



MIMOS Flow Blood Oxygenation Device (Mi-Flobo)

In digital healthcare, medical device manufacturers often design with a hospital clinician in mind as the end user. Moving into Industrial Revolution 4.0 in healthcare, valued-based care combined with consumer demand are the main focus. A patient-centric device that can improve recovery time or reduce adverse events. This will also have a distinct impact in holistic healthcare. Mi-Flobo provides a patient-centric approach for personalised healthcare with a non-invasive, non-intrusive, non-ionised and cuffless device.

Overview

MIMOS Flow Blood Oxygenation (Mi-Flobo) is the first in Malaysia to offer a non-invasive, non-intrusive, non-ionised and cuff-less electronics biomedical device that provides multiple physiological vital signs reading from a single-touch, single-point approach. Instead having multiple modality devices and different medical setups, having a pocket-size device that can perform as same as the current clinical-grade device is the future for healthcare. Using Advanced Photonics technology we have achieved a science fiction concept in healthcare. Currently it is under investigatory device classification.

Features

Mi-Flobo comprises the following features:

- **Multi-Physiological Parameters**
Mi-Flobo provides multiple physiological parameter which includes Blood Oxygenation (SpO₂), Heart Rate and Body Temperature.
- **Fully Photonic and Optical Technology**
Mi-Flobo uses Photoplethysmograph (PPG) which utilises NIR signal that shines through blood vessels and bioinformatics approach to perform blood vital signs analysis.
- **IoT and Industrial Revolution 4.0 enabled**
Mi-Flobo is embedded with Bluetooth BLE 4.0 and WiFi connectivity. This allows the device to be IR4.0 enabled if needed. Healthcare premises will benefit if the device can be integrated with Electronics Medical Records (EMR).

Technology Benefits

The main impacts of Mi-Flobo are:

- **Single Point and Multi-Reading**
Users are only required to place the sensor at a single arterial point (neck or finger) and within 20 seconds, a minimum of three physiological parameter can be obtained.
- **Fast Scanning**
All vital signs reading can be attained in seconds with the fast scanning algorithm built into the device. This provides the health practitioner fast results for health records in emergency situations.
- **Cuffless, Non-Invasive and Non-Intrusive**
Neither an uncomfortable cuff strap, nor blood analysis is required. This provides ease of measurement at your own comfort. The technology in Advanced Photonics allows such futuristic design to be possible.

Technology Summary

Mi-Flobo

A multi-physiological parameter healthcare device that provides multiple vital signs reading including SpO₂, heart rate and body temperature non-invasively and cuffless.

Industries: Healthcare

Features

- Multi-physiological parameters
- Fully photonic and optical technology
- IoT and Industrial Revolution 4.0 enabled

Technology Benefits

- Single point and multi-reading
- Fast scanning
- Cuffless, non-invasive and non-intrusive



MIMOS Mi-Flobo device

Specifications

Mi-Flobo	
Specifications	
Product Status	Investigatory device
Accuracy	Heart rate: ±3bpm, SpO ₂ : ±3%, Body Temperature: 0.3°C
Dimension (mm)	79(L) x 29(H) x 4(W)
Optical Sensor	Light source & Photodetector integrated
Data Resolution	18bit
Power	Non-removable Li-Po 1000 mAH battery

