



UVC Air Clean Module - UVC40D15X2/UVC60D15X4

Product Specifications

Customer	Product Name	Part No.	Approved
	UVC Air Clean Module		Dison

Version	Description of change / content	Released by	Date
1.0	Creation	Dison	20-May-2020

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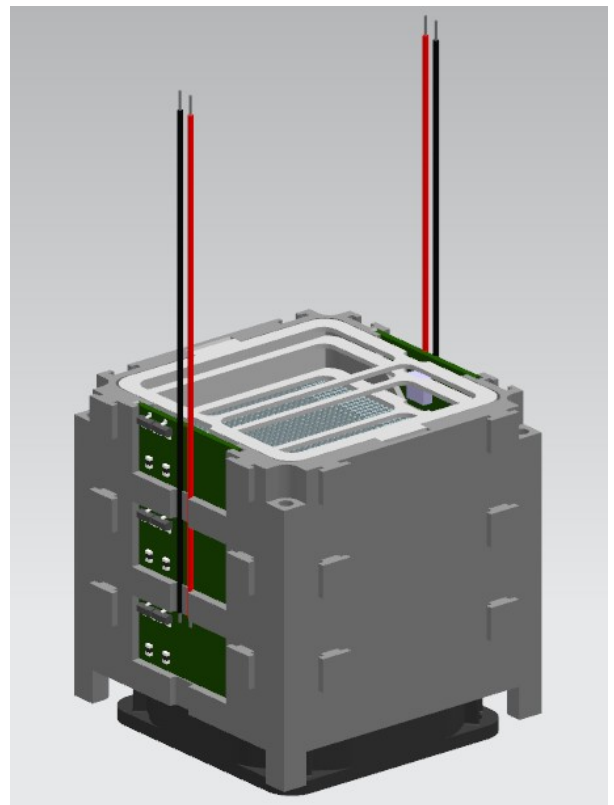
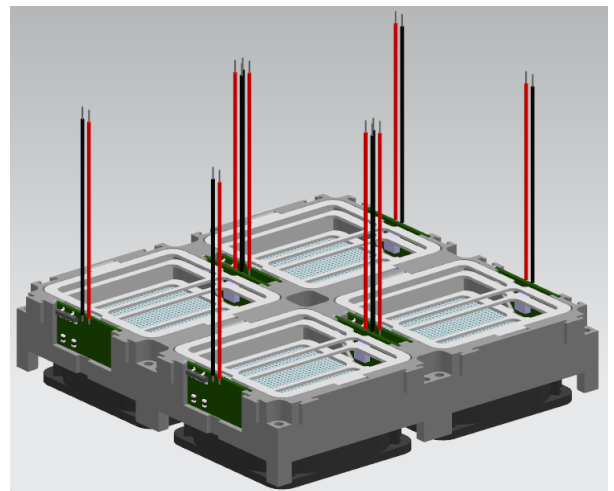
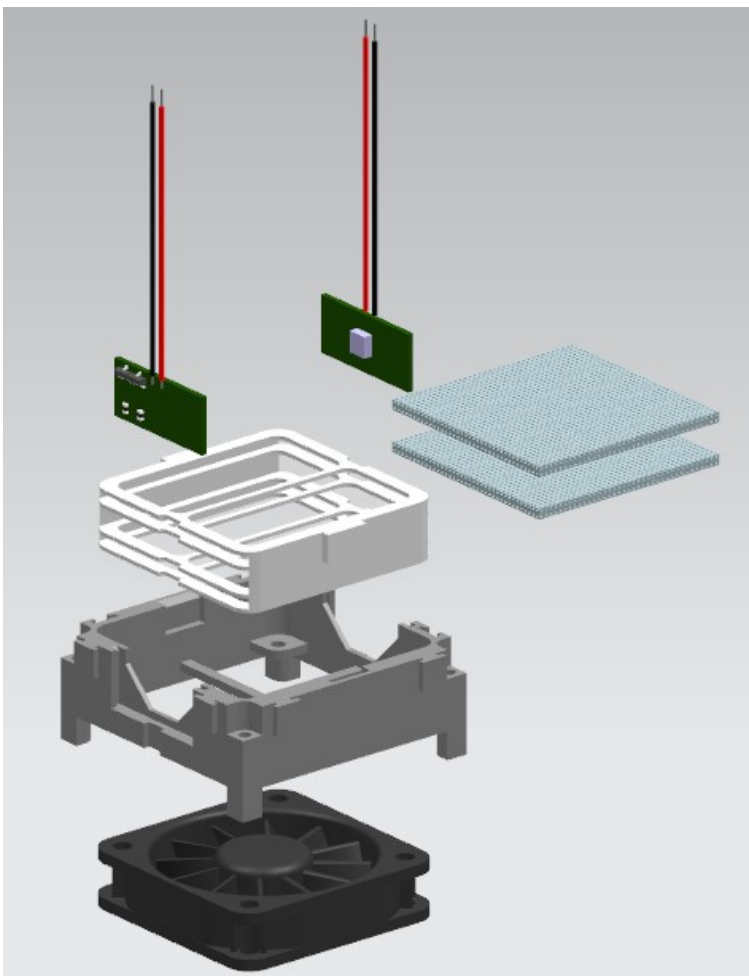
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UVC Air Clean Module UVC40D15X2/UVC60D15X4

