DALI-50-500-1750-F1P1



5W~50W 500~1750mA 10~54Vdc

FECH 3 Dimmable[.] 0.1%-100%

LED Intelligent Driver

- Dimming interface: DALI, Push Dim.
- PWM digital dimming, no alter LED color rendering index. .
- Standard DALI logarithmic dimming curve.
- Dimming range: 0~100%, LED start at 0.1% possible. .
- Multiple current, wide voltage, compatible with a variety of LED lights.
- Short circuit / Over-heat / Over load / Non-load protection.
- Non-load output voltage OV to prevent damages to LED caused by poor contact. •

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>0.99

- Class 2 power supply. Full protective plastic housing. ٠
- DALI bus standard: IEC62386-101, 102, 207.
- Compliant with Safety Extra Low Voltage standard.
- Suitable for indoor environments. SELV



Main Characteristics







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| Dimming Interface: | DALI (IEC62386), Push Dim | Current Accuracy: | ±3% |
|--------------------------|--|-----------------------------|-------------------------------------|
| Input Voltage Range: | 100-240Vac ±10% | Max. Output Voltage: | 58Vdc |
| Frequency: | 50/60Hz | Non-load Output Voltage: | OVdc |
| Input Current: | 115Vac≤0.6A, 230Vac≤0.3A | Dimming Range: | 0~100%, LED start at 0.1% possible. |
| Power Factor: | PF>0.99/115Vac, PF>0.95/230Vac, at full load | PWM Frequency: | ≪4KHz |
| THD: | $\leqslant\!10\%$ at 115Vac, $\leqslant\!20\%$ at 230Vac, at full load | Working Temperature: | tc: 80°C ta: -30°C ~ 55°C |
| Efficiency: | >85% | Working Humidity: | 20 ~ 95%RH, non-condensing |
| Inrush Current(typ.): | Cold start 50A at 230Vac | Storage Temp., Humidity: | -40 ~ 80°C, 10~95%RH |
| Control Surge Capability | L-N: 1kV | Temp. Coefficient: | ±0.03%/°C(0-50°C) |
| Leakage Current: | <0.5mA/230Vac | Vibration: | 10~500Hz, 2G 12min./1cycle, period |
| Operating Voltage: | 10-54Vdc | | for 72min. each along X, Y, Z axes |
| Output Power Range: | 5W~50W | | |
| Output Current : | 500mA 700mA 900mA 1050mA 1200mA | 1450mA 1600mA 1750r | nA |
| Output Voltage : | 10-54V 10-54V 10-54V 10-48V 10-42V | 10-34V 10-32V 10-2 | 9V |
| Output Power : | 5-27W 7-37.8W 9-48.6W 10.5-50.4W 12-50.4W | 14.5-49.3W 16-51.2W 17.5-50 | 0.8W |

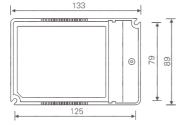
Protection

Over-heat Protection: Over Load Protection: Non-load Protection.

When O/P voltage exceed its range, O/P current declines, auto recovers when the load is reduced. Short Circuit Protection: Shut down automatically if short circuit occurs, auto recovers after faulty condition is removed. Auto detecting, auto recovers when load back to normal.

Shut down the output when PCB temp. \geq 110°C, auto recovers when temp. back to normal.

Dimensions



Safety & EMC

| Withstand Voltage: |
|-----------------------|
| Isolation Resistance: |
| Safety Standards: |
| EMC Emission: |
| EMC Immunity: |

I/P-0/P: 3750Vac I/P-0/P: 100MΩ/500VDC/25°C/70%RH IEC/EN61347-1, IEC/EN61347-2-13 EN55015, EN61000-3-2 Class C, IEC61000-3-3 EN61000-4-2,3,4,5,6,8,11 EN61547

Others

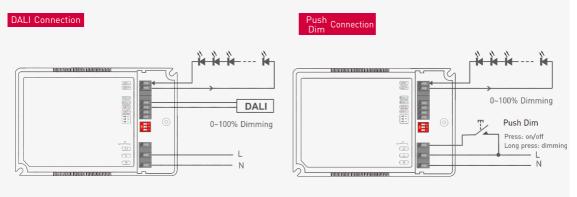
Dimension: Packing: Weight(G.W.):

133×89×30mm(L×W×H) 135×90×35mm(L×W×H) 320g±10g



Connections





The dimming interface priority: First DALI, next Push Dim.

• With every other long press, the light level goes to the opposite direction.

On/off control: Short press.Stepless dimming: Long press.

Push Dimming



Reset Switch

LED Current Selection

Quick options: DIP switch for 8 optional currents' quick selection(see the table below).



| | 117 | 171 | 177 | 711 | TAT | TTL | TTT | T | 4 |
|-------------|---------|---------|---------|---------|---------|---------|---------|----|-----|
| 50 KohA/SET | 700mA | 90 0mA | 1050mA | 120 0mA | 145 0mA | 160 0mA | 175 0mA | ON | OEE |
| 10 -54V | 10 -54V | 10 -54V | 10 -48V | 10 -42V | 10 -34V | 10 -32V | 10 -29V | | |

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

• Dimming memory: Brightness will be the same as previously adjusted when turning off and on again.

🔆 E.g. LED 3.2V/pcs: 10-54V can power 3-16pcs LEDs in series, 10-29V can power 3-9pcs LEDs, the max quantity of LEDs in series will be subject to the actual voltage of LED.

Advanced options: Dial DIP switch down 🛓 🛓 , connect ISET port with resistors of different values to set up any current from 500mA to 1750mA (specific resistor values refer to the table).



| Connecting ISET with resistors can obtain the following typical currents. | | | | | | | | | |
|---|---------|----------------|----------|---------|---------|---------|----------|----------|---------|
| Current (nA) | 500mA | 550mA | 600mA | 650mA | 700mA | 750mA | 800mA | 850mA | 900mA |
| Resistor (K) | 00 | 21.2KΩ | 18.95 KΩ | 17 KΩ | 15.3KΩ | 13.9 KΩ | 12.64 KΩ | 11.39 KΩ | 10.3 KΩ |
| Current (mA) | 950mA | 1000mA | 1050mA | 1100mA | 1150mA | 1200mA | 1250mA | 1300mA | 1350mA |
| Resistor (K) | 9.38 KΩ | 7.95 KΩ | 7.18 KΩ | 6.52 KΩ | 5.87 KΩ | 5.25 KΩ | 4.62 KΩ | 4.13 KΩ | 3.69 KΩ |
| Current (nA) | 1400mA | 1450mA | 1500mA | 1550mA | 1600mA | 1650mA | 1700mA | 1750mA | |
| Resistor (K) | 3.24 KΩ | 2.79KΩ | 2.31 KΩ | 2.03KΩ | 1.63 KΩ | 1.31 KΩ | 1.05 KΩ | Ο ΚΩ | |