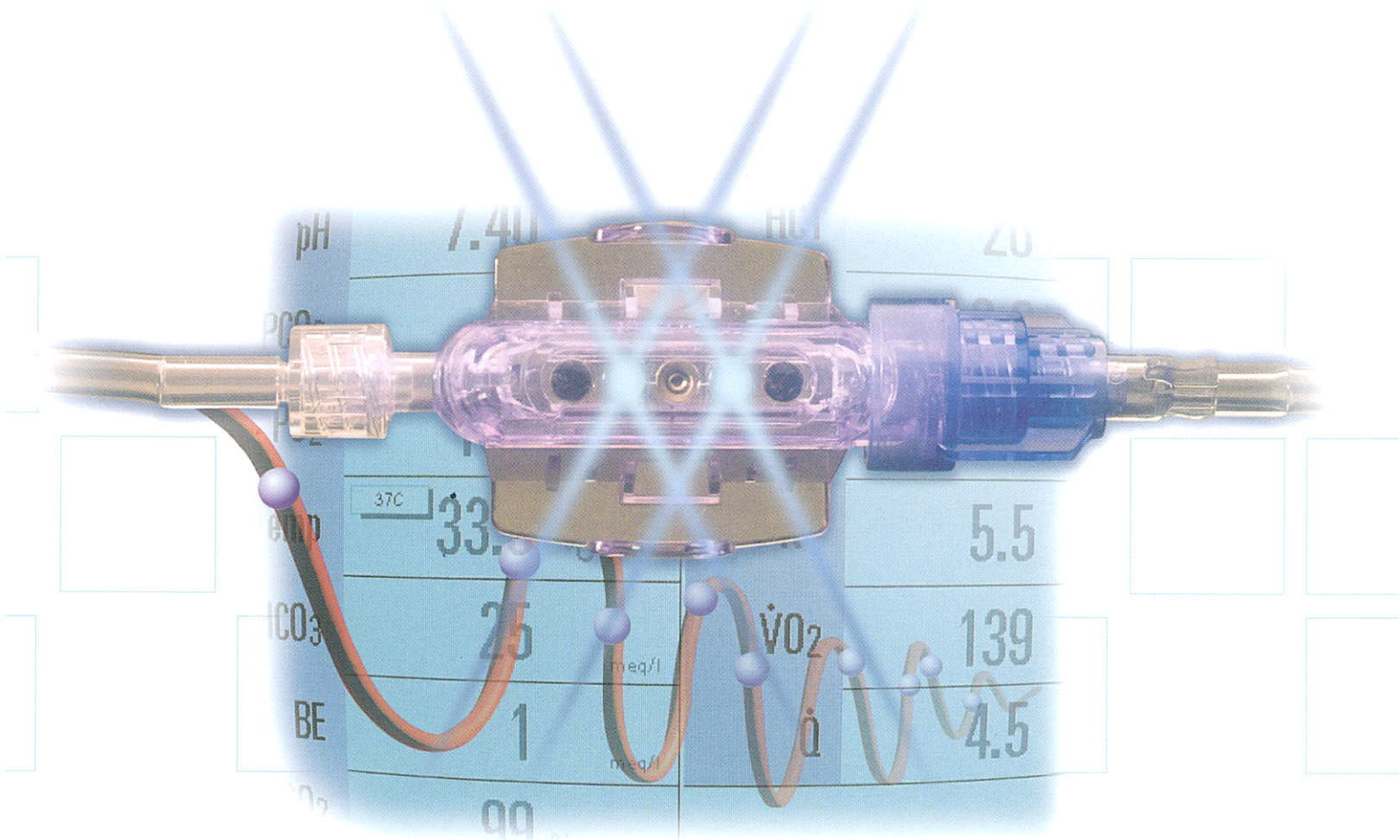


CDI™ 500 Blood Parameter Monitoring System

Breakthrough technology for faster, more precise, clinical decision making during cardiac surgery.



The CDI™ 500 Blood Parameter Monitoring System provides continuous information on blood parameters for faster, more precise, clinical decision making during cardiac surgery.

What is the CDI 500 system?

Based on optical fluorescence and reflectance technologies, the CDI 500 system continuously measures or calculates 11 critical blood parameter values during cardiopulmonary bypass. Access to continuous information is a key advantage in optimum patient management because it enables clinicians to react without delay to changes in blood parameter values. The CDI 500 system's combination of accuracy and speed facilitates sound clinical decision making.

