# ControlVUE: CV-1000

Software Overview

Loadstar Sensors provides easy-to-use software to display or log or plot sensor data easily on a PC or Tablet running Windows 8/10/11. When your application needs customization or features that are not present in any of these standard versions, we will be happy to customize it for you for a nominal cost. Please note that Loadstar software is only compatible with sensors and interfaces offered by Loadstar Sensors.

ControlVUE - Multiple Channel Software to Control Devices

ControlVUE software allows you to display, log and plot data from multiple sensors, and multiple types of sensors and in addition, allows you to control external devices based on sensor values or values derived from raw sensor values.We recommend at least 16 GB RAM for your PC or Tablet for optimal performance of the SensorVUE software.

While it is not like a full fledged programmable logic controller, it is an easy way to turn on/off external devices such as valves, pumps, motors or lamps through our USB Relay and create simple automated solutions for applications such as bagging, filling and packaging using our sensors as inputs and your PC as the controller. We recommend at least 16 GB RAM on a Windows 8/10/11 PC or Tablet for effective use of this software for your application.

Inputs

Outputs
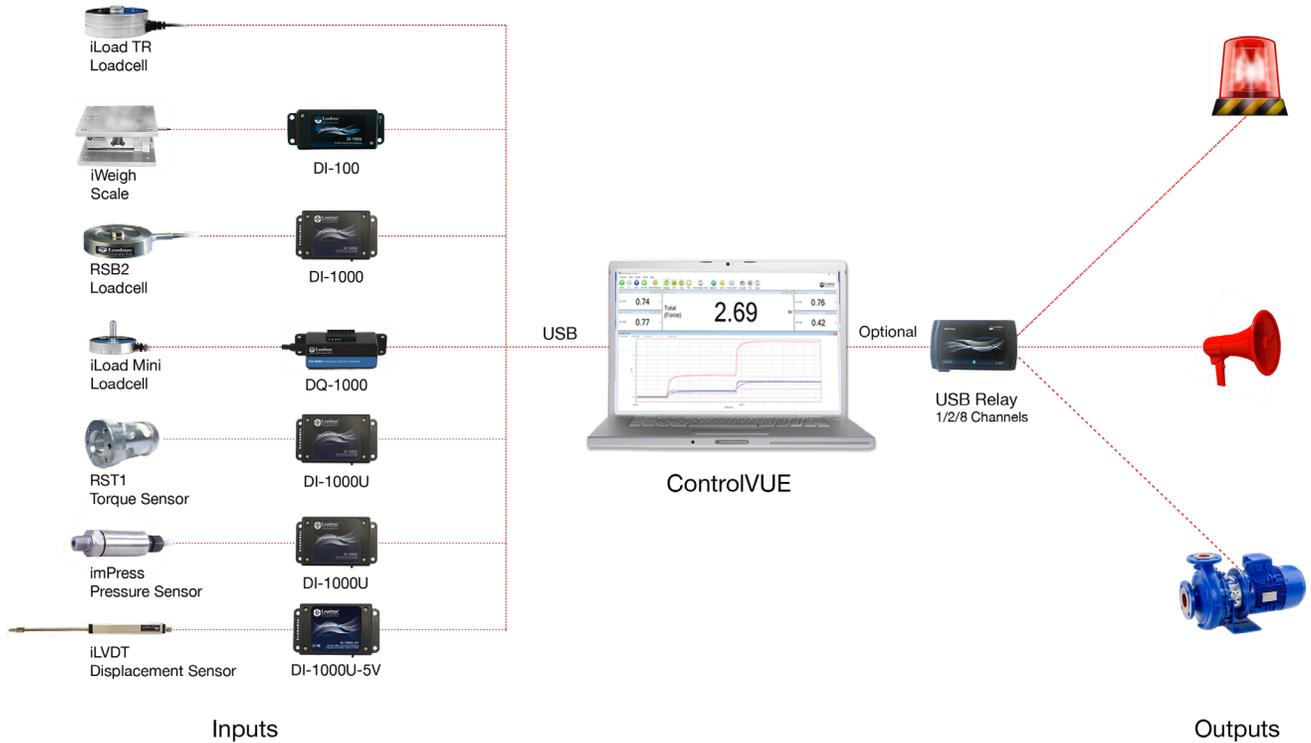
Description

ControlVUE software enables a user to display, log, and plot data from multiple connected digital sensors on a PC or Tablet simultaneoulsy and control external devices.
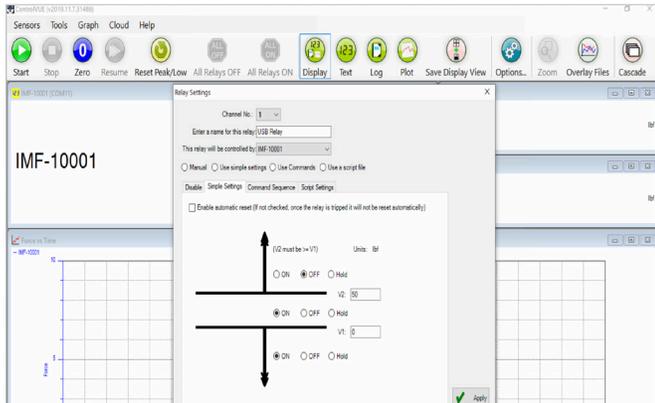
A user can also compute derived values from raw sensor data by simple computations. These derived values can also be displayed, logged, and plotted easily.

