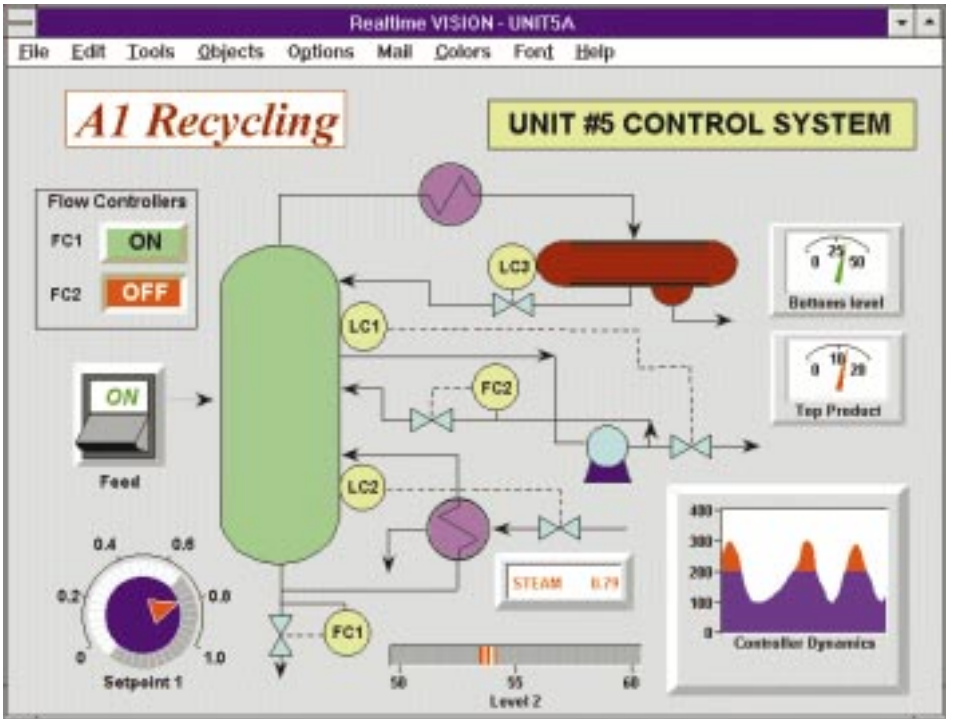
Labtech Control

Data Acquisition and Control Software for Windows

From **$2495**



- **Ramp and Soak and Cascade Control Capability**
- **Realtime Data Acquisition and Data Display**
- **On-Line Calculations for Mathematical, Statistical and Logical Functions in Real-Time**
- **Real-Time Multitasking**
- **Integral Fault Tolerance Operation Built-In**
- **Real-Time Process Diagrams with a Variety of Display Types, Including SPC Charts, Trend Lines, Bar Graphs, Digital Meters and Faceplates**
- **Includes Vision Object-Based Graphic Interface**
- **Menu and Icon-Driven Setups for Ease of Use**

Labtech Control is a complete, integrated system that provides a comprehensive set of monitoring and control functions, including process monitoring, process control, real-time operator interface and display, on-line analysis and open architecture networking.

Process Monitoring

Labtech Control is a comprehensive industrial software package featuring an extensive library of I/O drivers, which allows users to create, simulate, test, and run control strategies on OMEGA's hardware interfaces, including plug-in boards and stand-alone systems. Labtech Control interfaces to a wide variety of process variable types, such as analog voltage and current, discrete I/O, thermocouple, RTD, strain gage, counter, and frequency inputs. Other variable types include time, replay of stored or theoretical data, and calculated variables. Analog and digital outputs, as well as pulse outputs, are also supported.

Process data can be monitored on a continual basis. For more efficient operation, when a very large number of variables are present, you can set up the system to collect data only on those variables being displayed or logged on an active trend line or graphics window.

Datalogging and Storage

As data is collected, values, tag names, and alarm conditions may be time-stamped and stored directly to disk, allowing you to save results from an almost unlimited number of process runs. Data can be written to disk either continuously or in response to event/alarm trigger or operator commands. Pretriggering allows you to set the system so that when an event or alarm occurs, data just prior to the occurrence will also be displayed and logged.

