

ProcessView® Software – Dedicated to Watlow® F4T, Legacy F4 and EZ-Zone® PM Controllers



ProcessView Data Acquisition Software for Watlow's F4T, Legacy F4, and EZ-Zone® PM Controller Networks. The Software is dedicated to adding value just with Watlow F4T, Legacy F4, and EZ-Zone PM Controllers, which means there is no programming required and it outperforms other more expensive software packages on the market!

It is designed to work with Windows 7/10 operating systems allowing the use of newer PC technology. It supports up to 50 Watlow F4T's, Legacy F4 and or EZ-Zone PM Controllers embedded in Environmental Chambers, Furnaces or Ovens on a local network. Enabling the software's security features provides compliance to 21 CFR Part 11 industries such as Pharmaceutical, Medical and Clinical markets.



ProcessView is a great replacement for legacy Watview® Software!

Dedicated Overview Screen: Each Controller/Chamber on the network shows real-time trend, process data, event output status and current Profile status. Profiles can be started, stopped, paused or resumed from this screen. Profile Events can be manually turned on or off if enabled.

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F4T Profile Utility

File

Settings

Historical Trend

Help

Network View

Chamber 1

Chamber 2

Chamber 3

Chamber 4

Chamber 5

Chamber 6

Chamber 7

Chamber 8

Chamber 9

Chamber 10

Chamber 11

Chamber 12

	F4T Name	Alarm State	Active Profile	Profile Status	Current Step	Step Number	Step Time Remaining	Total Time Remaining	IP Address
▶	Chamber 1	Startup	Product ABC	Running	Soak	4	02:12:45	08:22	192.168.0.1
	Chamber 2	Safe	Test Profile ABC	Running	Ramp Time	8	03:55:35	06:51	192.168.0.2
	Chamber 3	Safe	Demo Profile	Running	Ramp Time	1	00:20:03	00:56	192.168.0.3
	Chamber 4	High Alarm	Test Profile ABC	Terminated	End	0	00:00:00	00:00	192.168.0.4
	Chamber 5	Safe	Product ABC	Completed	End	0	00:00:00	00:00	192.168.0.5
	Chamber 6	Safe	Test Profile ABC	Completed	End	0	00:00:00	00:00	192.168.0.6
	Chamber 7	Safe	Test Profile ABC	Running	Ramp Time	3	02:48:13	10:07	192.168.0.7
	Chamber 8	Safe	Product ABC	Running	Soak	6	00:14:40	04:44	192.168.0.8
	Chamber 9	Safe	Test Profile ABC	Completed	End	0	00:00:00	00:00	192.168.0.9
	Chamber 10	Safe	Product ABC	Running	Ramp Time	12	02:11:06	04:09	192.168.0.10
	Chamber 11	Safe	Test Profile ABC	Paused	Ramp Time	18	01:33:03	06:05	192.168.0.11
	Chamber 12	Safe	Product ABC	Completed	End	0	00:00:00	00:00	192.168.0.12
*									

Network Overview Screen: Displays Profile Status for all the Chambers on the network.

ProcessView Features:

- Up to 50 Watlow F4T, Legacy F4 and Series PM Controls embedded in a chamber or furnace can be monitored and or controlled on a local Ethernet and or RS-485 Network
- Can be used with PM or F4T controls that are networked with Watlow's STD BUS using an RUI Gateway (TCP/IP Modbus or Modbus RTU) making retrofits easy!
- Provides compliance for 21 CFR Part 11, with advanced password management, electronic signatures, encrypted datafiles and an audit trail.
- All data can be uploaded to a Cloud Database service that enables anyone with secure access to access the data real-time! Data can be saved to an FTP site, remote drive or local drive automatically. Microsoft Azure, Amazon AWS, Microsoft SQL Server, and Microsoft Access are all supported.
- Web Server allows for remote PC/Smart Phone access to read only Profile Status and Process Data!
- Watlow's new F4T Controllers can be added to your existing RS-485 Legacy F4 Controller Network
- Supports Windows 7/10 Operating Systems
- Control and check the status of each F4T, F4 or Series PM loaded profile

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- Up to 8 analog inputs and 4 Control PID loops are supported for monitoring or control for each F4T, F4 or Series PM Controller
- 8 digital or analog F4T internal variables can be monitored or controlled from the software
- 2 Limit Controls are supported for each F4T Controller or PM Series Controller
- Configurable Real-Time Trending of user-selected data parameters
- CSV or Encrypted formats are supported for Data Logging as well as multiple digital signatures can be added for tamper-proof security
- Data that is being logged can be viewed real time to ensure correct operation
- Bar/QR Scanner is supported, which keeps Operators from making typing mistakes. Loading Profiles or adding Batch/Profile Run information is supported
- User notes can be added while the data is being logged or after a Profile/Batch has been completed
- Trend Plots can be archived via hard copy printer or PDF files for Quality Control requirements
- Dedicated Tuning Screen aids in Tuning PID Control Loops
- Alarm or End of Profile Notification via Email or GSM Cellular Text Messages allows updated status anywhere in the world
- Profile Status can be accessed via Cellular text messaging from anywhere in the world
- All Labels are can be customized to make the software more intuitive to the user and simplify the user interface for operators
- Password Security for different levels of users provides secure access
- F4T internal CSV Data log files can be graphed, viewed and archived for Quality Control requirements (secure encryption of files is supported if required)
- Alarm management is supported by up to 8 process alarms
- Tolerance bands can be displayed on the trend graph for Quality Control requirements
- All Profile Status, Alarm Status and Event Outputs changed by the user are data logged for Quality Control requirements as well as entered in the audit trail
- 16 external sensors can be added to the system or chamber via a Watlow RMS input scanner or with two Advantech TC input modules and can be data logged

Hardware and Supported Operating System Requirements:

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ProcessView supports Microsoft Windows 7 or 10 operating systems and runs the best on a monitor that has a resolution of at least 1366 x 768 (greater resolutions are recommended for optimal viewing).

ProcessView supports both Ethernet and RS-485 networks simultaneously!

Ethernet Modbus TCP/IP Communications: Your PC will need an Ethernet port for communications with Watlow F4T's and Watlow EZ-Zone PM controllers (EZ-Zone PM needs to have Ethernet option).

Modbus RTU RS-485 Communications: Your PC will need an available serial port (USB port) and a RS-485 converter (USB to RS-485 converters are readily available and are very inexpensive) for communications with Watlow F4T's, Legacy F4's and Watlow EZ-Zone PM controllers (EZ-Zone PM and F4T controllers need to have the Modbus RTU option installed in the controller).

Watlow RUI Gateway STD BUS Communications: You can network up to 8 EZ-Zone PM Controllers or F4T's on a RUI Gateway for easy retrofits!