1. Introduction

Part No: UVC40D15X2/UVC60D15X4

This module consists of 2 UVC 270nm LED and driving boards on two sides, 2 photocatalytic filters on top and bottom side for high sterilization efficiency. The modules also can be combined together in different dimension size for different applications and efficiency requirements.



2. Features

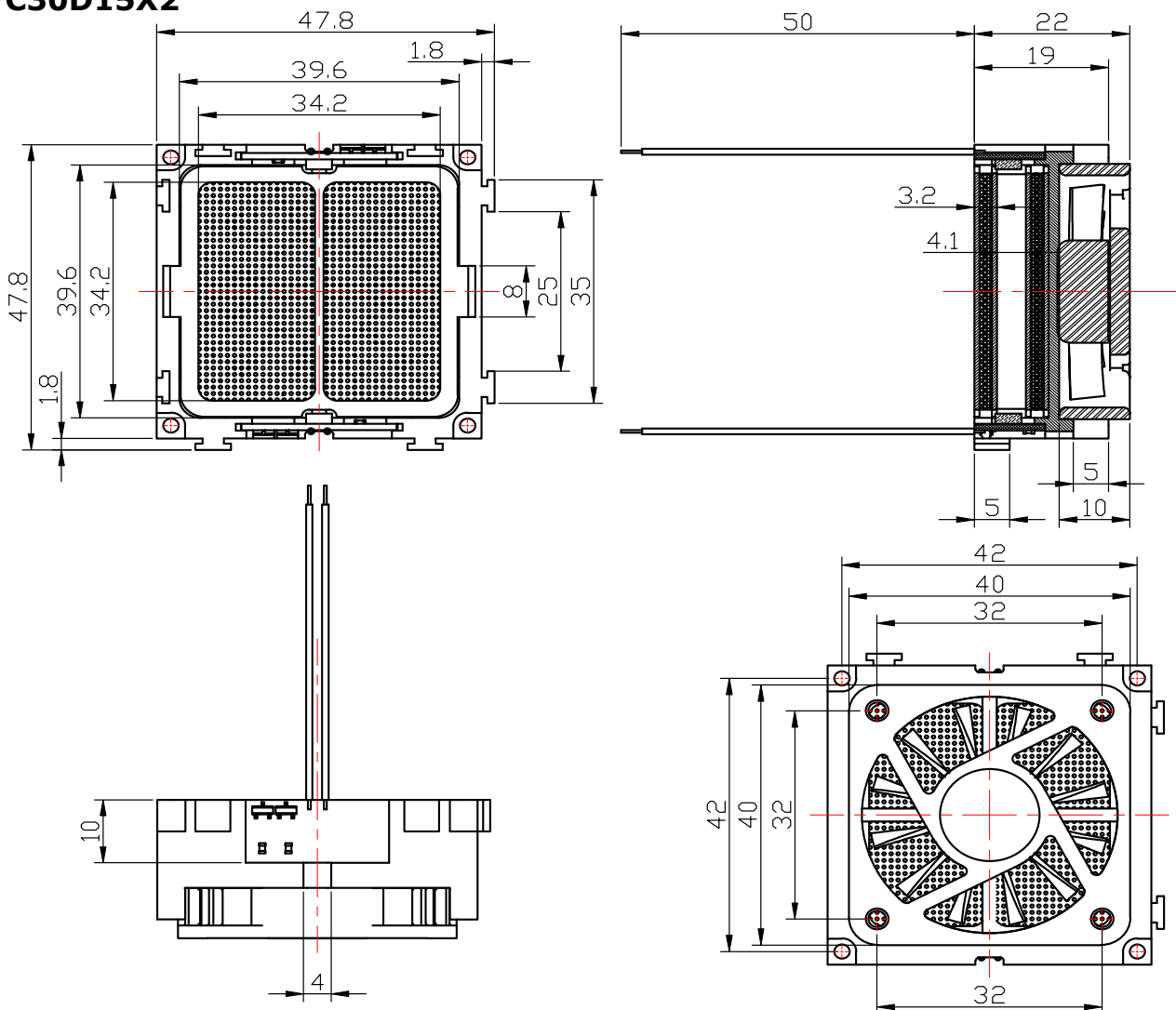
- ◆ 270nm 15mW UV-C LED high intensity sterilization.
- ◆ Up/Down 2 T.T.A photocatalytic filters decomposition
- ◆ UVC+T.T.A high efficiency and 2 effective sterilization
- ◆ Modularize design can be combined to different dimension size for product development easily.

