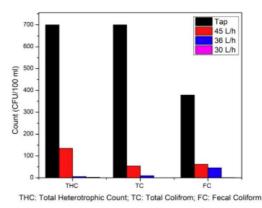






(IN202111046524)
Uvc led system for water treatment



NEED

Water purification systems face challenges with effective disinfection using UVC light while managing heat. What if there was a way to ensure optimal UVC radiation while keeping systems cool?

TECHNOLOGY OVERVIEW

This UVC LED system addresses heat dissipation issues by using a longitudinally extending heat sink and a unique outer sheath encasing the UVC LED array. This design enhances cooling and UV emission efficiency for water treatment applications.

TECHNOLOGY KEY FEATURES

1) UVC LED array on a substrate. 2) Longitudinal heat sink for heat management. 3) Outer sheath encasing for UV radiation efficiency. 4) Ideal for water treatment and sterilization systems.

MARKET ANALYSIS

The global UV LED market is projected to grow at a CAGR of 18.4% from 2023 to 2033. Increasing demand for efficient, energy-saving water purification solutions is a major driver. (Source: Grand View Research)

Target Industries

1) Water treatment companies deploying UVC LED technology for disinfection 2) UV LED manufacturers focusing on high-efficiency, energy-saving designs for industrial applications 3) System integrators working on UVC-based solutions for large-scale water purification plants.

AT A GLANCE

 SDG 6 (Clean Water and Sanitation), SDG 9 (Industry, Innovation, and Infrastructure), SDG 12 (Responsible Consumption and Production)

Read more here

Technology is available for licensing/ co-development.

Reach out to Prof. Deepak Chitkara, Coordinator, BITS Technology Enabling Centre,

BITS Pilani Contact Details: tec.bits@pilani.bits-pilani.ac.in, 91 1596-255913