Alarms

Labtech Control software also performs alarm and limit monitoring. Alarms can be triggered when a variable reaches or passes a predetermined value, or as a result of a calculated variable or operator action. All systems support multiple alarm states: Hi-Hi, high, normal, low and Lo-Lo, which can be displayed on the computer monitor and logged to disk. The system can be configured so that when an alarm occurs, the operator is notified and must acknowledge the condition.

Process Control

Labtech Control provides a comprehensive series of control functions. Alarm and bang-bang control features allow for the turning on and off of equipment for closed-loop control or to indicate alarm conditions. PID loops provide closed-loop control for constant or variable setpoints. Setpoints can be entered through the keyboard, automatically through on-line calculations, or as a preset schedule of values stored on disk. Control loops have a block-structured architecture. Each control block implements individual control algorithms for specific variable inputs and control outputs. Cascade control—

IBM PC IBM PS/2 MADE IN USA

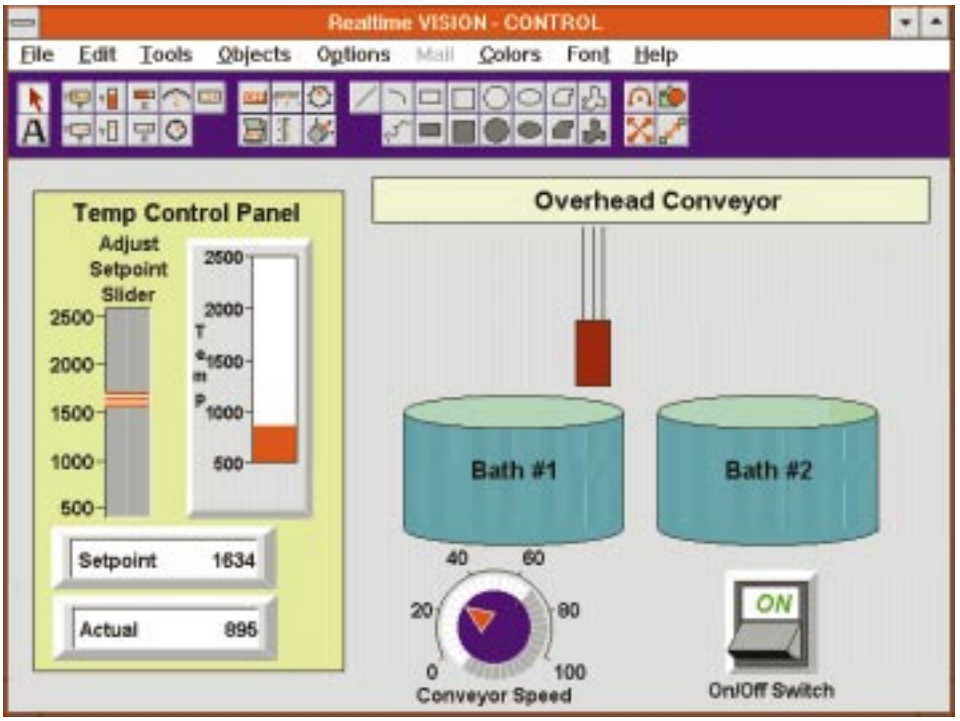
the ability to have the output of one control loop act as the input to another—provides you with an added degree of freedom when configuring your control strategy.

Open Architecture Networking

Labtech Control supports both local and remote real-time communications between unlimited nodes for process display, datalogging and process control functions. The software implements a network file system that supports peer-to-peer or file-server based communications over any standard network, including Netware, 3Com and LAN Manager.

Realtime Vision Graphical Display

Realtime Vision software, included with Control, provides the user with an object-based graphic interface, for ease of use. The combination of Control and Vision gives you the power of client-server architecture for your data acquisition and control system. Vision and Control can execute on the same PC, or on different computers across a network. As values in Control change, Vision displays the changes. Vision is completely interactive, so you can change the Vision display on-the-fly. Vision also gives you knobs, switches and sliders that can be used to make adjustments to Control as it is running.



