | Frequency                | 50/60Hz                                                                                                   |                                                              |                                                                |
|              | Input Current            | <0.15A                                                                                                    | <0.2A                                                        | <0.3A                                                          |
|              | Power Factor             | PF>0.90/230Vac, at full load                                                                              | PF>0.93/230Vac, at full load                                 | PF>0.95/230Vac, at full load                                   |
|              | THD                      | ≤20% at 230Vac, at full load                                                                              |                                                              |                                                                |
|              | Efficiency(typ.)         | 83%                                                                                                       | 84%                                                          | 87%                                                            |
|              | Inrush Current(typ.)     | Cold start 2.53A at 230Vac (twid=25.1μs measured at 50% Ipeak)                                            | Cold start 3.01A at 230Vac (twid=35μs measured at 50% Ipeak) | Cold start 6.31A at 230Vac (twid=58.4μs measured at 50% Ipeak) |
|              | Anti Surge               | L-N: 1kV                                                                                                  |                                                              |                                                                |
|              | Leakage Current          | <0.5mA/230Vac                                                                                             |                                                              |                                                                |
| ENVIRONMENT  | Working Temperature      | ta: 50°C tc: 90°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 Load Protection     | Shut down the output when rated power ≥102%, auto recovers.                                               |                                                              |                                                                |
|              | Short Circuit Protection | Shut down automatically if short circuit occurs, auto recovers.                                           |                                                              |                                                                |
|              | Non-load Protection      | Shut down the output if no load, auto recovers when load back to normal.                                  |                                                              |                                                                |
| 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                | 167×41×32mm(L×W×H)                                                                                        |                                                              |                                                                |
|              | Packing                  | 168×43×35mm(L×W×H)                                                                                        |                                                              |                                                                |
|              | Weight(G.W.)             | 165g±10g                                                                                                  |                                                              |                                                                |

### Dimensions

Unit: mm



## LED Current Selection

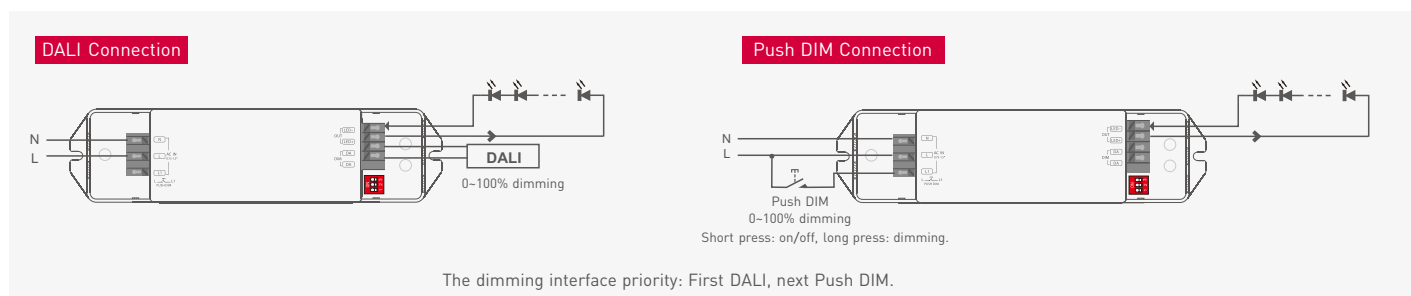
DIP switch for 8 optional currents' quick selection[see the table below].

| DALI-15-100-700-E1A1  | DIP Switch     |           |            |          |             |            |          |              |          | <br>ON<br><br>OFF |
|-----------------------|----------------|-----------|------------|----------|-------------|------------|----------|--------------|----------|-------------------|
|                       | Output Current | 100mA     | 180mA      | 300mA    | 350mA       | 450mA      | 500mA    | 600mA        | 700mA    |                   |
|                       | Output Voltage | 10-54V    | 10-54V     | 10-50V   | 10-43V      | 10-34V     | 10-30V   | 10-25V       | 10-22V   |                   |
|                       | Output Power   | 1W-5.4W   | 1.8W-9.72W | 3W-15W   | 3.5W-15.05W | 4.5W-15.3W | 5W-15W   | 6W-15W       | 7W-15.4W |                   |
| DALI-25-150-900-E1A1  | DIP Switch     |           |            |          |             |            |          |              |          | <br>ON<br><br>OFF |
|                       | Output Current | 150mA     | 250mA      | 300mA    | 350mA       | 500mA      | 600mA    | 700mA        | 900mA    |                   |
|                       | Output Voltage | 10-54V    | 10-54V     | 10-54V   | 10-54V      | 10-50V     | 10-42V   | 10-36V       | 10-28V   |                   |
|                       | Output Power   | 1.5W-8.1W | 2.5W-13.5W | 3W-16.2W | 3.5W-18.9W  | 5W-25W     | 6W-25.2W | 7W-25.2W     | 9W-25.2W |                   |
| DALI-36-200-1200-E1A1 | DIP Switch     |           |            |          |             |            |          |              |          | <br>ON<br><br>OFF |
|                       | Output Current | 200mA     | 350mA      | 500mA    | 600mA       | 700mA      | 900mA    | 1050mA       | 1200mA   |                   |
|                       | Output Voltage | 10-54V    | 10-54V     | 10-54V   | 10-54V      | 10-52V     | 10-40V   | 10-35V       | 10-30V   |                   |
|                       | Output Power   | 2W-10.8W  | 3.5W-18.9W | 5W-27W   | 6W-32.4W    | 7W-36.4W   | 9W-36W   | 10.5W-36.75W | 12W-36W  |                   |

\* After current setting by DIP switch, power off and then power on to make the new current effective.

\* E.g. LED 3.2V/pcs: 10-54V can power 3-16pcs LEDs in series, 10-22V can power 3-6pcs LEDs, the max quantity of LEDs in series will be subject to the actual voltage of LED.

## 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.

## Relationship Diagrams

