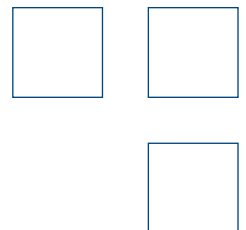


# Configuration Software Manual

## MT100 Multipoint Flow Meter



**Notice of Proprietary Rights**

This document contains confidential technical data, including trade secrets and proprietary information which is the property of Fluid Components International LLC (FCI). Disclosure of this data to you is expressly conditioned upon your assent that its use is limited to use within your company only (and does not include manufacture or processing uses). Any other use is strictly prohibited without the prior written consent of FCI.

© Copyright 2020 by Fluid Components International LLC. All rights reserved. FCI is a registered trademark of Fluid Components International LLC. Information subject to change without notice.

**Table of Contents**

1. Introduction.....1

2. Installation.....1

3. Operation.....1

    Configuration Software Basics .....4

        Password Protection .....4

    Basic Setup Tab Screens.....5

    Advanced Setup Tab Screens.....8

        Download Calibration .....11

    Configuration Tab Screens.....13

    Diagnostics Tab Screens.....16

        CEMS Test Results.....20

    Factory Tab Screens .....21

    FE1-FE8 Process Data.....27

    Parameter Reports .....28

    Customer Service/Technical Support.....29

**List of Figures**

Figure 1 – USB & Ethernet Connectors on SB4 Main Board .....1

Figure 2 – Welcome Screen.....2

Figure 3 – Example Process Data Screen .....3

Figure 4 – Basic Application Screen Elements .....4

Figure 5 – Example Groups Tab (Basic Setup) .....5

Figure 6 – Example Units Tab (Basic Setup) .....6

Figure 7 – Example Pipe Size Tab (Basic Setup) .....6

Figure 8 – Example Alarms Tab (Basic Setup) .....7

Figure 9 – Example SD Card Logging Tab (Basic Setup).....7

Figure 10 – Example Totalizer Tab (Basic Setup) .....8

Figure 11 – Example User Parameters Tab (Advanced Setup).....8

Figure 12 – Example Ethernet Tab (Advanced Setup).....10

Figure 13 – Example Data and Time Tab (Advanced Setup) .....10

Figure 14 – Example Download Calibration Tab (Advanced Setup) .....11

Figure 15 – Example Reboot Device Tab (Advanced Setup).....12

Figure 16 – Example Flow Filtering Tab (Advanced Setup).....12

Figure 17 – Example Output Tab (Configuration) .....13

Figure 18 – Example 4-20mA User Tab (Configuration).....14

Figure 19 – Example Modbus Tab (Configuration).....14

Figure 20 – Example Extended Op. Mode Tab (Configuration) .....15

Figure 21 – Example Group Switch Setup Tab (Configuration).....15

Figure 22 – Example Status Tab (Diagnostics).....16

Figure 23 – Example Fault Log Tab and Example Fault Log List (Diagnostics).....17

Figure 24 – Example idR Scheduled Tests Tab and Example idR On-Demand Test Results Display (Diagnostics) .....17

Figure 25 – Example idR Test Logs Tab and Example idR Test Log List (Diagnostics) .....18

Figure 26 – Example CEMS On-Demand Tab (Diagnostics).....18

Figure 27 – Example CEMS Scheduled Tab (Diagnostics).....19

Figure 28 – Example CEMS Settings Tab (Diagnostics).....19

Figure 29 – Example On-Demand CEMS Test Results Window (Diagnostics).....20

Figure 30 – Example Factory Parameters Tab (Factory).....21

Figure 31 – Example Identification Tab (Factory).....22

## List of Figures (continued)

Figure 32 – Example 4-20mA Factory Tab (Factory).....	22
Figure 33 – Example Options Tab (Factory).....	23
Figure 34 – Example HART Tab (Factory).....	23
Figure 35 – Example Memory Tab (Factory).....	24
Figure 36 – Example Reset idRs Tab (Factory).....	24
Figure 37 – Example SIL Adj Tab (Factory).....	25
Figure 38 – Example FE Faults Tab (Factory).....	25
Figure 39 – Example Core Faults Tab (Factory).....	26
Figure 40 – Example Process Data Screen (FE1).....	27
Figure 41 – Example Parameter Report, Group 1.....	28
Figure 42 – Example Parameter Report, Group 5.....	28