Digi Port Servers: You can use Digi Port Servers for ethernet communication to RS-485 serial networks.



Profile Viewer Screen: Displays Current Step (green bar) and Profile Programs Graphically with Output Events.

Setup Data Logging 1

Data To Log | Log File Name/Location | Start/Stop Automation

Data Log Interval 5.0 **Sec**

☒ Login User Name

Profile Data

- ☒ Temperature Target SP
- ☒ Temperature Current SP
- ☒ Humidity Target SP
- ☐ Humidity Current SP
- ☐ Step Number
- ☒ Step Type
- ☐ Profile Status

Event Outputs

- ☒ Event 1 Output
- ☒ Event 2 Output
- ☒ Event 3 Output
- ☒ Event 4 Output

Control Loop 1

- ☒ Setpoint
- ☒ Temperature
- ☐ Heat PWR
- ☐ Cool PWR

Control Loop 2

- ☒ Setpoint
- ☒ Humidity
- ☐ Heat PWR
- ☐ Cool PWR

Start Data Logging at Profile Start
Exit

Data Log Setup Screen: All Process Data and Profile Status parameters can be logged to a CSV Excel file. Data can be logged as Encrypted if required with a password.

Profile Editor 1

F4T Profiles

- Product ABC
- Profile Calibrate
- Test Profile 1
- Product 123456
- Product GHi12
- New Profile**

Calendar Start

Delete

Steps

- Ramp Time**
- Soak
- Ramp Time
- Soak
- End

Insert After

Insert

Update Profile

Delete

Profile Name:

Profile Number: 6

☒ Log Data while this profile is running.

Step 1

Create New Profile

Type:

Time

Hours

Minutes

Seconds

Control Loop 1

Set Point

Guaranteed Soak Enable

Control Loop 2

Set Point

Guaranteed Soak Enable

Control Loop 3

Set Point

Guaranteed Soak Enable

Control Loop 4

Set Point

Guaranteed Soak Enable

Event Outputs

Event Output 1

Event Output 2

Event Output 3

Event Output 4

Event Output 5

Event Output 6

Event Output 7

Event Output 8

Calendar Start

Select Date or Day Day of Week

Hour

Minute

View Profile

Import Profile

Export Profile

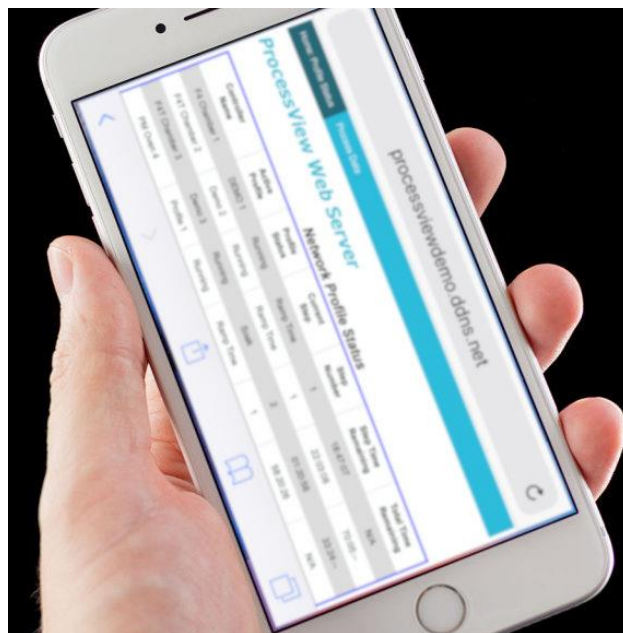
Return

Profile Editor Screen: Profiles can be created, edited On-line or Off-line and stored on the PC for future downloads and archiving.

