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RAPIDSCAN® - Programmable Portable Handheld Reader of Electrochemical-Based Biosensors for Field Use

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RAPIDSCAN® is a handheld portable device designed specifically for field use of electrochemical-based biosensors. With this device, biosensor researchers and start-ups will be able to advance their research and commercialization in biosensors to sampling sites for field trials. The development concept of RAPIDSCAN® is to have a generic biosensor reader that can work with different electrochemical-based biosensors. This will lower the entry cost barriers of researchers and start-ups to commercialize their respective biosensors.RAPIDSCAN® can be programmed with linear calibration equations as well as potential outputs at pre-determined timing to enable the device to be customized to researchers' individual specifications. The device comes with packaged software that can be installed into a PC to allow researchers to set in their own calibration equations and parameters to maintain protection of their intellectual property. The device also works independently without the need for an external computer or power supply.The range of current detection for the RAPIDSCAN® device is 50nA – 200μA with range of potential output from -2.0V to +2.0V. It comes with a rechargeable cells that can be charged via PC/laptop USB port or AC/DC adaptor. Current signals from biosensor is digitized and stored in the memory for further processing. The quantitative output from the device is displayed on a monochrome LCD screen in pre-selected units such as ppm, ppb, mol/L, mg/L etc. Additionally, text instructions and icons can be programmed into the reader to guide the end-users to perform the tests correctly. RAPIDSCAN® is designed with the idea that it can be easily used by any untrained and unskilled persons for field use.

Biography

B.L. Goh heads the Technical Development Team; he graduated from the University of Toronto in Applied in Electrical Engineering. He has extensive experience in bringing new technologies into the market, having built his business in the the supply of information technology products to the eye-care industry.

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