## List of Tables


Table 1 – Basic Setup Tabs.....	5
Table 2 – Advanced Setup Tabs.....	9
Table 3 – Configuration Tabs.....	13
Table 4 – Diagnostics Tabs.....	16
Table 5 – Factory Tabs.....	21

## 1. Introduction

The MT100 Configuration software is a Windows PC application that lets the user easily set up and configure the MT100 Multipoint Flow Meter products. Use this tool for all instrument commissioning activity. Note that the software application serves both ST100 Series and MT100 product lines. This manual, however, covers operation with MT100 only (software version 3.2.0.x).

## 2. Installation

Find the Software Configurator MSI install file in the Software folder on the product documentation CD or downloaded over the web. The file can be identified by name: *ST-MT-Configurator-v3200.msi*. Copy this file to a location on your PC designated for MT100 documentation.

Run the MSI installer file (make sure you have administrative rights to install) and follow the on-screen instructions to complete the installation (uninstall any previous version of the software first). The installation process places an application shortcut icon of a stylized meter face on the Windows desktop:  The installer also creates a folder in the Start Menu named *Fluid Components Intl*, which contains another program shortcut.

## 3. Operation

Connect the host PC via USB or Ethernet as required for your application:

- Use **USB** for local host PC connection to the instrument. Use the supplied USB cable to make the connection. Plug the cable end with the square-shaped plug into the instrument's USB connector. Plug the other end of the cable with the flat plug into a USB port on the PC. .
- Use **Ethernet** for remote applications in which the host PC communicates with the instrument over an Ethernet network. Connect a Cat-5 Ethernet patch cable to the instrument's RJ-45 connector on the main board. Plug the other end of the cable to a 100Base-T compatible network switch or hub attached to your network. Refer to "Advanced Setup Tab Screens" on page 8 for info on setting Ethernet address values.

The MT100 USB and Ethernet connectors are located at the bottom edge of the SB4 main board as shown in the figure below (open enclosure door for access).