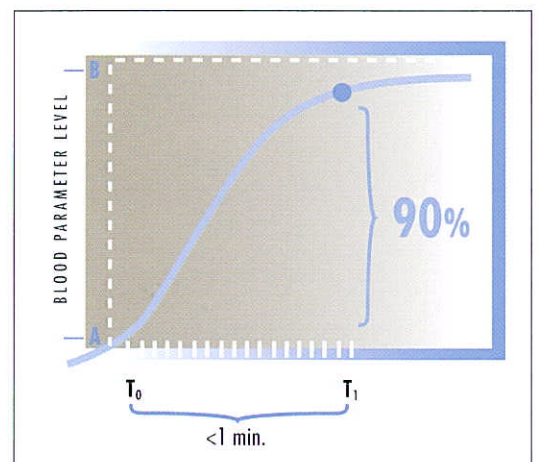
The CDI 500 system measures or calculates pH, pCO₂, pO₂, K⁺, temp, SO₂, hematocrit, hemoglobin, base excess, bicarbonate and oxygen consumption. With its quick response time and lab quality accuracy, the CDI 500 system is setting new standards in patient care during cardiac surgery.

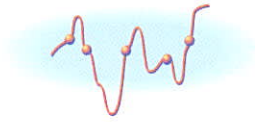


Less than one minute response time

The new CDI™ 500 system shunt sensor is designed to be placed in a shunt line where the blood is in direct contact with the system's sterile microsensors. This technological advancement eliminates the delays associated with the diffusion of blood gases and hydrogen ions through sterile membranes. The system's average response time for measured parameters pH, pCO₂, pO₂ and K⁺ is less than one minute.

Averaged response time of measured values, pH, pCO₂, pO₂ and K⁺, at 37°C with 90% equilibration in Terumo Cardiovascular Systems in vitro testing.





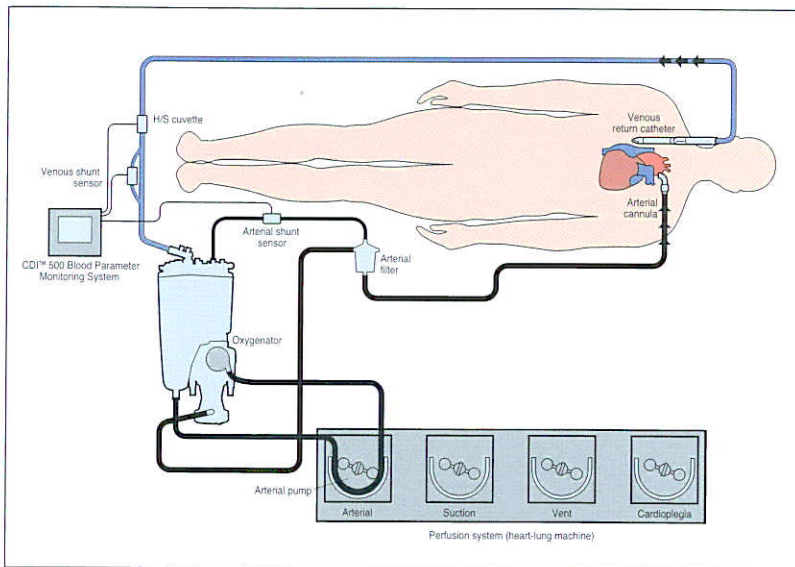
Accuracy comparable to laboratory analyzers

Clinical investigation demonstrates that the CDI 500 system provides values that are within the accepted accuracy parameters for laboratory analyzers. Advancements in optical fluorescent design account for the accurate results. The use of light emitting diodes (LEDs) reduces signal noise, drift and warm-up effects. New signal detection circuitry delivers high signal fidelity and eliminates the need for long fiber optic cables, providing increased reliability.

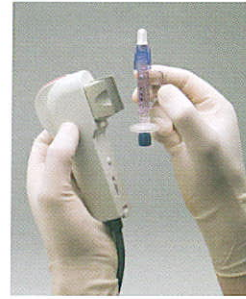
Easy to set up and calibrate

It takes less than one minute to set up the system for calibration.* There is no warm-up time required for installation or calibration. Installing the sensor in the shunt line requires a few, simple luer connections. The shunt sensor can be added after the initiation of bypass, facilitating set up in emergency cases.

Circuit diagram with the CDI™ 500 Blood Parameter Monitoring System



*In clinical evaluations, the average time to set up calibration for the arterial shunt sensor was 37 seconds. Average time to install the calibrated sensor in the purge line was 22 seconds. (Calibration itself requires no user dedication and takes 10 minutes.)



Fast, easy set up

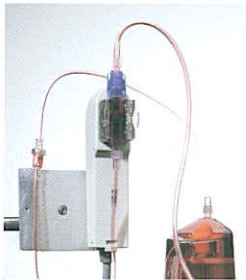
The shunt sensor is placed in the probe head.



The probe head, with sensor attached, is placed in the calibrator.



The sensor, still attached to the probe head, is installed in the circuit with two luer connections.



The sensor allows placement in a variety of circuit locations.