

# 40W Intelligent Series - MU040I180AQI52 (DMX,1ch)

## Features

- Compliant with Class 2 Power supply safety standards
- Constant current LED driver
- Support DMX/RDM dimming
- 1 LED channel, output current can be changed from 200mA to 1800mA
- Mode of wiring: At the bottom of wiring.
- Constant power maximum is 40W
- Normal life time is 50000 hours ( at the case's temperature of 75℃ )
- Dimming range 0.1%~100%
- Protection compliant with IP20
- CUL / CE
- 5-year warranty



126 × 76 × 30mm

## Electrical Specifications

Input voltage range	100 - 277 V
Frequency	50 / 60 Hz
Input current	0.6A
Inrush current	< 15A
Rated power	40W
Power factor	>0.95 ( 230V,50Hz,full loaded )
Efficiency	86 - 88 % ( 230V,50Hz,full loaded )
Output voltage range	8 - 50 V
Output current range	200-1800mA
Protections	Thermal protection,short-circuit protection,no-load protection,over-power protection

## Environmental Specifications

Operating temperature	-25℃ - +63℃
Storage temperature	-40℃ - +85℃
Maximum case temperature	86℃
Cooling method	Convection
Life time	50,000 hours at tc 75℃
Reference dimension( LxWxH)	126 × 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

- DMX/RDM

DMX+、DMX-、Shield are the interfaces of DMX/RDM.

- 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, 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

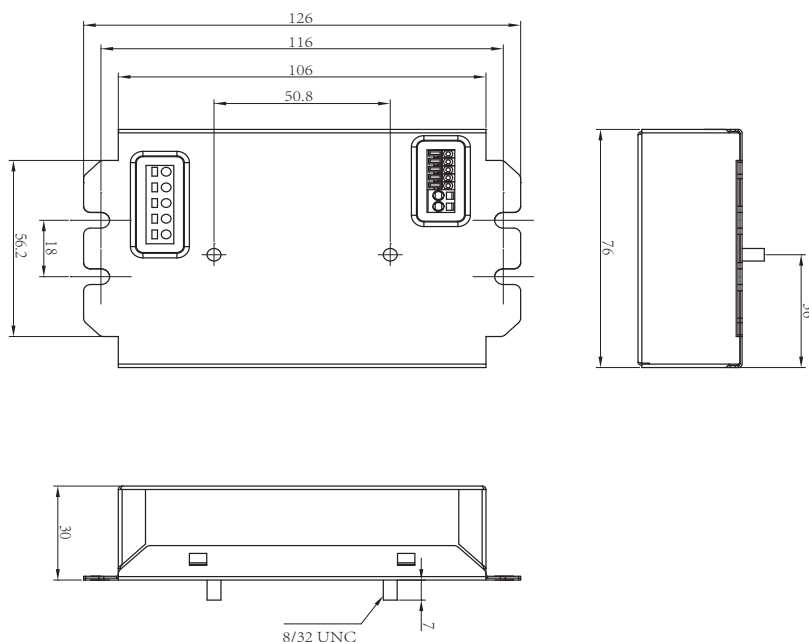
If the total power exceeds 50W, the output current of each channel will decrease to 50%, and then the maximum output power is increased to 40W gradually.

- Online Update

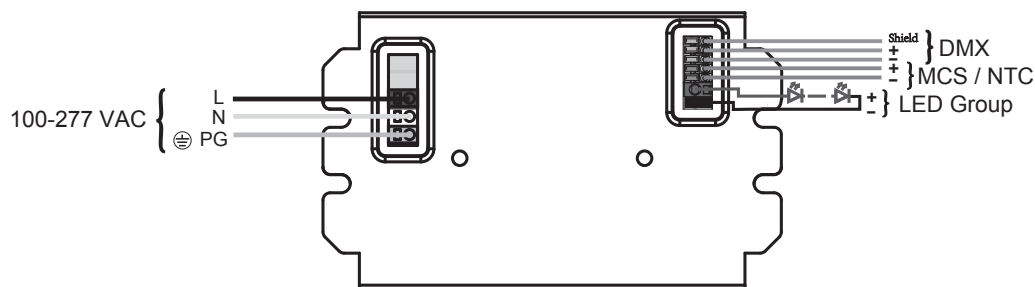
Connect Smartkey to PC through a USB port, then connect Smartkey to the driver correctly to update.

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