The user can setup alerts/alarms, turn on/off motors, and control PLCs.

Highlights

- Supports Multiple Channels
- Displays Force, Weight,Torque, Pressure, Level data
- Control external devices
- Display, Log and Plot Data
- Change Units, Data Capture Rate
- Show Peak and Low Values
- Size and Place Elements as needed
- Data Rates up to 1 kHz
- Includes:
  - Calibration Utility
 - Remote Support
  - Easy Access to Putty & Device Manager

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ControlVUE

Control Relays

Log Data

ControlVUE enables a user to control a USB Relay with one, two or eight channels to turn on/off a variety of 110V/220V (2 A) devices or to control a USB Stepper Motor's angular position and speed. By coupling a rack and pinion gear system onto the motor, a user can also create a linear actuator. By using sensors and these simple control mechanisms a user can create automated solutions for applications such as bagging, filling and packaging.
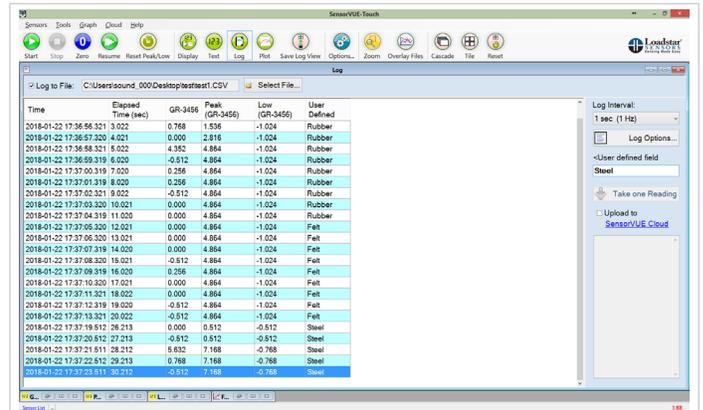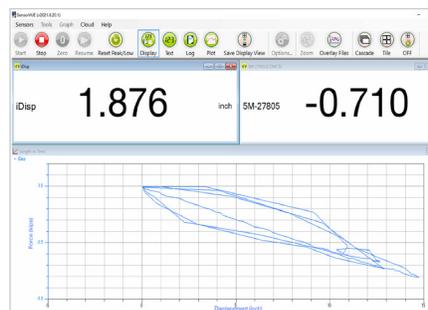
Data can be logged to Excel compatible CSV files. Depending on the sensor, data logging at different rates can be captured from a drop down list up to a maximum of 1000 Hz. For data rates up to 50 khz use LV-1000HS-10K software.

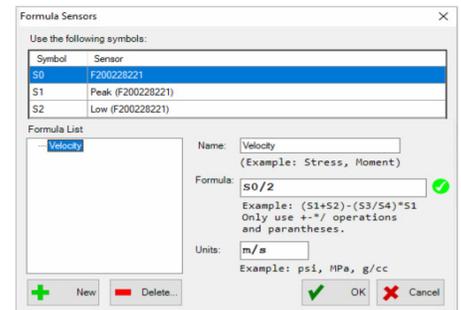**Alerts**

Force vs Displacement

Formula Sensors
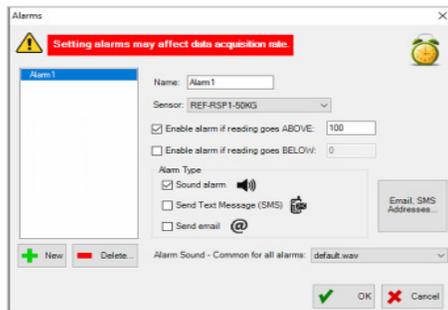
Audio alarms can configured to trigger when specific conditions are met, for example, when load exceeds a specified limit. Emails and/or text messages can be sent when audio alarms are triggered.

You can use this feature during manufacturing operations for e.g. to let a technician know when a certain force threshold has been met.

Mix and match different kinds of sensors and display, log and plot all of them within a single interface. It can handle force and displacement sensors simultaneously as shown above. It can not only show multiple force sensors and one displacement sensors as a Value vs. Time plot, but in additional it can also plot Force vs. Displacement plots and allow a user to characterize material properties.

Combine one or more sensors to create a virtual sensor. Simple formulas (using the 4 basic operations: + - * /) can be used to create a virtual sensor. For example if you are using a force sensor and know the area under the force, you can plot the stress by creating a formula Force/Area. You can then log, plot, set alarms, etc. on these virtual sensors just as you would on a real sensor. You can even combine formula sensors to create a new formula sensor.