www.f4tsoftware.com

ProcessView® Data Sheet Rev. E May 2020

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Home: Profile Status

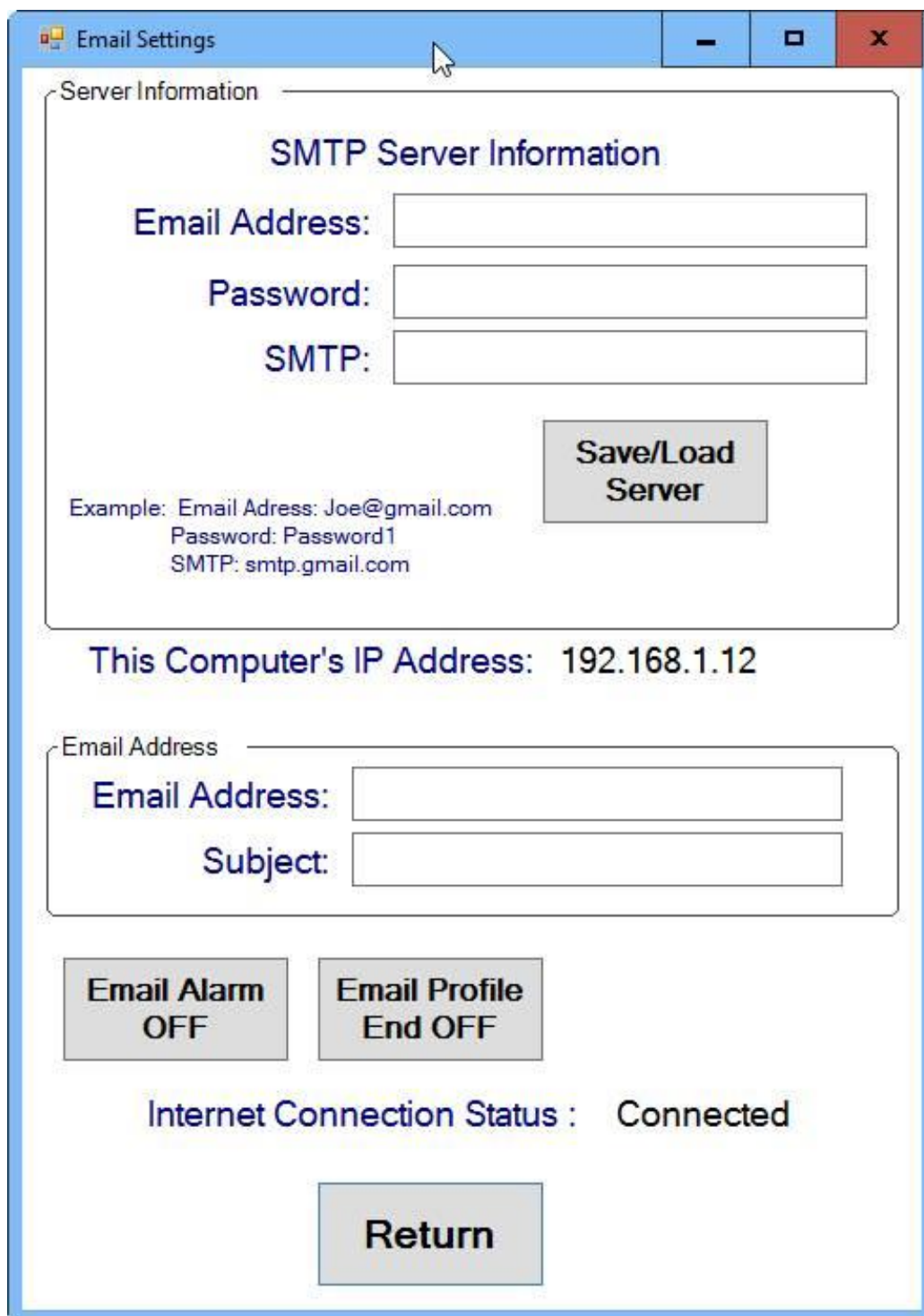
Process Data

ProcessView Web Server

Process Data

Controller Name	Control Loop 1 Current Setpoint	Control Loop 1 Target Setpoint	Control Loop 1 Process Value	Control Loop 2 Current Setpoint	Control Loop 2 Target Setpoint	Control Loop 2 Process Value	Monitor Process Value
F4 Chamber 1	Temperature Current SP=42.5°C	Temperature Profile Target SP=35.0°C	Temperature=42.4°C	Humidity Current SP=32.0% RH	Humidity Profile Target SP=54.0% RH	Humidity=32.0% RH	
F4T Chamber 2	Air Temp Current SP=81.3°C	Air Temp Profile Target SP=89.0°C	Air Temp=0.0°C	Humidity Current SP=73.0% RH	Humidity Profile Target SP=50.0% RH	Humidity=100.0% RH	
F4T Chamber 3	Temperature Current SP=80.0°C	Temperature Profile Target SP=80.0°C	Temperature=63.4°C				
PM Oven 4	Temperature Current SP=92.7°F	Temperature Profile Target SP=100.0°F	Temperature=92.8°F				
F4 Chamber 4	Chamber Temp Current SP=100.0°F	Chamber Temp Profile Target SP=75.0°F	Chamber Temp=100.0°F	Humidity Current SP=75.0% RH	Humidity Profile Target SP=75.0% RH	Humidity=0.0% RH	

Built in Web Server: Allows remote access to Profile Status and Process Data from a remote PC or smart phone. Web pages are read-only for security reasons and Web Pages can be viewed on an inter-company network or from an external network (world wide web, Internet).

A screenshot of the "Email Settings" window. The window has a blue title bar with the text "Email Settings" and standard minimize, maximize, and close buttons. The main content area is white and contains several sections. The first section is titled "Server Information" and includes a sub-header "SMTP Server Information". Below this are three input fields labeled "Email Address:", "Password:", and "SMTP:". To the right of these fields is a button labeled "Save/Load Server". Below the input fields is an example text: "Example: Email Address: Joe@gmail.com", "Password: Password1", and "SMTP: smtp.gmail.com". The second section is titled "This Computer's IP Address:" followed by the value "192.168.1.12". The third section is titled "Email Address" and contains two input fields labeled "Email Address:" and "Subject:". Below these fields are two buttons: "Email Alarm OFF" and "Email Profile End OFF". The fourth section is titled "Internet Connection Status:" followed by the value "Connected". At the bottom of the window is a large button labeled "Return".

Email Settings

Server Information

SMTP Server Information

Email Address:

Password:

SMTP:

Save/Load Server

Example: Email Address: Joe@gmail.com
Password: Password1
SMTP: smtp.gmail.com

This Computer's IP Address: 192.168.1.12

Email Address

Email Address:

Subject:

Email Alarm OFF

Email Profile End OFF

Internet Connection Status : Connected

Return

Email Settings Screen: End of Profile and Alarm conditions can be emailed or texted for convenient status updates for your tests being run on the chamber.

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View Data 1

Load Data Log File

Data Log File: D:\Data\VB Source\Versions\F4T 4.01\April 14 173021 Chamber 1.csv

Start Data Logging

End Data Logging

	Date (MDY)	Time	PID Loop 1 SP C	PID Loop 1 Zone 1 C	PID Loop 1 Heat PWR %	Zone 1 Profile Target SP1 (C)	Zone 1 Profile Current SP1 (C)	* User Name	* Data Log Notes
▶	04/14/2020	5:30:27 PM	28.7	24.6	73.4	28.7	25.0	System Manager	Event Note: Profile: T
	04/14/2020	5:30:32 PM	28.7	24.6	76.1	28.7	25.4	System Manager	
	04/14/2020	5:30:37 PM	28.7	24.6	80.2	28.7	25.9	System Manager	
	04/14/2020	5:30:42 PM	28.7	24.6	83.7	28.7	26.4	System Manager	
	04/14/2020	5:30:47 PM	28.7	24.6	87.4	28.7	26.8	System Manager	
	04/14/2020	5:30:52 PM	28.7	24.6	91.2	28.7	27.3	System Manager	
	04/14/2020	5:30:57 PM	28.7	24.6	94.9	28.7	27.7	System Manager	
	04/14/2020	5:31:02 PM	28.7	24.6	98.8	28.7	28.2	System Manager	
	04/14/2020	5:31:07 PM	28.7	24.6	100.0	28.7	28.6	System Manager	
	04/14/2020	5:31:12 PM	28.7	24.6	100.0	28.7	28.7	System Manager	
	04/14/2020	5:31:17 PM	28.7	24.6	100.0	28.7	28.7	System Manager	
	04/14/2020	5:31:22 PM	28.7	24.6	100.0	28.7	28.7	System Manager	
	04/14/2020	5:31:27 PM	28.7	24.6	100.0	28.7	28.7	System Manager	
	04/14/2020	5:31:32 PM	28.7	24.6	100.0	28.7	28.7	System Manager	
	04/14/2020	5:31:37 PM	28.7	24.6	100.0	28.7	28.7	System Manager	
	04/14/2020	5:31:42 PM	28.7	24.6	100.0	28.7	28.7	System Manager	
	04/14/2020	5:31:47 PM	28.7	24.6	100.0	28.7	28.7	System Manager	
	04/14/2020	5:31:52 PM	28.7	24.6	100.0	28.7	28.7	System Manager	
	04/14/2020	5:31:57 PM	28.7	24.6	100.0	28.7	28.7	System Manager	
	04/14/2020	5:32:02 PM	28.7	24.6	100.0	28.7	28.7	System Manager	
	04/14/2020	5:32:07 PM	28.7	24.6	100.0	28.7	28.7	System Manager	

Enter Text To Be Added To Data Log File Here

Enter Note to Data Log File

Return

Add Electronic Signature

Graph Data

Real-Time Data Log File Viewer Screen: Displays data as it is being logged to the PC file for peace of mind and to make sure the correct data is being logged. Events are also recorded in the Data Log file along with Batch Information and Min/Max process values for each input. Notes can be added by the operator real-time as the profile or batch is running. Multiple electronic signatures can be added to data log files for tamper-proof security.

