SYNERGY™ MANAGER

PC Based Multi-Chamber Control and Monitoring

PROCESS DATA
Displays setpoints and actual temperature and humidity data

GRAPHS
Displays setpoint and actual temperature and humidity data on a line graph

ALARMS
Sets and monitors process alarms such as maximum allowed temperatures

LOGGING
Logs setpoint and actual temperature and humidity data and PID values to a text file

EVENTS
Displays status of events, dipswitch settings and logical inputs

PROFILES
Allows users to create and download test profiles to a chamber

The Synergy™ Manager is a PC-based controller software program for employment in multi-chamber/multi-manufacturer test environments. It is designed to provide the utmost in integration and interconnectivity to environmental chamber control.

The Synergy Manager is available in a FREE "Monitor-Only" version.

What makes this software unique?

The Synergy Manager software eliminates the need for engineers to rewrite test profiles for different manfacturers test chambers and controllers. Conceptually resembling Java's "write once, run everywhere" functionality, the software allows operators to write environmental test profiles just once on a PC, and send the profile to any combination of supported environmental chamber controllers. This is a significant benefit to operators as test chamber controllers are generally difficult to program (with the exception of Tidal's Synergy Controller).

The Synergy Manager supports 13 of the most popular environmental chamber controllers from a variety of manufacturers. Vendor-specific products (e.g., Watlow's Watview) limit the user one brand. While third-party software packages e.g. SpecView may support diverse brands, they don't translate profiles. Moreover, as they operate in real-time, they must be connected to the instrument. This limits flexibility and reduces reliability.

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SYNERGY™ MANAGER

Features:

- Write a test profile once, and run it on any of 13 different controllers in a lab.

- Download, control, monitor, record and graph environmental test data on multiple chambers simultaneously.

- Communicate to any one of 13 different supported controllers, in any combination.

- Communicate via Ethernet TCP/IP, RS-232, GPIB-IEEE 488, and RS-485 protocols.

- Set up alarms for absolute limits and setpoint deviation limits with, e-mail, fax, and pager notification.

- Store and archive thousands of profiles on a server for backup/restore.

Data Control and Observation

Each individual chamber control window has eight data tabs at the bottom. Each of these tabs pertains to a different category of data control and observation. As a collection, the eight data tabs present a complete, real-time, view of the state of each chamber.

Profile Editor-
Write Profiles Once And Run Anywhere

The Synergy Manager enables users to create test profiles directly on their PC. LED based controllers are often difficult to use for test profile creation as their limited display capabilities lead to cryptic labels and confusing navigation processes. Using the Synergy Manager's graphic windows interface simplifies the test profile creation process. Every step is clearly displayed in one window. Step creation and data editing is one mouse click away. Profiles are generic and may be downloaded to any of the supported chambers.

After creating a test profile in the Profile Editor, it can be viewed it in graph format by pressing the Graph button. The resulting graph displays the entire test run, including jump loops. With graphical analysis users can more clearly see exactly what each profile step represents.

Email and Fax Alert System

In addition to monitoring and control, the Synergy Manager employs a highly customizable Alert Notification System. Once enabled, specified recipients are notified of all errors and alarms via email or fax. The alarms are separated into eight categories and the user can assign a different priority to each category. For example, users can assign all chamber alarms to have a high priority and be emailed immediately upon

the sounding of the alarm. However, for communications errors that may be caused by transient noise on the line, users set these as a low priority. All low priority errors would then be compiled in a general report that is transmitted once a week. The exact definition of each priority level is also user definable: High, medium or low priority items can be specified to be sent immediately, once an hour, once a day or once a week, at any specified time.

Application Features Matrix

Data

SP1—Ch. 1 Set Point

SP2—Ch. 2 Set Point

C1—Ch. 1 Process Variable

C2—Ch. 2 Process Variable

Temp. Mode—Celsius & Fahrenheit Selectable

Settings

Heat/Cool—PID Display

Hum/Dehumidify—PID Display

Events—Event Outputs

Alarms—Controller Alarms

Limit Check Setup

Deviation Check Setup

Check Setup Saving

Logging

Graph/Zoom— Graph process and setpoint data

Logging—Log process and setpoint data

Export Logs—Save Log data to CVS files

UUT Data— Logging of external UUT data

Controller Mode

Temp Only—Temperature Only Mode

Temp / Temp— Temperature Temperature Mode

Temp / Hum

Temperature Humidity Mode

Temp / Pressure

Temperature Pressure Mode

Profiles

Profile Creation— Create controller profile

Profile Download— Download to controller

Profile Control— Start and Stop profiles

Profile Download File— Download location

Communications

GPIB—IEEE 488 Communications

RS-232—RS-232 Serial Communications

RS-485—RS-485 Serial Communications

TCP IP (Ethernet)— Network Communications

Synergy 488 GPIB— Synergy IEEE 488 Communications

Synergy488 TCP/IP— Synergy Network Communications

Synergy488 RS-232— Synergy Serial Communications

Synergy Gateway-Ethernet — Synergy Gateway Network Comms.

Email Fax Alert

Email—Email Alerts

Fax—Fax Alerts

The Synergy Manager can operate in a both a FREE monitor-only mode and a full featured mode. The software is available for download from the downloads section at the bottom of this page. To enable the full featured mode, contact Tidal Engineering to purchase a USB or parallel port key. The capabilities of each mode are listed in the table below. Version upgrades are posted to the website periodically and are free to all users.

Supported Controllers & Communication Protocols

VersaTenn 2—Xon/Xoff

VersaTenn 3—Xon/Xoff

VersaTenn 4—Modbus

VersaTenn 5—Xon/Xoff, TCP/IP

Synergy Controller—Xon/Xoff, TCP/IP

BlueM Protouch—Xon/Xoff, TCP/IP

BlueM Pro550—Yokogawa PC Link

BlueM Pro750—Yokogawa PC Link

Yokogawa 550—Yokogawa PC Link

Yokogawa 750—Yokogawa PC Link

Watlow 942—Xon/Xoff

Thermotron T4800— RTS Hardware Handshake

Partlow 1462—Modbus, TCP/IP

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