

DIAMON™ Sensor Technology

*Next Generation Sensor Technology for
Biosensing*



Nano
lex
Electrode Excellence

Biosensing

Next Generation Sensor Technology

Healthcare and Diagnostics

Point-of-care diagnostics require easy-to-use devices with a high degree of measurement certainty. A DIAMON™ Sensor gives the biosensing community the ideal platform to vastly improve current measurement techniques. The ultra-high sensitivity, high signal-to-noise ratio and increased speed of response offers many innovative opportunities. Commonly used surface modification methodologies have been shown to translate directly to DIAMON™ Sensors.

Biomarker detection – a comparison

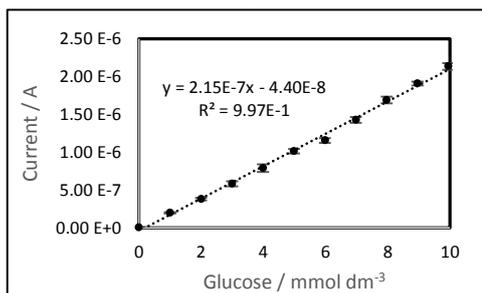
Improved Sensitivity



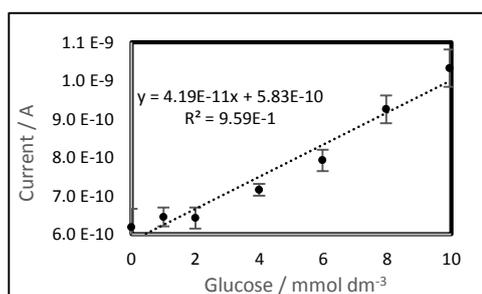
Limit of Detection of H_2O_2 using a **DIAMON™ Sensor**

Limit of Detection of H_2O_2 using a traditional sensor

Improved Accuracy



Glucose calibration curve using **DIAMON™ Sensor**



Glucose calibration curve using conventional electrode technology

- ✓ **1000 x more sensitive than traditional sensors**
- ✓ **Improved signal-to-noise ratio**
- ✓ **Typically provides a wider linear range**
- ✓ **Fast response time**
- ✓ **Less biofouling and skin irritation – extends device lifetimes**

Continuous Glucose Monitoring

The DIAMON™ Sensor platform could potentially transform Continuous Glucose Monitoring (CGM) in patients. The extremely high sensitivity of the structure allows for the size of the device to be reduced significantly without sacrificing sensitivity. The enhanced mass transport also removes the need for membranes on the electrode surface to limit oxygen diffusion. The flexible electrodes are made using tried and trusted manufacturing techniques, making applications in CGM a reality.



NanoFlex™ also supply the **CAVIARE™ Nanoband Array** electrode, a research-grade electrode which can be used to trial this exciting technology.

Please contact us for more information

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Providing greater measurement certainty

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