

VisSim/Real-TimePRO™

Data Acquisition, Control, and Hardware-in-the-Loop Validation

Key Highlights

- Develop and validate control strategies
- Perform off-line tuning of controllers against a real-time plant
- Perform real-time control of actual plant
- Perform operator training against a real-time plant simulation
- Universal library support for National Instruments and Measurement Computing boards
- Real-time data acquisition and display
- Real-time HIL execution
- Real-time data logging with gating
- Closed-loop process control
- Cold junction compensation
- Pulse width modulation
- Thermocouple linearization
- PID tuning
- Connect up to 16 boards simultaneously
- Simultaneous use of boards from different vendor
- Up to 10 kHz data sampling rate

System Requirements

- Professional VisSim v9.0
- Windows XP, Vista, 7, or 8
- Hardware board
- 128 MB RAM
- 125 MB hard disk space

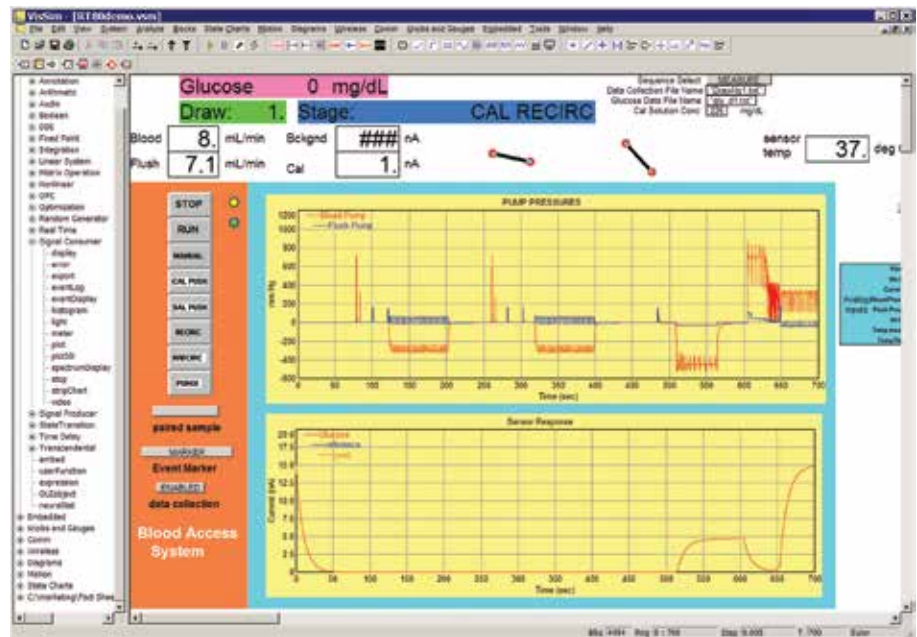
Introduction

VisSim/Real-TimePRO interfaces VisSim to popular analog and digital I/O boards and devices from National Instruments, Measurement Computing, and Quanser.

VisSim/Real-TimePRO lets you couple a VisSim model directly with a real PLC or DCS system for off-line tuning, or to prototype a VisSim control with a real plant.

With VisSim/Real-TimePRO, hardware-in-the-loop (HIL) systems can be configured and executed by interfacing VisSim plant or controller models with real-world hardware, such as manufacturing plants, chemical processes, motors, pumps, and electric drives. The interface is through computer I/O cards, high-speed motion control interface cards, or serial port connections to PLCs or DCSs. There is no code generation or programming involved to configure an HIL system with VisSim/Real-TimePRO.

For the complete list of board support is online at www.altairhyperworks.com/vissim



VisSim model of a real-time, hardware-in-the-loop system that automatically draws and returns blood samples from measurement.