3. Specifications

Part No.	UVC40D15X2 (2pcs LEDs)/ UVC60D15X4(4pcs LEDs)
Effective Space of one module	UVC40D15X2: 5m ³ / UVC60D15X4: 12m ³ for 1.5~2cycle in 30min
UVC Wavelength	265nm ~ 275nm
UVC Light Intensity	One LED: 15mW
LED Driving Voltage	7.0~7.2V
Operation current	One LED: 120~150mA
Power Consumption	One LED: 0.5W
Radian Irradiation	One LED: 1.5 mW/cm ²
Photocatalytic Filters	T.T.A. Photocatalyst Composites with 1.7mm Nickel Filter
Operating Temperature	- 40°C to + 60°C
Storage Temperature	- 40°C to + 85°C
Weight	25g for UVC40D15X2 / 35g for UVC60D15X4

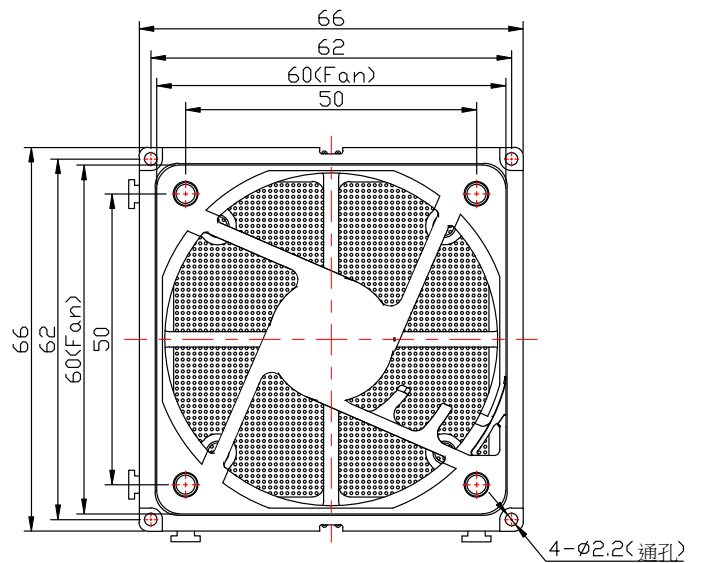
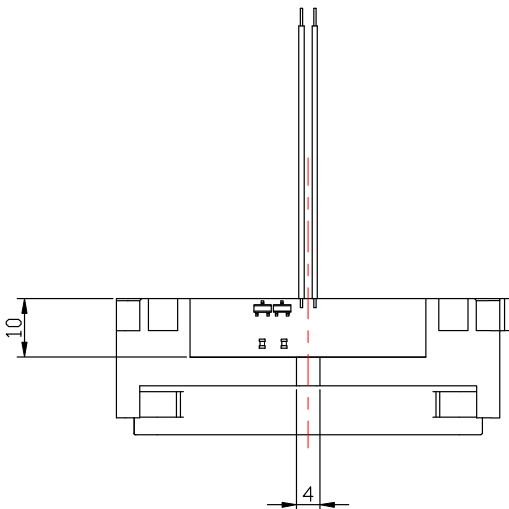
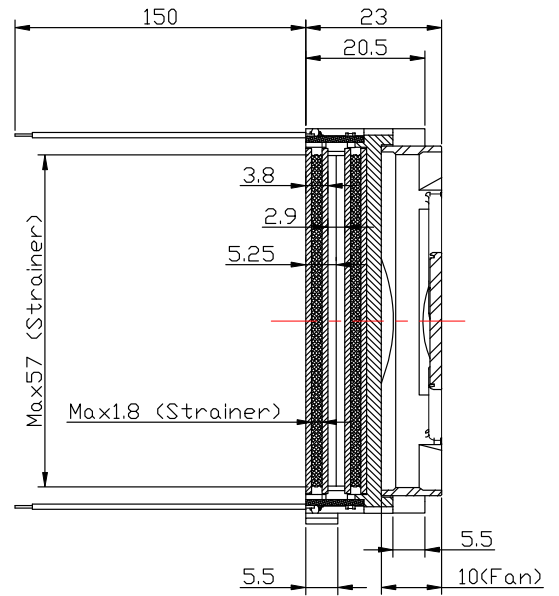
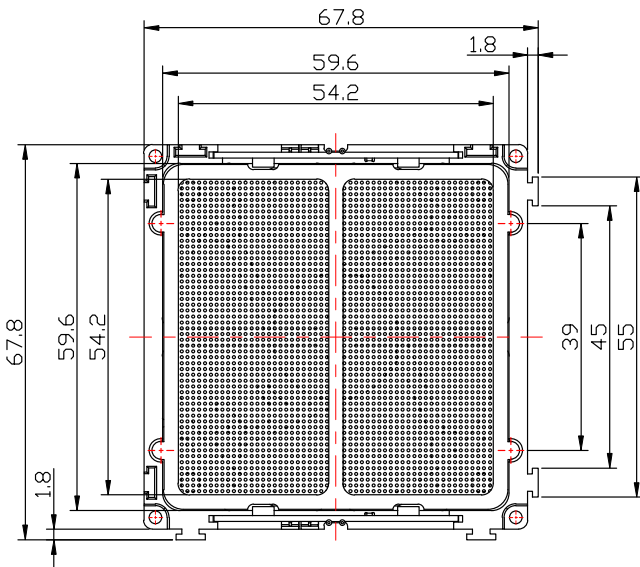
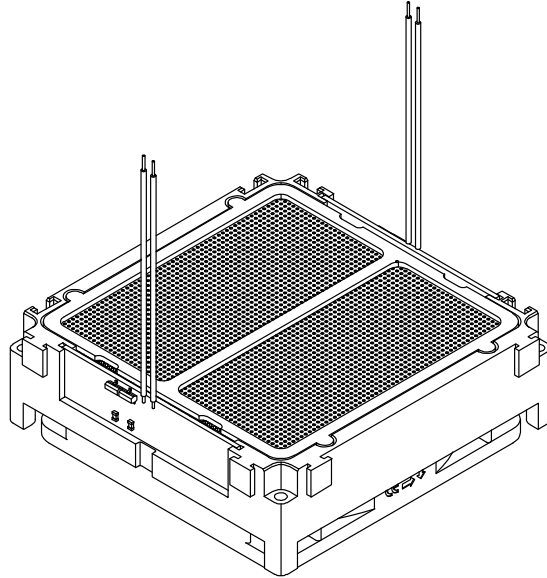
4. Drawing

