

Performance report: Glucose / Lactate

Method: Dialysis
Measurement range: Glucose 0.5 – 20 g/L, Lactate 0.25 – 10 g/L



SYSTEM PERFORMANCE

These data were compiled in order to give an overview of the system- and sensor-performance in the normal concentration range using the dialysis sampling method.

Linearity

By comparing the actual value with the set value a regression coefficient R^2 of not less than 0,9995 will be obtained (Figure 1).

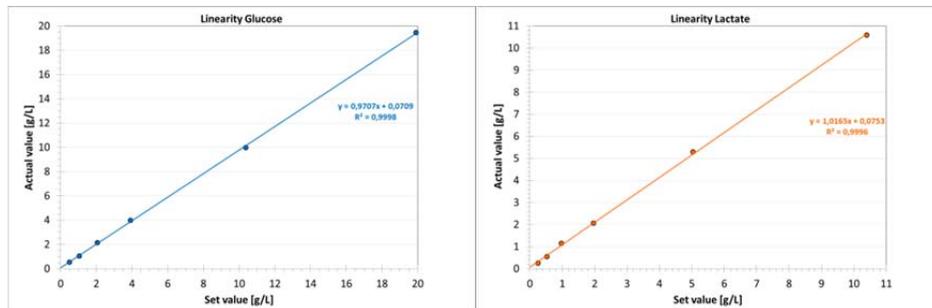


Figure 1. Linearity of Glucose ($R^2=0,9998$) and Lactate ($R^2=0,9996$)

Precision

The typical variation about the mean value is below 1,5% (Figure 2), except for the low concentrations (< 2,5%).

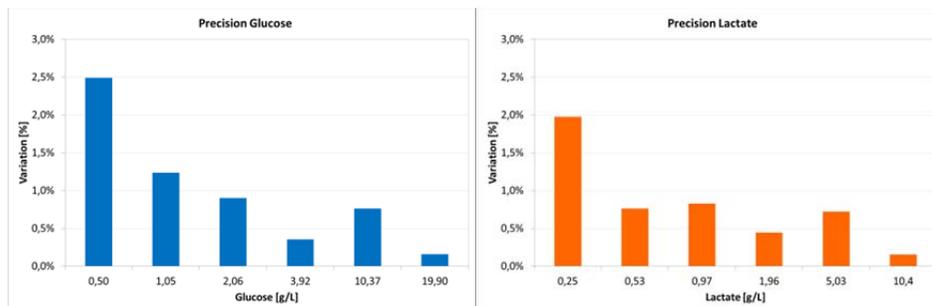


Figure 2. Precision of Glucose and Lactate

Recovery

The recovery of the glucose and lactate values is shown in figure 3.

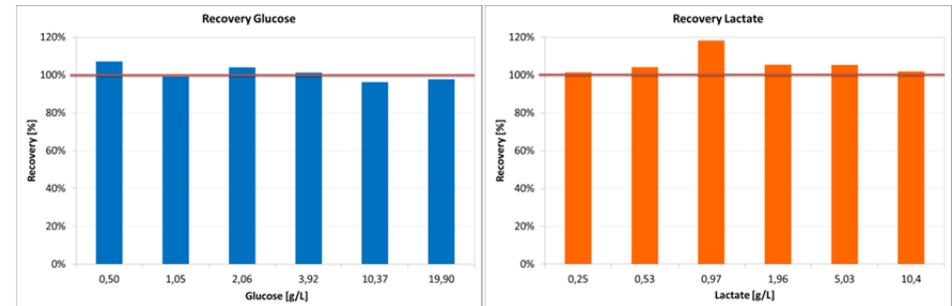


Figure 3. Recovery of Glucose and Lactate

Operational stability

Long term stability for the application Glucose/Lactate is guaranteed for 5.000 measurements or 14 days. Figure 4 shows a typical profile during the load test within the QA procedure over 5.000 assays (every two minutes = 7 days).

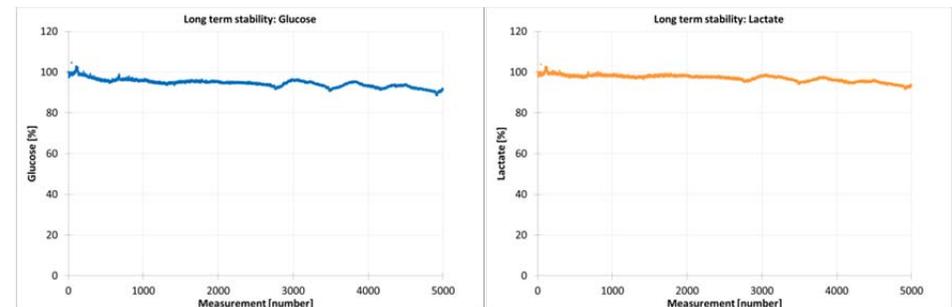


Figure 4. Load test of Glucose and Lactate sensors

Shelf life

Glucose-/Lactate-Sensors have a shelf life of at least 12 months at room temperature.