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The screenshot shows the "Audit Trail Viewer" application window. The title bar reads "Audit Trail Viewer" with standard minimize, maximize, and close buttons. Below the title bar, a status bar indicates "Current Audit Trail File: No File Loaded". The main area contains a table with the following headers: "Time Stamp", "User", "Category", "Description", "Old Value", "New Value", "Comments", and "F4T Name". The table body is currently empty. At the bottom of the window, there is a "Search String:" label followed by a text input field. To the right of the input field are five buttons: "Search Audit Trail File", "Return", "Load Audit Trail", "Export to CSV File", and "Print Audit Trail".

Time Stamp	User	Category	Description	Old Value	New Value	Comments	F4T Name
------------	------	----------	-------------	-----------	-----------	----------	----------

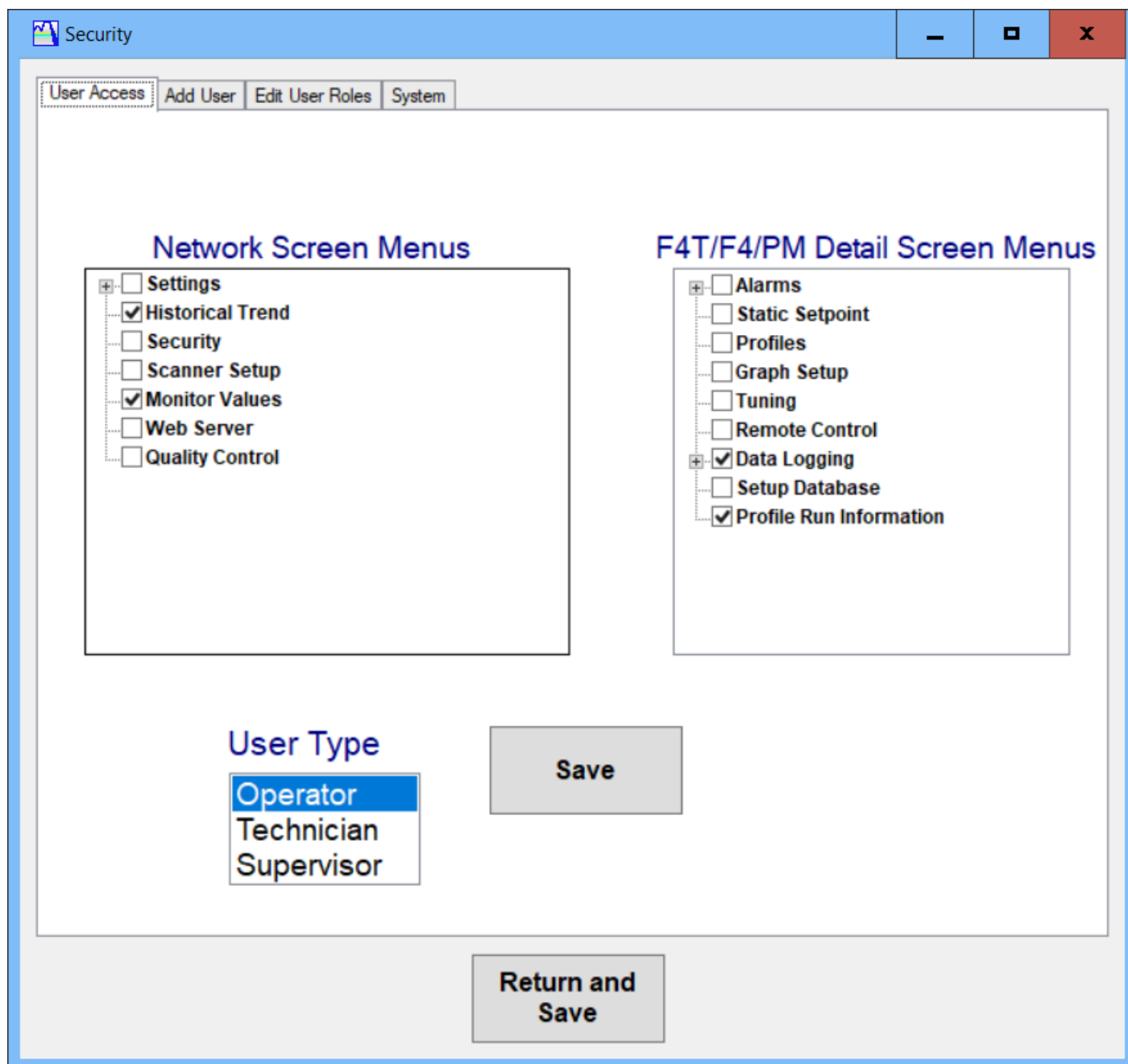
Audit Trail Viewer: All audit trail entries can be viewed with the audit trail viewer screen. Each audit trail entry is time stamped and answer the “How”, “Why”, “Who”, “When” for the change. Audit trails are encrypted and can be printed or exported for auditor inspections in a readable CSV format.

Software Alarms 1

Air Temp <input checked="" type="checkbox"/> Enable High Alarm High Alarm <input checked="" type="checkbox"/> Enable Low Alarm <input checked="" type="checkbox"/> Audible Alarm Enable Process High Limit Value: 10 Process Low Limit Value: 0 Alarm Silence Reset Alarm	Zone 5 <input type="checkbox"/> Enable High Alarm <input type="checkbox"/> Enable Low Alarm <input type="checkbox"/> Audible Alarm Enable Process High Limit Value: 1000 Process Low Limit Value: 0 Alarm Silence Reset Alarm
Humidity <input checked="" type="checkbox"/> Enable High Alarm <input type="checkbox"/> Enable Low Alarm <input checked="" type="checkbox"/> Audible Alarm Enable Process High Limit Value: 85 Process Low Limit Value: 0 Alarm Silence Reset Alarm	Zone 6 <input type="checkbox"/> Enable High Alarm <input type="checkbox"/> Enable Low Alarm <input type="checkbox"/> Audible Alarm Enable Process High Limit Value: 1000 Process Low Limit Value: 0 Alarm Silence Reset Alarm
Part Temp <input checked="" type="checkbox"/> Enable High Alarm <input checked="" type="checkbox"/> Enable Low Alarm Low Alarm <input checked="" type="checkbox"/> Audible Alarm Enable Process High Limit Value: 356 Process Low Limit Value: 50 Alarm Silence Reset Alarm	Zone 7 <input type="checkbox"/> Enable High Alarm <input type="checkbox"/> Enable Low Alarm <input type="checkbox"/> Audible Alarm Enable Process High Limit Value: 1000 Process Low Limit Value: 0 Alarm Silence Reset Alarm
Zone 4 <input type="checkbox"/> Enable High Alarm <input type="checkbox"/> Enable Low Alarm <input type="checkbox"/> Audible Alarm Enable Process High Limit Value: 1000 Process Low Limit Value: 0 Alarm Silence Reset Alarm	Zone 8 <input type="checkbox"/> Enable High Alarm <input type="checkbox"/> Enable Low Alarm <input type="checkbox"/> Audible Alarm Enable Process High Limit Value: 1000 Process Low Limit Value: 0 Alarm Silence Reset Alarm

