



ERYTHROSENSE – PORTABLE BLOOD GROUP SCREENING DEVICE

SoulSense Innovations Private Limited



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3 Working Principle

ErythroSense Portable Blood Group Screening Device

Problem Statement

Blood group identification is essential for safe blood transfusions, emergency medical care, and accurate medical records. However, many healthcare settings—especially rural clinics and emergency response units—lack quick, affordable, and infrastructure-independent blood typing solutions. This often leads to delays, limited accessibility, and increased risks during emergencies where rapid blood group identification can significantly improve clinical outcomes.



Dr. Shweta Chawla

Technology

ErythroSense is a compact biosensing device designed for rapid blood group screening. It utilizes reagent-based antigen-antibody reactions within integrated detection channels to identify blood groups from a small blood sample. Its portable design enables point-of-care testing without complex laboratory infrastructure, providing a reliable, low-cost, and fast solution for hospitals, blood banks, emergency services, and field healthcare applications.

Highlights

ErythroSense enables rapid blood group screening in hospitals, blood banks, ambulances, disaster response units, and rural healthcare centers. Its portable and low-cost design improves access to blood typing in areas with limited laboratory infrastructure. The device supports faster transfusion decisions, enhances patient safety, strengthens emergency preparedness, and assists blood donation camps and public health programs requiring large-scale screening.