

## Bosch develops non-invasive portable haemoglobin monitor

11 January 2021 | News

**The device provides a reliable result within 30 seconds even for low haemoglobin concentrations**



Bosch has developed a portable haemoglobin monitor solution (HMS) especially for regions where routine access to medical care tends to be difficult. This HMS allows a large number of people to be screened for anaemia rapidly, safely, using a non-invasive approach. The solution has been named a CES Innovation Award Honouree in the 'Health and Wellness' category.

"This should offer people better diagnosis options even in resource constrained conditions. The use of artificial intelligence is revolutionising anaemia management, specifically in point-of-care setups and closer to the patient", explains Dattatri Salagame, President and Managing Director, Robert Bosch Engineering and Business Solutions Private Limited (RBEI).

The intelligent solution by Bosch is designed for use directly at the point-of-care and is completely pain-free with no need for a blood test, as the value is determined by a finger scanner using multi-wavelength spectrophotometry on the surface of the skin. The system uses an optical sensor to precisely and reliably measure the photoplethysmogram (PPG) signals. The device provides a reliable result within 30 seconds even for low haemoglobin concentrations.

A laboratory analysis is not necessary and there is no risk of infection from contaminated needles. Participants receive their test results quickly at the point of care. The device is battery operated, does not need subsequent calibration, and is extremely easy to use. It is intended for use in outlying and remote regions by healthcare professionals. Location-based reporting ensures easy clinical traceability. Market release in India is expected by mid-2021.