Update Alarm Settings **Return**

Software Alarm Screen: Each input sensor (temperature, humidity, etc.) can have a Software Alarm associated with it independent of the alarms hard coded in the controller. Both visual and audible notifications can be enabled in the software.



Security

User Access Add User Edit User Roles System

Network Screen Menus

- ☐ Settings
- ☒ Historical Trend
- ☐ Security
- ☐ Scanner Setup
- ☒ Monitor Values
- ☐ Web Server
- ☐ Quality Control

F4T/F4/PM Detail Screen Menus

- ☐ Alarms
- ☐ Static Setpoint
- ☐ Profiles
- ☐ Graph Setup
- ☐ Tuning
- ☐ Remote Control
- ☒ Data Logging
- ☐ Setup Database
- ☒ Profile Run Information

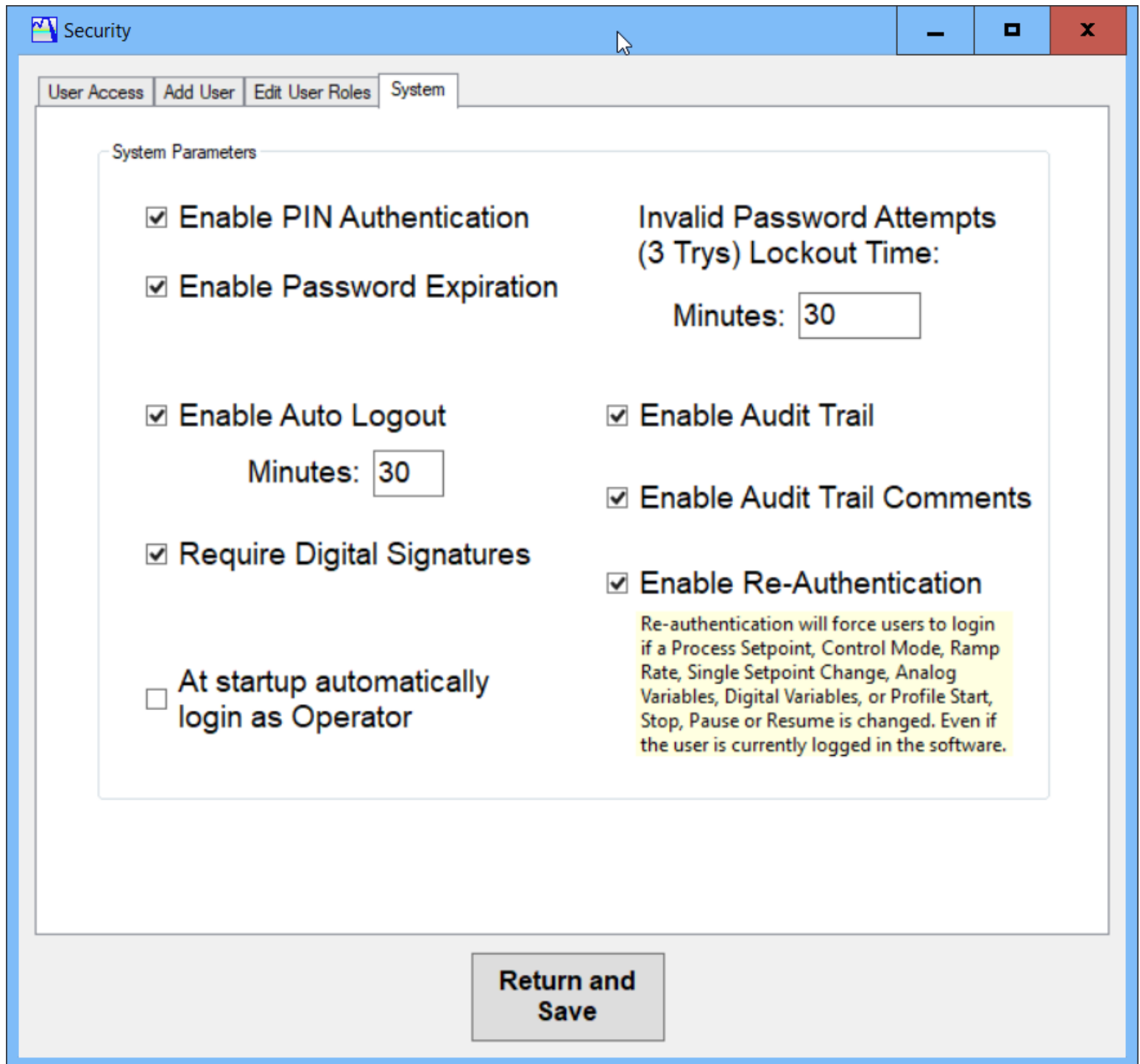
User Type

Operator
Technician
Supervisor

Save

Return and Save

Security Screen: All menus and screens can be password protected with 3 different role levels (Supervisor, Technician and Operator) with unique passwords.

