

50W Intelligent Series - MU050I105DQI51 (DMX, 4chs)

Features

- Compliant with Class 2 Power supply safety standards
- DMX/RDM constant current LED driver
- 4 LED channels, output current can be changed from 200mA to 1050mA
- Mode of wiring: On both ends of wiring.
- Constant power maximum is 50W
- Normal life time is 50000 hours (at the case's temperature of 78℃)
- Dimming range 0.1%~100%
- Protection compliant with IP20
- CUL / CE
- 5-year warranty



438.8 × 30 × 21mm

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	85 - 87 % (230V,50Hz,full loaded)
Output voltage range	8 - 50 V
Output current range	200-1050mA
Protections	Thermal protection,short-circuit protection,no-load protection,over-power protection

Environmental Specifications

Operating temperature	-25 - 61℃
Storage temperature	-40℃ ~ +85℃
Maximum case temperature	90℃
Cooling method	Convection
Life time	50,000 hours at 78℃
Reference dimension(LxWxH)	438.8 × 30 × 21mm

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

- DMX/RDM

DMX in +、DMX in -、Shield ; DMX out +、DMX out -、Shield are the interfaces of DMX/RDM, support daisy-chain.

- 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, DMX start address, scene modes 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 temperature 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.

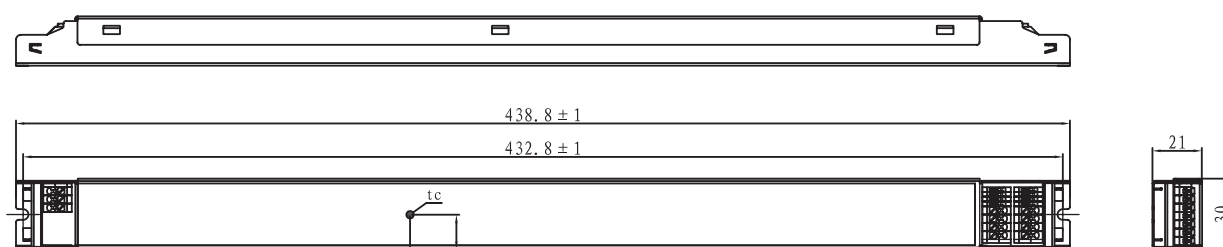
Over-Power Protection

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.

- Online Update

Connect Smartkey to PC through a USB port, then connect Smartkey to the driver correctly to update. Please refer to the specification of Smartkey.

Mechanical Outline (unit: mm)



Schematic Diagram



Numbering System

Quick Selection

LED Driver
- General Series
- Outdoor Use
- H Series

LED Driver
- General Series
- Outdoor Use
- Half Potted Series

LED Driver
- General Series
- Outdoor Use
- A Series

LED Driver
- General Series
- Outdoor Use
- Other Series

LED Driver
- Intelligent Series
- 50W Intelligent Series

LED Driver
- Intelligent Series
- 40W Intelligent Series

LED Driver
- Intelligent Series
- 50W Intelligent Series

LED Driver
- Intelligent Series
- 50W Intelligent Series

LED Driver
- Intelligent Series
- Other Series

General Power Supplies
- MP Series

SPD

Appendix