SADC SERIES

SADC-L117-DNN-U1930

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Rev 2.1

SADC Series



SADC-L117- DNN-U1930

The core of an air sterilization module made up from foundation that focuses light and a dust-proof housing that was specially designed according to the characteristics of high-power ultraviolet LED.

From sterilization effectiveness point, the module

can replace the traditional UV lamps. It has the advantages of occupying only small volumes, high sterilizing efficiency, and can effectively guaranteeing the indoor environment sanitation of the user.

Product Features:

- 1. Sterilization rate reaches above 70% after turning on module for 1 hour ${\mathbb O}$;
- Operating under pulse mode can extend life cycle to above 10,000 hours² at 25°C.
- 3. Extremely low wind resistance, greatly reducing the noise of air flow
- 4. Extremely low standby operating current : < 0.1 uA
- 5. Lead-free, environmental, and RoHS compatible

① Laboratory testing environment (30m³) and stand slant culturing of E.coli [NMKL official procedure(147.1993)], testing results under the condition of fan ventilation 300m³/H
 ② IESNA (Illuminating Engineering Society of North America) LM70 experimental method, 70% Lumens depreciation evaluation standard, pulse percentage accounting up to 10% of standard



• Product Specification:

1. Module Spec:

Spec		Symbol	SADC-L117- DNN-U1930	
Wavelength		nm	265-280	
Radiance	Тур.	mW	18	
Vin Voltage		V	24	
Power	Min.		0.70	
Consumption ①	Max	vv	1.10	
Housing Type			Pitch2.5 3Pin	
Signal Detection			LED open circuit	
Life Cycle(at 25°C)		hrs	 Operating under pulse mode can extend life 	
			cycle to above 10,000 hours ②	
			 Operating under continuous lighting mode for 	
			5,000 hours or more.	
			**It is recommended to set the module controller to	
			work in pulse. Turn-on the sterilization mode	
			according to the actual needs, and turn off the module	
			in time after the sterilization is achieved, to prolong its	
			life.	

2. Physical Characteristics

Spec	Symbol	Min.	Тур.	Max.
Weight	g		16.5	
Storage Temperature	°C	-10		60
Operating Temperature	°C	0		35

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Fig. 1 Wire Schematic

4. Module dimension: Ø21mm x 12.6mm



Fig. 2 Module Dimensions

- 5. Material: Housing High purity aluminum alloy Glass High purity quartz glass
- Module SADC-L117- DNN-U1930 with warning function, provide instant feedback of High (5V) module working status

I. LED Open Circuiting

Note: The acceptable performance measurement parameters of the table are: irradiance (P0) 10%, forward voltage drop \pm 0.15V, peak wavelength \pm 3 nm

③ Power capacity above 5W

④ IESNA (Illuminating Engineering Society of North America) LM80 experimental method, 70% Lumens depreciation evaluation standard

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• Installation Instructions:

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This part is designed as a small module with a maximum exterior size of 21mm, which is easy to fit inside air conditioner and purifier type of appliances. The main part of the module has a spare screw hole available for bolting the module inside the appliances.

This sterilization module focuses ultraviolet light (the view angle is about 15° as shown in Fig.3, and UV radiation outside the 15° view angle is <5%). It is best installed in the narrow interior spaces of air purifiers as light will not be easily blocked or absorbed by the appliance, boosting up UV utilization rate.

After the module position is fixed, connect the power terminal to a 24V voltage power source according to the correct polarity (red positive black negative). It is recommended to add a control switch in the control system for timed and cyclic operation, extending the life of the module.



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Suggest customers with air purifying applications to install the module as below:

- SADC-L117
- 1. Air conditioner, fresh air ventilation systems etc:

2. Air Purifiers etc:



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• Packaging:

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 Protective Foam Dimension: 629 x310 x40 mm Quantity: 30 pieces/ layer





Section A -A

 Outer Carton Box Dimension: 630 x310 x440 mm Quantity: 10 layers/ box Gross Weight: 6Kg



- *Unit: mm
- *Tolerance: +/- 10mm



Rev 2.1

• History of Version

Revision	Date	Contents of Revision Change	Remark
Preliminary	Feb 1, 2019	New Establishment	
Rev 1.0	May 13, 2019	Add SADC-L117- DNN-U1930 specification	
Rev 1.1	May 15, 2019	Add characteristics graph	
Rev 1.2	May 25, 2019	Add Packing info	
Rev 1.3	Jul 6, 2020	Add Physical Characteristics	
Rev 2.1	Dec. 24. 2020	Modify power consumption	

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