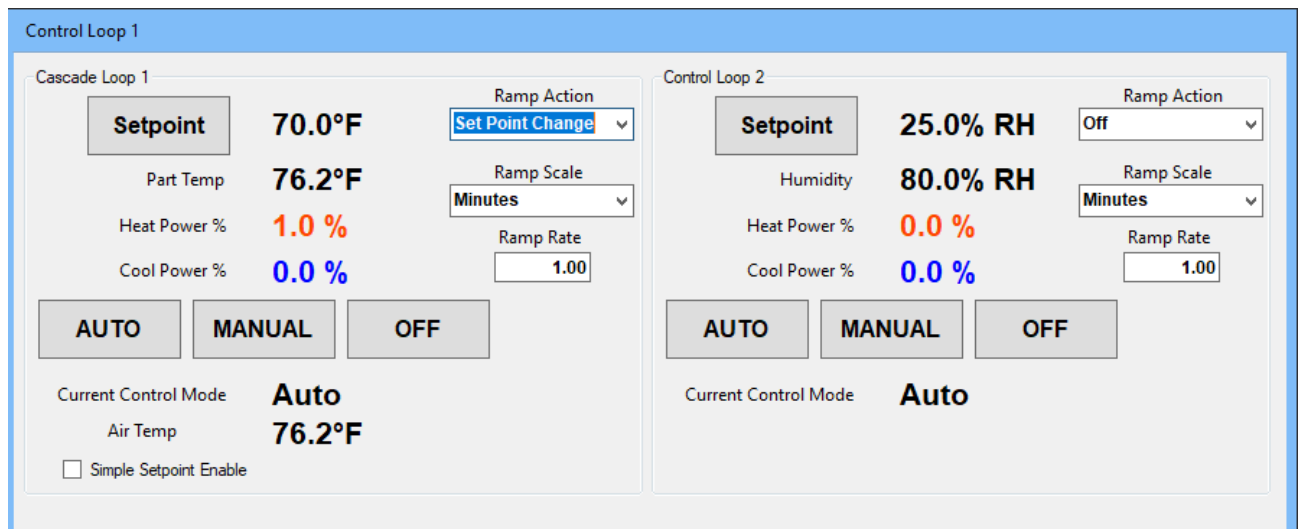


The screenshot shows the 'Security' window with the 'System' tab selected. The 'System Parameters' section contains the following settings:

- ☒ Enable PIN Authentication
- ☒ Enable Password Expiration
- ☒ Enable Auto Logout
Minutes:
- ☒ Require Digital Signatures
- ☐ At startup automatically login as Operator
- Invalid Password Attempts (3 Trys) Lockout Time:
Minutes:
- ☒ Enable Audit Trail
- ☒ Enable Audit Trail Comments
- ☒ Enable Re-Authentication
Re-authentication will force users to login if a Process Setpoint, Control Mode, Ramp Rate, Single Setpoint Change, Analog Variables, Digital Variables, or Profile Start, Stop, Pause or Resume is changed. Even if the user is currently logged in the software.

A 'Return and Save' button is located at the bottom center of the window.

Security Screen – System: The Security System tab allows for advanced user management and enables the use of digital signatures and or audit trails.



Control Loop 1

Cascade Loop 1

Setpoint 70.0°F

Part Temp 76.2°F

Heat Power % 1.0 %

Cool Power % 0.0 %

Ramp Action Set Point Change

Ramp Scale Minutes

Ramp Rate 1.00

AUTO **MANUAL** **OFF**

Current Control Mode **Auto**

Air Temp 76.2°F

☐ Simple Setpoint Enable

Control Loop 2

Setpoint 25.0% RH

Humidity 80.0% RH

Heat Power % 0.0 %

Cool Power % 0.0 %

Ramp Action Off

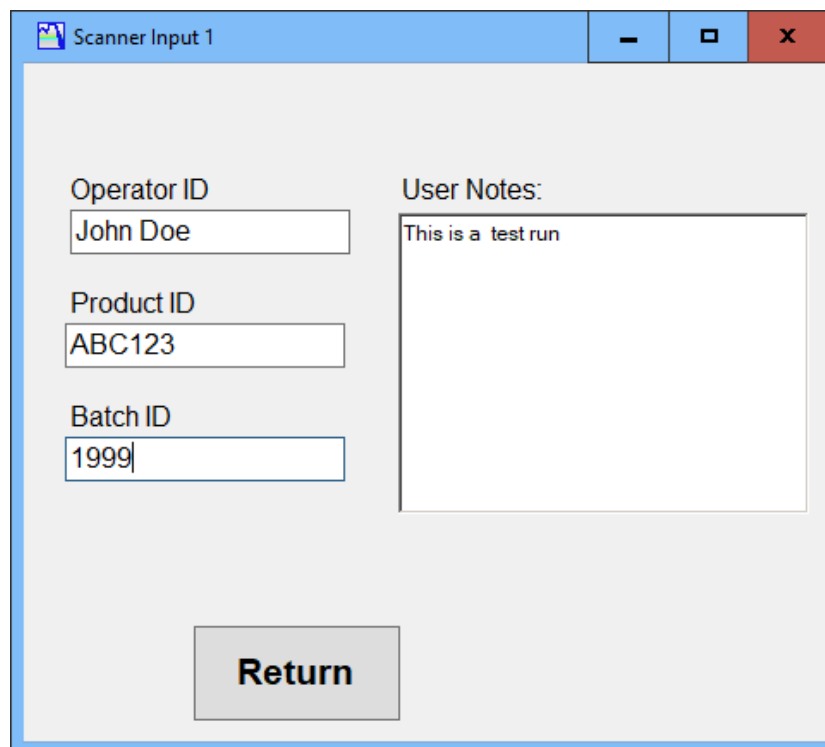
Ramp Scale Minutes

Ramp Rate 1.00

AUTO **MANUAL** **OFF**

Current Control Mode **Auto**

Static Setpoint Screen: Control parameters such as control mode (Auto, Manual or Off), Static Setpoints and ramping mode can be adjusted by the user. For Cascade control users can enable Simple Setpoint when not requiring Cascade control usually used for controller to a Part Temperature.



Scanner Input 1

Operator ID
John Doe

Product ID
ABC123

Batch ID
1999

User Notes:
This is a test run

Return



Batch Processing Operator Setup Screen: Bar code scanning can be used to automate batch processes for quality requirements and to eliminated errors running profiles.

Bar/QR Code Scanner Setup

If a Bar Code or QR Scanner is used for inputting Profile Run Data then Select the Checkbox below.
If a User will manually input Profile Run Data then Leave the box below unchecked.