Realtime Vison software provides a graphical interface for Control.

Specifications

No. of Blocks: 600 Standard Edition; 2000 for Control Pro.

Screens: 50 Standard Edition; no limit for Control Pro

High Speed DMA Support: Standard

Interface Support: GPIB/IEEE and RS-232 devices

Client/Server: Network DDE supported

C-Icon Development Kit: Included

I/O Driver Toolkit: Included

Control Capabilities: Ramp and soak and cascade control supported

Interface: ICONview iconic graphical interface

Data Acquisition: Real-time standard

Data Display: Real-time standard

Analytical Capabilities: On-line calculations for mathematical, statistical and logical functions in real-time

Trigger: Analog input, calculated values, digital inputs

Sampling Rates: Different per channel

Process Control: Open or closed loop

Analog Signal Scaling and Calibration: Standard

Pretriggering: Standard

Replay Stored or Theoretical Data: Standard

Display Types: Multiple signals per display, waveform plots, X-Y, Y-t, horizontal and vertical bar graphs, analog and digital panel meters; user-customizable

Control Objects: Knobs for inputs of variable data, on-off buttons, sliders; user-customizable

Drawing Features: Import bitmaps, background picture bitmaps, line segments, arcs, freehand lines, rectangles and squares (filled/unfilled), ovals and circles (filled/unfilled), polygons and freehand shapes

Animation: Multiple animations per object; move, rotate, change color, and shrink/grow objects in response to input data

Alarm Logging: Standard

Sensor Voting: Standard

Anti-Reset Windup: Standard

Supported Hardware:CHROM-AT, CIO-DAS16/16F, CIO-DAS16JR, CIO-DAS16/330, CIO-DAS16/330i, CIO-DAS08-PG, CIO-DAS08, CIO-EXP16, CIO-EXP32, CIO-DAC02, CIO-DAC08, CIO-DAC16, CIO-DDA06, CIO-CTR05, CIO-CTR10, CIO-DIO24/24H, CIO-DIO48, CIO-DIO96, CIO-DIO192, CIO-PDISO8, CTM-05, DAC-02, DAQBOARD Series, DAS-1400, DAS-1600, DAS-4, DAS-8, DAS-800, DAS-8PGA, DAS-8PG/AO, DAS-1200, DAS-16/F/G, DAS-20, DAS-TC, DataShuttle (DS Series), DDA-06, EXP-16, EXP-20, OM-1050, OM6, OMD-5508BG, OMD-5508HR, OMD-5508RTD, OMD-5508TC, OMD-5508CL, OMD-5504DA, OMD-5508ACI, OMD-5508ACO, OMD-5616DCI, OMD-5616DCO, OMD-5616CCI, OMD-5632TTL, OMB-TEMPSCAN-1000, OMB-DAQBOOK Series, OMB-Multiscan, PIO-12, PIO-24, UCDAS-8PGA, UCDAS-16G, UCPIO-12, WB-AAI, WB-ASC, WB-ASC16, WB-DYNARES, WB-FAI, WB-AVO, WB-DIO-PC, WB-800, WB-802F, WB-815, WB-817, WB-820, WB-850, WB-860, WIN-30 Series, D1000/2000/3000/4000 Series,

System Requirements: Microsoft Windows 3.1 or Windows 95, IBM Compatible 386 or better, 16 MB Memory.

To Order *(Specify Model Number)*

Model No.	Price	Description
SWD-LTC-WIN	**$2495**	Labtech Control for Windows 3.x
SWD-LTC-WIN95	**2495**	Labtech Control for Windows 95
SWD-LTC-PRO-WIN	**3495**	Labtech Control Pro for Windows 3.x
SWD-LTC-PRO-WIN95	**3495**	Labtech Control Pro for Windows 95

Each unit supplied with 3.5" disks, and complete operator's manual.
Ordering Example: *SWD-LTC-WIN Labtech Control for Windows 3.x,* ***$2495****.*