

# AQUUV™ mini – C series UVC LED Sterilizer Unit

SPECIFICATION P/N : AMCH-CE

## DESCRIPTION

- ◆ AQUUV MINI is disinfection unit with UV LED
- ◆ This unit is designed for water tank sterilization

## FEATURES

- ◆ Eco friendly product : No mercury, chemical
- ◆ using Deep ultraviolet LED (UVC)
- ◆ High disinfection rate : more than 99.99% (5Liters)
- ◆ Very low power consumption : less than 0.5W
- ◆ Waterproof
- ◆ Compact design
- ◆ Easy installation



## APPLICATIONS

- ◆ Disinfection / Sterilization
- ◆ Water purifier / Dispenser
- ◆ Humidifier
- ◆ Ice room in Water purifier

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## CONTENTS

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- 1.Product brief
- 2.Product list
- 3.Performance Characteristics
- 4.Dimensions
- 5.Characteristics diagram
- 6.Reliability test
- 7.Installation
- 8.Precautions

## Product List

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No	Product Name	Input Voltage (VDC)	Wavelength (nm)	Radiant Flux (mW)
1	AMCH-CE	12V	260~280	Typ. 20.0

Notes:

1. DC Power source, Radiometric Power (Po)  $\pm 10\%$ .

## Performance characteristics (Ta : 25°C)

Item	Symbol	Min.	Typical	Max.	Unit
DC Input Voltage	$V_{DC}$	10	12	14	V
Peak wavelength <sup>1</sup>	$\lambda_P$	260	275	280	nm
Power consumption	$P_D$	0.56	0.58	0.60	W
Radiant Flux <sup>2</sup>	$\Phi_E$		20		mW
Spectrum Half Width	$\Delta\lambda$		10		nm
Weight	WT		12		g
Water Proof	IP		IPx7		-
Water Tank Capacity	$V_{TANK}$			5	liter

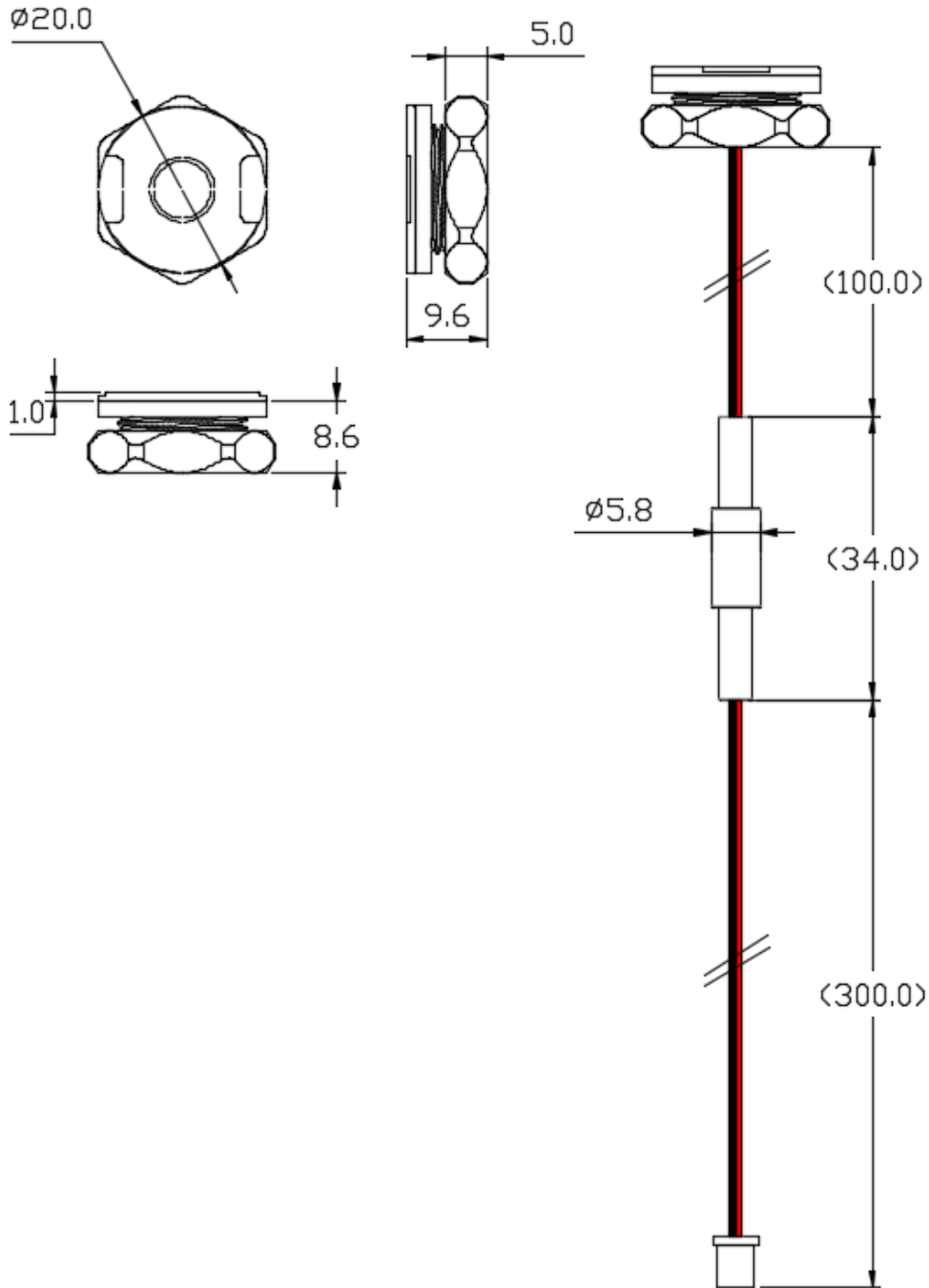
### Notes

1. Peak wavelength measurement tolerance :  $\pm 3\%$
2. Radiant Flux measurement tolerance :  $\pm 10\%$
3. Water tank capacity is a range that the unit can cover more than 99.9% of reduction rate of E. coli ATCC 25992 tested by third party.

# Dimensions

**Notes**

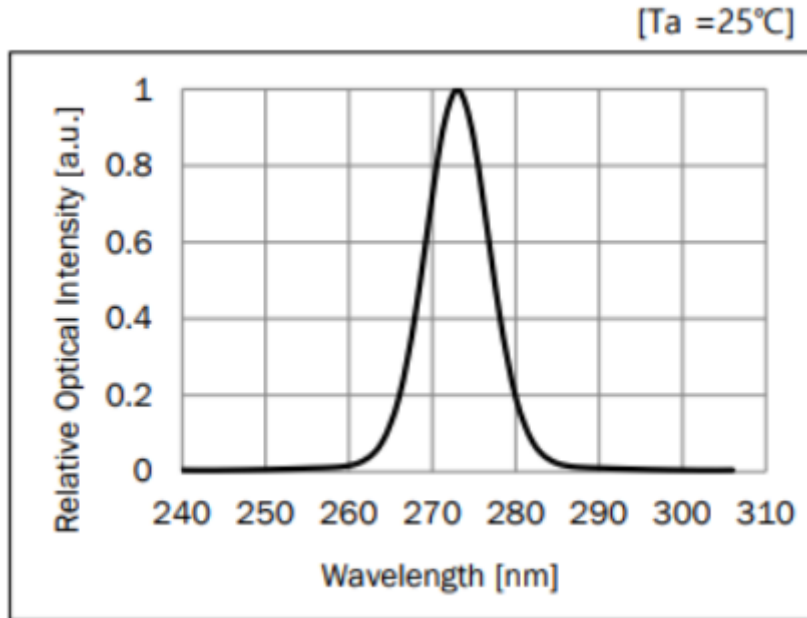
- 1. Unit : mm
- 2. Tolerance : ± 0.5mm



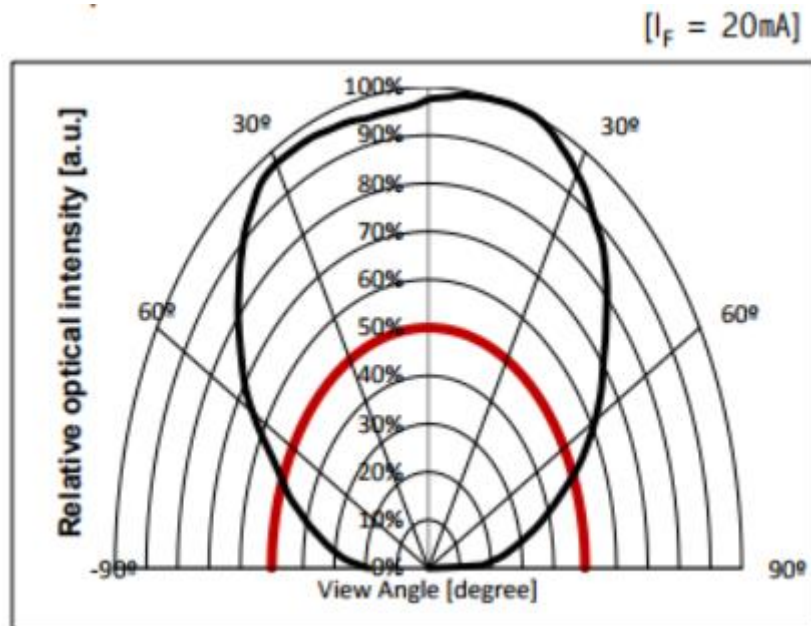
**CNT : JST PHR-2 Female**

# Characteristic diagram

## 1. Spectrum



## 2. Typical spatial distribution



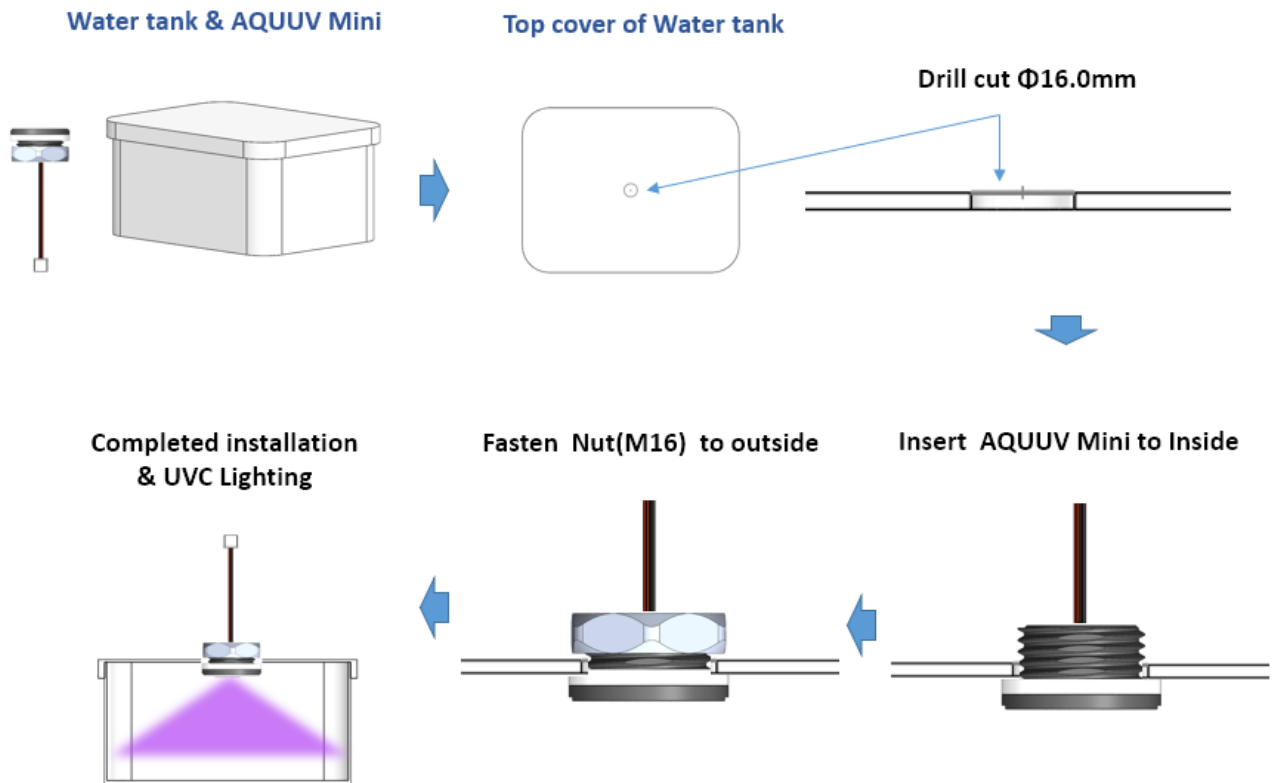
## Reliability Test

NO	Test Item	Test Conditions	Note	Ac /Sample size	Results
1	Steady State Operating Life	Ta=25°C, VDC 12V	1000 hrs	0/5	Pass

**Notes**

1.Judgment Criteria : 70% of initial Po value

## Installation



## Precautions

### 1. Storage

- 1.1 To avoid moisture penetration, we recommend storing UV Module in a dry box with a desiccant. The recommended temperature and Relative humidity are between 5°C and 30°C and below 50% respectively.
- 1.2 Replace the remained UV Module into the moisture-proof bag and reseal the bag after work to avoid those UV Module being exposed to moisture. Prolonged exposure to moisture can adversely affect the proper functioning of the UV Module.

### 2. Handling

- 2.1 Do not use inflammable material nearby the products.
- 2.2 Do not touch the products with wet hand
- 2.3 Do not fix or remodel the products.
- 2.4 Do not drop the machine, or give strong impact on the products.
- 2.5 UV Module needs to be handled carefully as below
- Avoid touching quartz glass parts especially with sharp tools such as Tweezers
  - Avoid leaving fingerprints cover parts.
  - UV Module will attract dust so use covered containers for storage.

### 3. Safety for eyes and skin

The Products emit high intensity ultraviolet light which can make your eyes and skin harmful, So do not look directly into the UV light and wear protective equipment during operation.

### 4. Cleaning

After assembly the product, empty the water and then wipe the UV Module with a dry towel.

