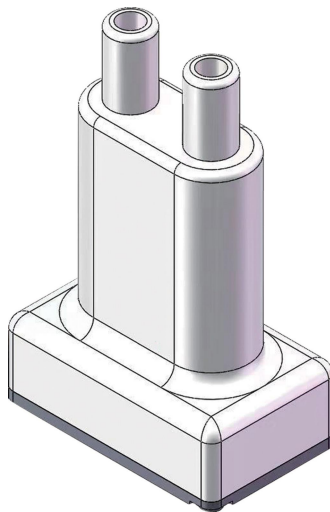


PPM-DT1

Product Datasheet

SPECIFICATIONS



UVC LED Pueple Planet Mods



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1 Product Image



PPM-DT1 UVC-LED Dynamic Water Disinfection Module

2 Application Range

Application: Integrated waterway boards of water purifiers with pressurized water output or built-in water pumps.

Widely used in household appliances, including water dispensers, ice makers, air humidifiers, air purifiers, aroma diffusers, pet water fountains, dishwashers, smart toilet seats, and other smart home devices.

3 Applicable Standard: GB/T 4827-2015

Water Contact Safety – Compliant with Drinking Water Safety and Food

Hygiene Requirements

4 Product Specifications :

- Constant Voltage Drive: DC 12V / 24V
- Housing Material: Food-Grade ABS+PC; Bottom Cover: Die-Cast Aluminum
- Lead Wire Specification: UL2468 24 AWG Dual Parallel Cable (Wire Length Customizable)
Connector Specification: XHB-2P, Red (Connector Customizable)
- IP Rating: IP68 Dustproof & Waterproof (Terminal Excluded)

Operating Temperature: -25~100°C (UVC disinfection is not available for water temperatures above 45°C)

5 Performance Characteristics :

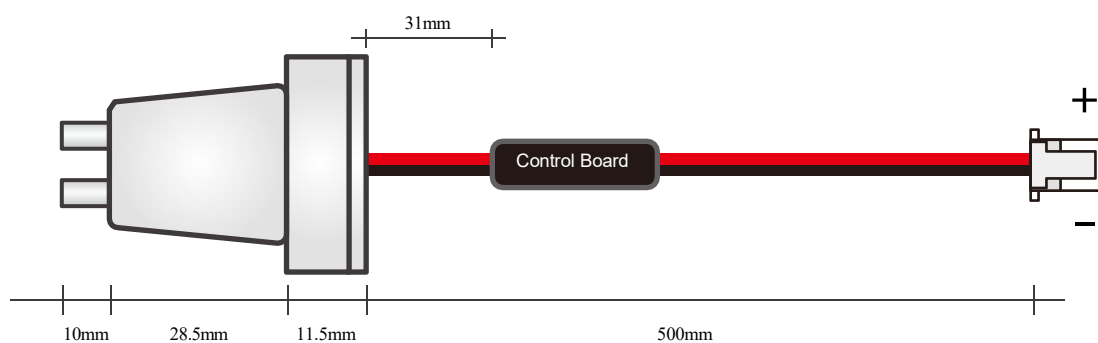
Model	Input Voltage	Operating Current	Radiant Power	Beam Angle
PPM-DT1	12V / 24V	100-150mA	50-70mW	30°~60°

Insulation Withstand Voltage : DC500V+2V_{in} / 1 min

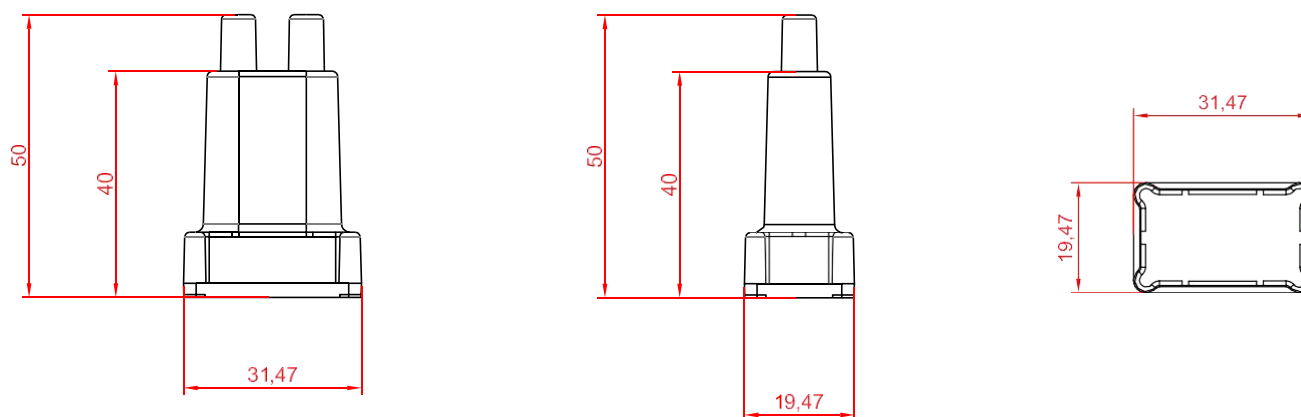
6 Test Method :

- Appearance: No flash, burrs, defects, corrosion, or deformation. Components securely assembled. Markings clear and durable.
- UV Optical Power: Measured by an integrating sphere to verify UV optical power output.
- UV Wavelength Range Measurement: 270~280 nm
- Insulation Withstand Voltage Test: Apply AC 1500V at 50Hz between live parts and the housing for 1 minute. No breakdown or insulation failure shall occur.
- High and Low Temperature Test: The product operates reliably at -25°C to 40°C and can be stored reliably at 40°C to 85°C.

7 Dimensions



Note: Connector wire polarity: Red wire (+), black wire.



Module Structure Three-View Drawing

8 Precautions for Use

- UVC LEDs are heat-sensitive. The UVC disinfection module must not be powered on without water flow.
(Do not power on or operate the UVC module when the water temperature exceeds 45°C.) ;
- Do not operate the UVC disinfection module beyond the rated voltage or current, or start the module with high-temperature water, as this may result in structural damage or circuit failure.

9 Important Safety Notice

- The product uses UVC LEDs as the disinfection light source. Proper ESD protection must be implemented, as severe electrostatic discharge (ESD) and surge voltage may result in UVC disinfection failure.
- Never directly view the deep UV-C radiation emitted by this product with the naked eye.