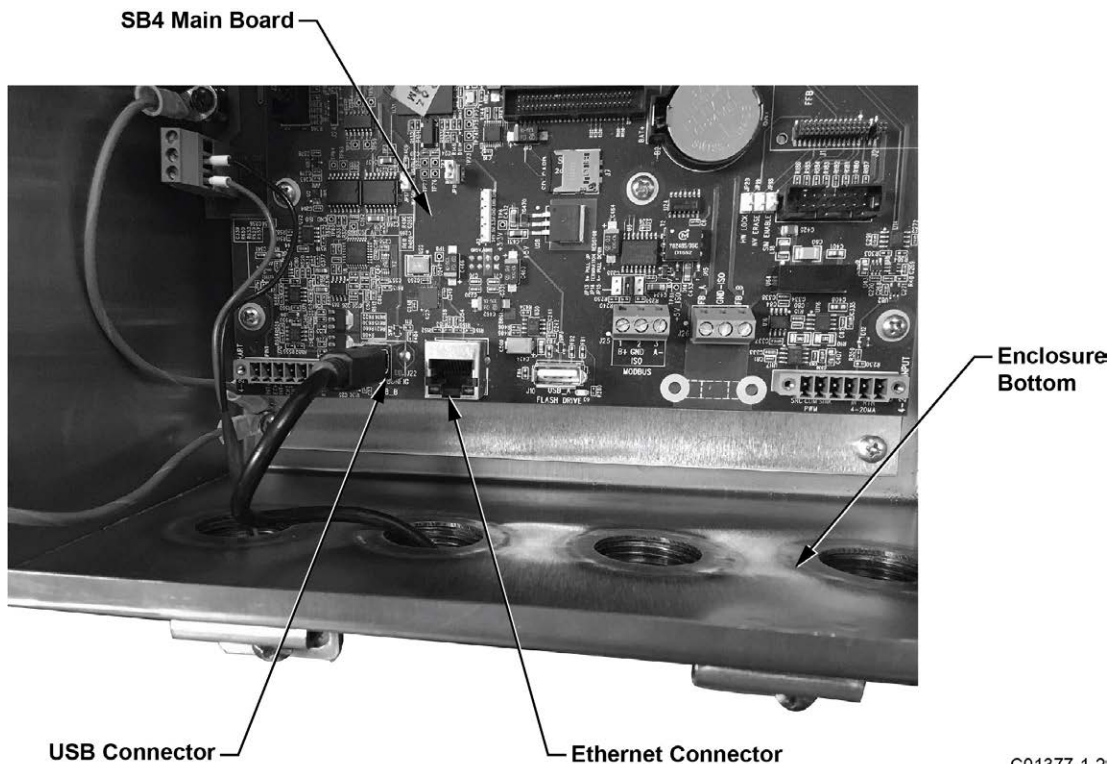


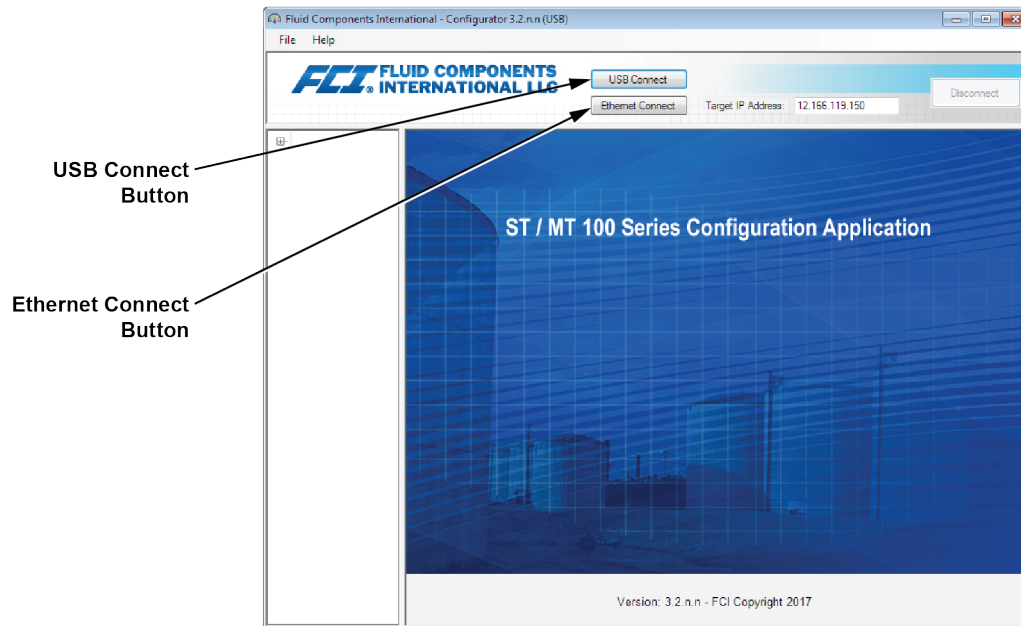
Figure 1 – USB & Ethernet Connectors on SB4 Main Board

C01377-1-2

**Note:** To avoid any connection problems make sure the MT100 is fully booted before connecting to the PC USB port and/or launching the MT100 Configuration software.

**Caution:** A host PC connection is intended for temporary use only. Do not make the PC/network connection part of the permanent installation.

Double click the MT100 Configurator icon. The application opens to the Welcome screen as shown in the figure below. