

A decorative graphic on the left side of the dark blue banner, consisting of several overlapping triangles in various shades of purple and blue, creating a faceted, crystalline appearance.

HIGH POWER UV LED MODULE SPECIFICATIONS

Model No. : MD1005-1

T. 310.787.1100 F. 310.787.1166
20900 Normandie Avenue Bldg. B, Torrance, CA 90502

www.irtronix.com

HIGH POWER UVC LED MODULE

Model No. : MD1005-1

Aluminium Heatsink

Aluminium PCB

Screwed (4 Corners)

Fan

[Front View]

[Backside View]

DC Input Voltage
Red(+) & Black(-) leads

Screwed (4 Corners)

Package:
Seoul Viosys / SETi
Optical power: Total 2.3W
290mW each COB
275nm UV-C

Power Plug

*Scale: NTS

HIGH POWER UVC LED MODULE

Model No. : **MD1005-1**

Optical Power : 2.3W (290mW each COB) 275nm UV-C LED

1. Description

The MD1005-1 is a complete system developed for the purpose disinfecting application. The module has 8 of SETi 20mm x 20mm UVC packages, 4 parallel x 2 in series, mounted on a fan cooled heatsink. The total current is 3.2A and the voltage is ~ 46Vdc. A DC benchtop laboratory power supply with adjustable current limit up to 3.2A, and adjustable voltage up to 48V can be used to provide power to the module.

2. Operating Procedures

Test set up:

- 1) Turn on the benchtop power supply and set the voltage to about 2V.
Short the output power leads (+ and -) together, and adjust the current to 3.2A.
- 2) Plug in the unit AC fan to 100~240Vac line voltage, and turn the fan on with a power cord switch.
- 3) Connect the Red (+) and Black (-) of the module to + and - leads of the benchtop power supply.
- 4) Slowly increase the power supply voltage until the current reach 3.2A.
- 5) The module is now ready to use with proper setting.

3. Features

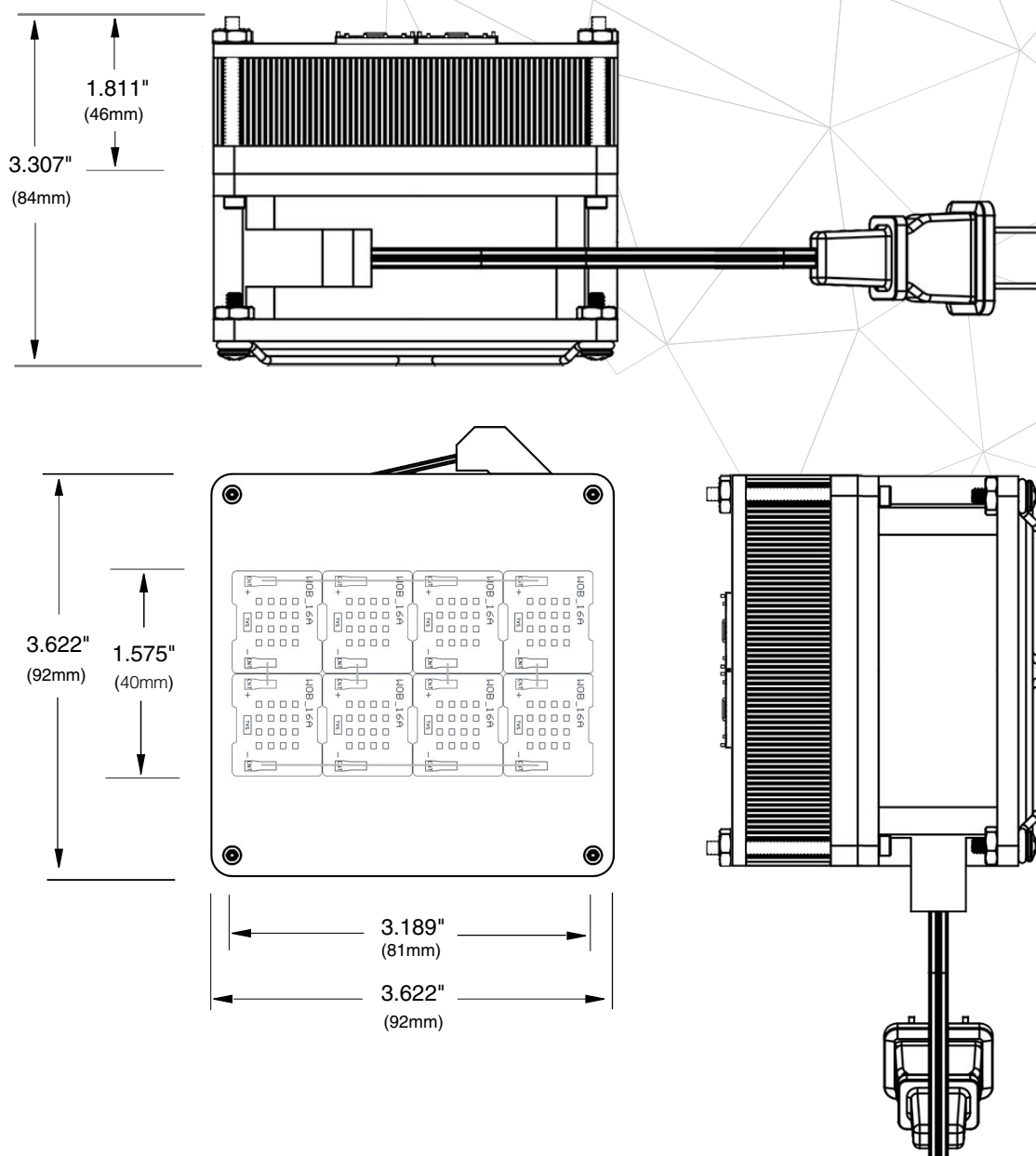
Number of UVC LEDs	128
Package Size	8 module of 16 LEDs each
Beam Angle	35 degrees
Dimensions	92(W) x 92(H) x 84(D) (mm)

4. Electro-Optical Characteristics

LED	Part No.	Peak Wavelength (Band)	Forward Current	Forward Voltage	Optical Power	Power Consumption
290mW	CMD-FS-COGA	275nm	3.20A	46V	2.32W	147W

5. Mechanical Characteristics

1) Outline Dimensions



6. Cautions on Use

- IRTronix is not responsible for any damages or accidents caused if the operating or storage conditions exceed the absolute maximum ratings recommended in this document.
- The LEDs described in this document are intended to be operated by ordinary electronic equipment.
- The LEDs should not be used at any lighting products together with the other LEDs, which has a different part number. If required, please contact any salesperson.
- It is recommended to consult with IRTronix when the environment or the LED operation is nonstandard in order to avoid any possible malfunctions or damage to product or risk of life or health.
- Disassembly of the LED products for the purpose of reverse engineering is prohibited without prior written consent from IRTronix. All defective LEDs must be reported to IRTronix and are not to be disassembled or analyzed.
- The product information can be modified and upgraded without prior notice.

7. Disclaimers: Safety Guidelines



- ULTRAVIOLET light may be harmful. Do not expose to your eyes and skin.
- Proceed with caution to avoid the risk of damage to the eyes when examining the LEDs with optical instruments.