☒ **Use Scanner As User Input**

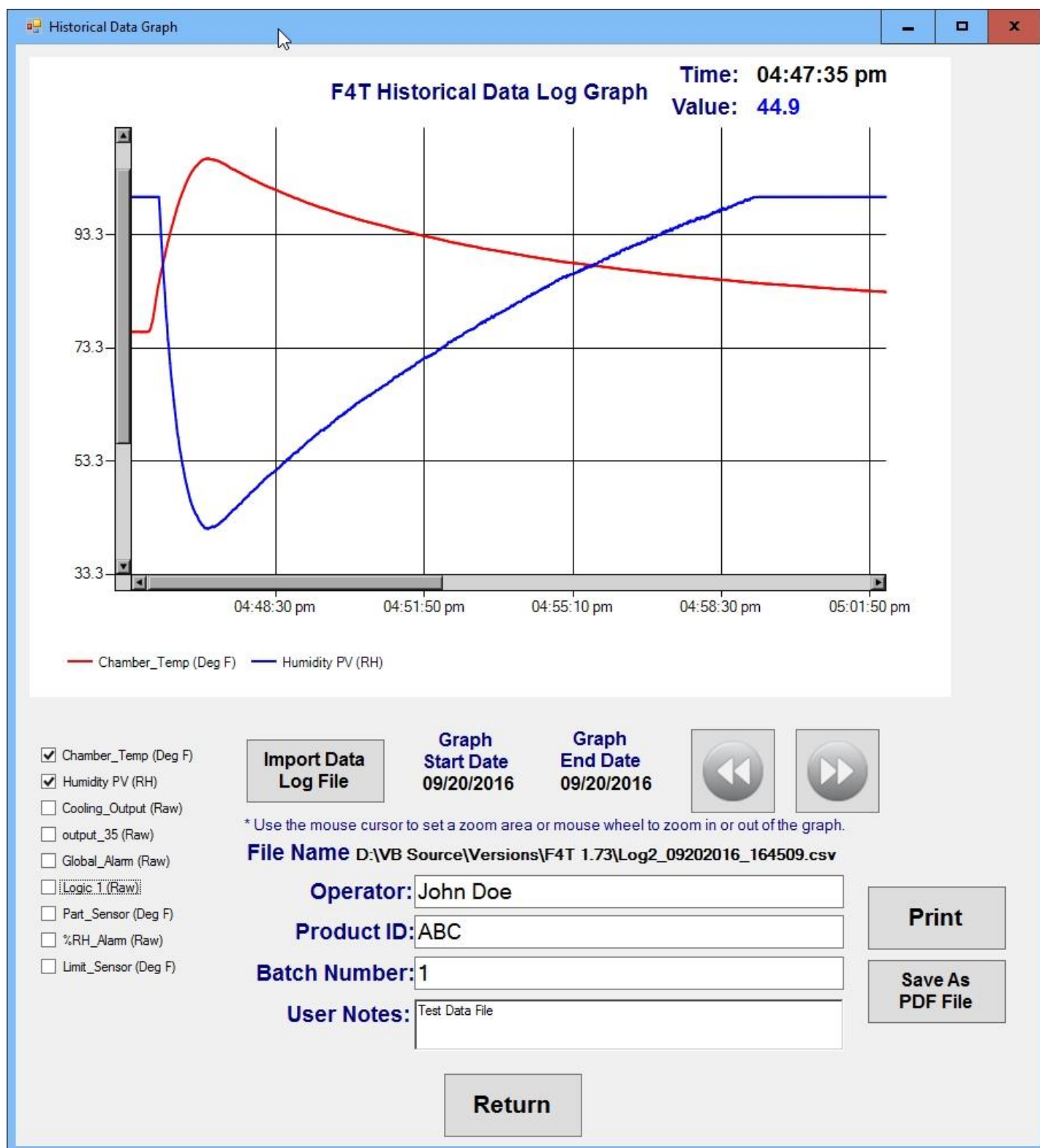
Select an an Input Field below and re-order the list the way the User will Scan the Bar/QR codes.
The top item will be scanned first. Use the Check Box for each Input Field if it is used or not used by the User:

Scan Items	
<input checked="" type="checkbox"/> Operator ID	 
<input checked="" type="checkbox"/> Product ID	
<input checked="" type="checkbox"/> Batch ID	
<input checked="" type="checkbox"/> Load Profile	

Return **Cancel**



Bar Code Scanner Setup Screen: Operator input for batch processing can be entered with bar codes for quality and product accuracy. Profiles can be loaded based on bar code information as well.



Historical Data Graph Screen: Saved data can be graphed for inspection and archiving purposes and saved as a PDF file or printed for a hard copy along with batch information.

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Add New F4T Online

Communications | **Sensor Setup** | Events/Alarms | Network/Cellular Alerts

Sensor Name	Sensor Present	Sensor Function	Input Slot #	Analog Input #
Air Temp	YES	PID Loop 1	Slot 1	Input 1
Humidity	YES	PID Loop 2	Slot 2	Input 1
Zone 3	NO			
Zone 4	NO			
Zone 5	NO			
Zone 6	NO			
Zone 7	NO			
Zone 8	NO			
Limit 1	NO			
Limit 2	NO			

For Quick Sensor Setup Select Chamber/Furnace Manufacturer:

- Default
- Clear Settings
- Russells Technical Products**
- TestEquity
- Cincinnati Sub Zero
- TPS-Blue M

Select Manufacturer Installed Options:

- ☒ Humidity

Save And Exit

F4T Name: Chamber 123A

Sensor Setup Screen: The only setup required is for the mapping of the sensor locations in an F4T controller. Predefined manufacturers setups are included making setup very easy! Sensor inputs can be given custom names to make the interface more intuitive to the user. (Russells Technical Products shown selected above). No programming required!

Tuning Screen: Easy tuning can be done from the tuning screen. Use the Auto Tuning

Tuning 1

Cascade Loop 1				Cascade Loop 2			
Inner PID Loop		Outer PID Loop		Inner PID Loop		Outer PID Loop	
Heat PB	25	Heat PB	20	Heat PB	56	Heat PB	53
Cool PB	26	Cool PB	24	Cool PB	4	Cool PB	24
Integral	180	Integral	181	Integral	180	Integral	240
Derivative	10	Derivative	24	Derivative	5	Derivative	4
Inner Dead Band	4	Outer Dead Band	3	Inner Dead Band	4	Outer Dead Band	7
Setpoint		Autotune Status: Off		Setpoint		Autotune Status: Off	
375.0°F		Autotune Aggressiveness: Critical		300.0°F		Autotune Aggressiveness: Critical	
		Autotune Set Point: 100				Autotune Set Point: 100	
		Start Autotune				Start Autotune	

Control Loop 3				Control Loop 4			
Heat PB	30	Dead Band	2	Heat PB	25	Dead Band	3
Cool PB	28	Autotune Set Point	100	Cool PB	25	Autotune Set Point	100
Integral	180	Autotune Aggressiveness	Critical	Integral	100	Autotune Aggressiveness	Critical
Derivative	10	Start Autotune		Derivative	1	Start Autotune	
Setpoint		Autotune Status: Off		Setpoint		Autotune Status: Off	
285.0°F				485.0°F			

Return

function along with the real trend graph to finely tune your process!