UVC30D15X2





UVC60D15X4



5. Reliability

no.	Item	Conditions & Requirements	Equipment
1	Low Temperature Storage	-30°C · 120hrs, temperature rise and fall time 30min each	Low Temperature Chamber
2	Low Temperature Operation	-20°C · 120hrs, temperature rise and fall time 30min each	Low Temperature Chamber
3	High Temperature Storage	80°C · 120hrs, temperature rise and fall time 30min each	High Temperature Chamber
4	High Temperature Operation	70°C · 120hrs, temperature rise and fall time 30min each	High Temperature Chamber
5	High Temperature & High Humidity Storage	60°C · 90%RH · 120hrs, temperature rise and fall time 30min each	Temperature & Humidity Chamber
6	High Temperature & High Humidity Operation	40°C · 90%RH · 48hrs, temperature rise and fall time 30min each	Temperature & Humidity Chamber
7	Thermal Shock Test	-30°C→80°C (each 30min) high/low temperature conversion time <5min, total : 10 cycles	High-Low Temperature Cycle Test Chamber
8	Drop Test (with package)	Drop height 150cm · 10 times	Hard Floor
9	Vibration Test (with package)	10Hz ~ 200Hz ~ 10Hz, Amplitude 2mm, XYZ 3 directions · Vibration 2hrs	Vibration Tester
10	ESD Test (power off)	150Pf · 330 Ohm±8KV · air discharge test10 times	ESD Simulator
<p>1. After the reliability test above, then check the outlook, dimension, optical function and functions operation all can work and in the specification requirements.</p> <p>2. Test conditions :</p> <p>illumination : small illumination box 150±10%LUX big illumination box 600±10%LUX</p> <p>color temperature : 4400±150K</p>			PC Module Function Test

6. Package

no.	Item	Requirements
1	Packing Materials	Packing Bag Carton Box
2	Package Quantities	1 Packing Bag : 12pcs 1 Box : 20 bags · 240pcs
3	Sealing Method	Vacuum sealed packaging
4	Storage Method	Environment temperature : 0°C --- 50°C Storage time : 1 year