

# 50W Intelligent Series - MU050I150BQI8 (DALI DT8, 2chs)

## Features

- Comply with Class 2 Power supply safety standards
- Comply with IEC62386-102(2.0), IEC62386-207 and IEC62386-209
- Constant current LED driver
- Support DALI type 8 colour temperature adjustment
- Support DALI type 6 and the group count of DALI address configurable (1/2 addresses)
- 2 LED channels, output current can be changed from 200mA to 1500mA
- Mode of wiring: Single-ended wiring.
- Constant power maximum is 50W
- Normal life time is 50000 hours ( at the case's temperature of 72°C )
- Dimming range 0.1%~100%
- Push Dimming for intensity and colour control.
- Protection comply with IP20
- CUL / CE
- 5-year warranty



130 × 76 × 30mm

## Electrical Specifications

Input voltage range	100 - 277 V
Frequency	50 / 60 Hz
Input current	0.7A
Inrush current	< 15A
Rated power	50W
Power factor	>0.95 ( 230V,50Hz,full loaded )
Efficiency	88 - 90 % ( 230V,50Hz,full loaded )
Output voltage range	8 - 50 V
Output current range	200-1500mA
Protections	Thermal protection,short-circuit protection,no-load protection,over-power protection

## Environmental Specifications

Operating temperature	-25°C - +49°C
Storage temperature	-40°C - +85°C
Maximum case temperature	84°C
Cooling method	Convection
Life time	50,000 hours at tc 72°C
Reference dimension( LxWxH)	130 × 76 × 30 mm

## Safety & EMC Compliance

CUL	UL8750,UL1310,CAN/CSA-C22.2 NO.223-M91
CE	EN61347-1,EN61347-2-13
Conducted Emissions	FCC Part15 Class B /EN55015
Radiated Emissions	FCC Part15 Class B /EN55015
Harmonic Current Emissions	EN 61000-3-2
Voltage Fluctuations and Flicker	EN 61000-3-3
Electrostatic Discharge	EN 61000-4-2
RFE Field Susceptibility	EN 61000-4-3
Electrical Fast Transient	EN 61000-4-4
Surge immunity test	EN61000-4-5 (Surge: L-N 1KV ,L/N-Earth 2KV)
Conducted Radio Frequency	EN 61000-4-6
Power Frequency Magnetic Field Test	EN 61000-4-8
Voltage Dips	EN 61000-4-11
Electromagnetic Immunity	EN61547

## Function Description

- Alternative DALI device type(default type 8).

You can select DALI type 6 or type 8 with Smartkey and DALI Configurator.

- DALI device type 8 software for tunable white(2500k-6500k).

You can set the CT range(coldest and warmest) with Smartkey and DALI Configurator.

- DALI device type 6

You can set dual DALI addressable or solo DALI addressable output channels with Smartkey and DALI Configurator.

- Switch DIM (with memory function)---push dimming

SwitchDIM means that you can use two lines to connect L and N to DA+ and DA- respectively, and add a switch in series to either of the two lines to complete the function of ON/OFF and dimming. Short press(<0.6s) can turn on/off the driver, and long press can adjust the dimming level. When several drivers are connected together and controlled by one switch, press the switch for 10s, all the drivers are dimmed to 50% at the same time.

- Color DIM(Switch-Control for the colour temperature)---push dimming

The control of Colour temperature is initiated with a press and hold of the light level up to the maximum, holding it at maximum level. After a holding period of 6 seconds on full intensity the driver starts to change the colour temperature of the white light.

- MCS technology

Connect Smartkey to the driver through MCS( Multifunctional Configuration Settings) ports. With MOONS' Configurator software, you can set the MAX current of the driver( each step is 1 mA),dimming curve type, group count of DALI address,etc.Please refer to specification of Smartkey to get specific information.

- Temperature Detection

In order to protect the LED, the temperature of LED is detected by a NTC. When the temperature exceeds the point which can be set by Smartkey, the output current can be decreased automatically, but not less than 25%.

- Constant Output Power

The driver can satisfy the curve of constant output power within a large range of output current and voltage.

- Protection

**Thermal Protection**

When the temperature of the inside PCB exceeds 110℃ , output current will be decreased to 50%. And it can not recover until the temperture drops to 70℃ .

**Short-circuit Protection**

Once the output short-circuits, the output will be cut off automatically. Then the driver will try to restart every 4s.

**No-load Protection**

The driver operating with no load will not be damaged, and it will try to restart every 4s. So the driver supports hot plug in.

**Over-Power Protection**

If the total power exceeds 60W, the output current of each channel will decrease to 50%, and then the maximum output power is increased to 50W gradually.

- DALI Signal Abnormality

If the signal of DALI is abnormal, including open-circuit and short-circuit, the output will recover to the preset maxium value.

- Online Update

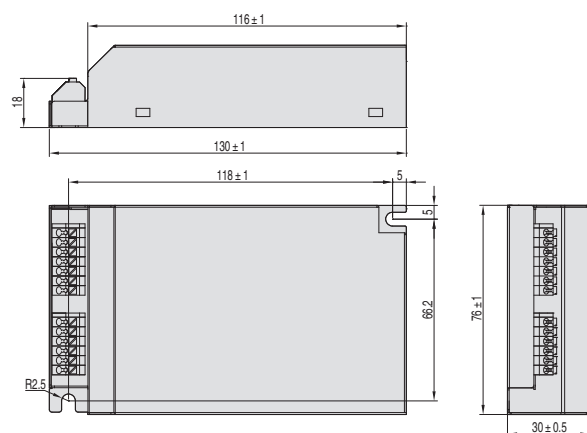
Use smart key to connect PC and the driver to update the firmware.

Please refer to the specification of Smart key.

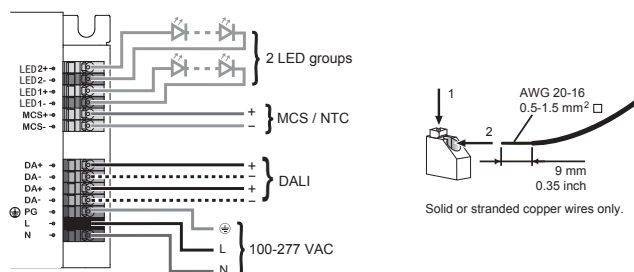
- Daisy-Chain

DALI dimming ports has 2 groups of DA+ and DA-, which support daisy-chain.

## Mechanical Outline (unit: mm)



## Schematic Diagram



Numbering System

Quick Selection

LED Driver  
- General Series  
- Outdoor Use  
- H SeriesLED Driver  
- General Series  
- Outdoor Use  
- Half Potted SeriesLED Driver  
- General Series  
- Outdoor Use  
- A SeriesLED Driver  
- General Series  
- Outdoor Use  
- Other SeriesLED Driver  
- Intelligent Series  
- 50W Intelligent SeriesLED Driver  
- Intelligent Series  
- 40W Intelligent SeriesLED Driver  
- Intelligent Series  
- 50W Intelligent SeriesLED Driver  
- Intelligent Series  
- 50W Intelligent SeriesLED Driver  
- Intelligent Series  
- Other SeriesGeneral Power Supplies  
- MP Series

SPD

Appendix