#### Numbering System

#### Quick Selection

#### LED Driver - General Series - Outdoor Use

LED Driver
- Intelligent Series
- 30W Intelligent Series

# LED Driver - Intelligent Series - 40W Intelligent Series

# LED Driver - Intelligent Series - 50W Intelligent Series

# LED Driver - Intelligent Series - 96W Intelligent Series

# - 96W Intelligent Series

### Power Suppli - MF Series

### SPD

### Appendix

# 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  $75^{\circ}$ C)
- 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 )
Effiency	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	2°68
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
/oltage Dips	EN 61000-4-11
Electromagnetic Immunity	EN61547

LED Driver - General Series - Outdoor Use

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### 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  $^{\circ}$ C , output current will be decreased to 50%. And it can not recover until the temperature drops to 70  $^{\circ}$ C .

### **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.

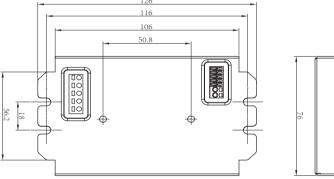
#### Over-Power Protection

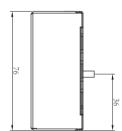
If the total power exceeds 50W, the output current of each channel will decrease to 50%, and then the maximum output power is increased to 40W gradually.

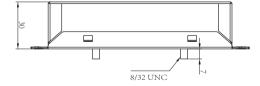
### Online Update

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

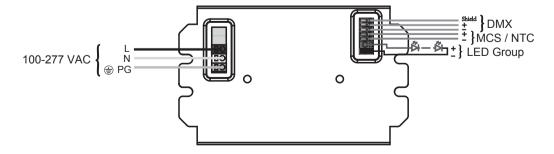
### Mechanical Outline (unit: mm)







### Schematic Diagram



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Numberin System

Quick

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- H Series

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ED Driver Intelligent Serie Other Series

General Power Supplie: - MF Series

SP

Append