

**GRANTED****(IN387277)**

An automatic apparatus, kit and a method for rapid detection of urinary pathogens and susceptibility thereof to antimicrobial agents in a biological



## NEED

The growing threat of antimicrobial resistance (AMR) requires rapid, precise detection of pathogens and their susceptibility to treatments. Current methods are slow, labor-intensive, and not portable—leading to delays in critical treatment decisions.

## TECHNOLOGY OVERVIEW

This portable apparatus allows rapid detection of pathogens and their susceptibility to antimicrobial agents. Using a multi-well strip with distinct antimicrobial agents, the system quickly measures pathogen growth and displays susceptibility levels, offering efficient diagnosis.

## TECHNOLOGY KEY FEATURES

Portable pathogen detection, multi-well strip for antimicrobial susceptibility testing, light-based sensing, microcontroller-based analysis, rapid results in under 3 hours, compact design for on-site testing.

[Read more here](#)

## MARKET ANALYSIS

The global market for antimicrobial susceptibility testing is projected to grow at a CAGR of 7.5% from 2023 to 2033 [Source: Grand View Research, 2023]. Rising healthcare costs and the increasing incidence of infections drive the demand for rapid diagnostic tools.

## Target Industries

Biotechnology, Healthcare Diagnostics, Medical Devices, Biotech companies, healthcare diagnostic providers, medical device manufacturers, research institutions, and clinical labs focused on infectious disease management and antimicrobial resistance testing.

## AT A GLANCE

- SDG 3 (Good Health and Well-being), SDG 9 (Industry, Innovation, and Infrastructure)

Technology is available for licensing/ co-development.

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