

REVA™

Reagentless Blood Testing and Vital Signs Analyser

REVA is a technology platform for non-intrusive blood testing (currently detecting haemoglobin) and vital signs screening. It is targeted for blood sample characterisation and screening. It uses photoplethysmography (PPG) and spectral (400nm to 1000nm) with signal conditioning which is processed by a deep learning algorithm – all captured by a portable handheld device.



Overview

REVA is a reagentless blood testing and vital signs analyser. It is a portable non-invasive haemoglobin meter with vital signs analyser. Current parameters are haemoglobin count and vital signs. Possible parameters include glucose, urea and creatinine.

Features

REVA provides the following features:

- Blood Components and Vital Signs Analysis**
 REVA enables gathering and analysis of blood components and vital signs of a patient/user via built-in chemometrics analysis using a near infrared (NIR) and photoplethysmographic (PPG) platform.
- Rapid and Non-Invasive Single Point of Detection**
 The platform provides a rapid scanning, reagentless, non-invasive and real-time single point of detection.
- Spectral Processing Engine Analytics**
 A robust spectral processing engine analytics consists of chemometrics and deep learning for spectral which enhances intelligence.
- Mobile and Dashboard Results**
 A mobile app communicates with REVA to display results. A results dashboard is also available via desktop.

Technology Benefits

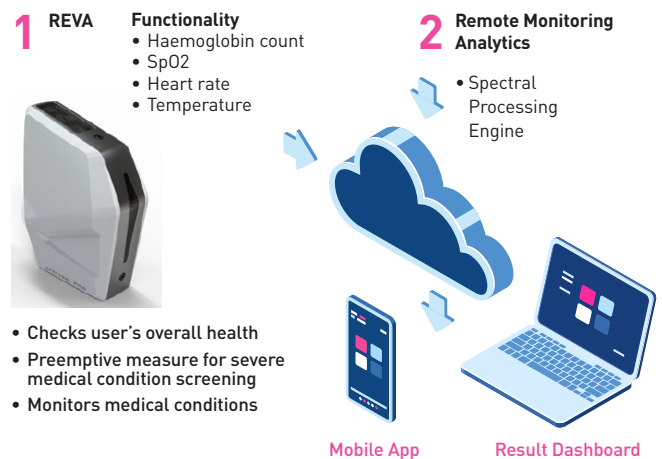
The main impacts of REVA are:

- AI and ML Technology for Spectral Processing**
 REVA uses an artificial intelligence (AI)/machine learning (ML) technology spectral processing engine which is able to speed up model development and for accurate readings.

- Advanced Cloud-Based Platform**
 An advanced cloud-based spectral platform enables faster processing (estimated 50% higher than current available platforms).
- Palm Sized and Lightweight**
 A compact palm-sized and lightweight mobile spectral and PPG module allows ease of use and portability for end users.

Applications

Healthcare Providers, Medical Centres



REVA and remote monitoring analytics system