Add RMS/ADAM 4118

RMS/ADAM-4118

Monitor Names and Input Types

☐ Add (1) ADAM-4118 Monitor 1 °F Monitor 6 °F Monitor 11 °F

☐ Add (2) ADAM-4118 Monitor 2 °F Monitor 7 °F Monitor 12 °F

☒ Add Watlow RMS Monitor 3 °F Monitor 8 °F Monitor 13 °F

Select Number of Channels Used for RMS: Monitor 4 °F Monitor 9 °F Monitor 14 °F

16 Channel Monitor 5 °F Monitor 10 °F Monitor 15 °F

Monitor 16 °F

Configure Serial Communications

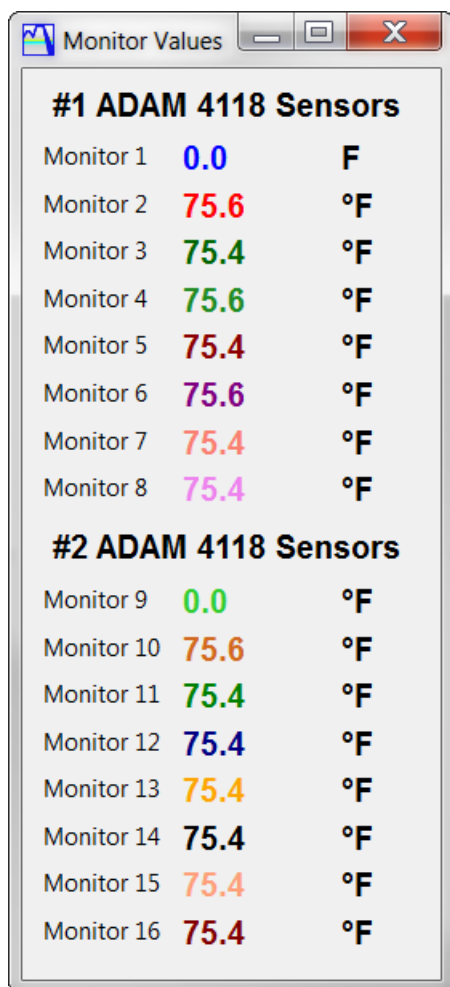
Select PC COM Port: COM6

Select Baud Rate: 9600

Enter Address (1-247) Adam 4118 #1 Network Address: 1

Save And Exit Monitor Device Name: Watlow RMS

Monitor Setup Screen: Setup for external sensors that can be data logged and viewed in the software. ProcessView supports an additional Watlow RMS or two Advantech TC input modules that can be used to add up to 16 external sensors to a chamber or for a device under test.



Monitor Values Screen: Up to 16 additional external monitor sensors interfaced to a Watlow RMS or two Advantch ADAM 4118 input modules can be viewed, graphed and data logged. The sensors can be used as additional sensors for expanding the chambers capability or for measuring products or devices under test in the chamber.

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Database 1 Setup

Connection String/
Endpoint String:

f4tdatabase.cce15gli7znj.us-east-1.rds.amazonaws.com

Username:

gvinson

Password:

••••••••

Data Base Name:
(lowercase)

f4tdatabase

☐ Show Password

Upload Data
To Cloud
Database

Login

Connected

Database Table Name: **dbo.test**

	Date_YYYYMMDD	Time	Monitor_1_F	Monitor_2_F	Monitor_3_F	Monitor_4_F	Monitor_5_F	Monitor_6	^
	2018-06-24	10:47:17	266.7	295.7	319.5	296.4	153.3	343.2	
	2018-06-24	10:47:22	266.7	295.7	319.5	296.4	153.3	343.2	
	2018-06-24	10:47:27	266.7	295.7	319.5	296.4	153.3	343.2	
	2018-06-24	10:47:32	266.7	295.7	319.5	296.4	153.3	343.2	
	2018-06-24	10:47:37	266.7	295.7	319.5	296.4	153.3	343.2	
	2018-06-24	10:47:42	266.7	295.7	319.5	296.4	153.3	343.2	
	2018-06-24	10:47:47	266.7	295.7	319.5	296.4	153.3	343.2	
	2018-06-24	10:47:52	266.7	295.7	319.5	296.4	153.3	343.2	
	2018-06-24	10:47:57	266.7	295.7	319.5	296.4	153.3	343.2	
	2018-06-24	10:48:02	266.7	295.7	319.5	296.4	153.3	343.2	
	2018-06-24	10:48:07	266.7	295.7	319.5	296.4	153.3	343.2	
	2018-06-24	10:48:12	266.7	295.7	319.5	296.4	153.3	343.2	
	2018-06-24	10:48:17	266.7	295.7	319.5	296.4	153.3	343.2	
▶	2018-06-24	10:48:22	266.7	295.7	319.5	296.4	153.3	343.2	
	2018-06-24	10:48:27	266.7	295.7	319.5	296.4	153.3	343.2	
	2018-06-24	10:48:32	266.7	295.7	319.5	296.4	153.3	343.2	▼




Note: Connection/Endpoint String should look
something like this:







Microsoft Azure: f4tserver.database.windows.net
Amazon AWS RDS: f4tserver.cjsdg5ewmp6r.us-east-1.rds.amazonaws.com


Return

Database Setup Screen: All logged parameters can be saved up to a Cloud Service such as Amazon AWS or Microsoft Azure with password security. Data is saved in SQL format for easy integration with Microsoft Access. Data can then be accessed by anyone with Security Credentials on the Cloud Database. Users must have an Amazon AWS or Microsoft Azure Cloud service in order to use this feature. Databases that are supported include Microsoft Azure, Amazon AWS, Microsoft SQL Server and Microsoft Access.


Graph 1 Setup

Pen Name	Pen Color	Pen Enable	Select Y-Axis	Enter Units
Air Temp		<input checked="" type="checkbox"/> On	Left <input type="text" value="v"/>	<input type="text" value="°F"/>
Humdiity		<input checked="" type="checkbox"/> On	Right <input type="text" value="v"/>	<input type="text" value="% RH"/>
Part Temp		<input checked="" type="checkbox"/> On	Left <input type="text" value="v"/>	<input type="text" value="°F"/>

PID 1 Setpoint		<input checked="" type="checkbox"/> On	Left Y-Axis Title <input type="text" value="Temperature (F)"/>
PID 1 Heat PWR		<input type="checkbox"/> Off	
PID 1 Cool PWR		<input type="checkbox"/> Off	
PID 2 Setpoint		<input type="checkbox"/> Off	Right Y-Axis Title <input type="text" value="Humidity %RH"/>
PID 2 Heat PWR		<input type="checkbox"/> Off	
PID 2 Cool PWR		<input type="checkbox"/> Off	

Over Temp  ☐ Off

Profile Setpoint

Current Setpoint		<input checked="" type="checkbox"/> On
High Tolerance Band	<input type="text" value="5"/>	<input checked="" type="checkbox"/> On
Low Tolerance Band	<input type="text" value="-5"/>	<input checked="" type="checkbox"/> On

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Graph Setup Screen: The Graph Setup screen allows the User to choose what parameters will be trended on the real-time graph. The user can choose the color of the trend as if tolerance bands should be graphed along with the current setpoint.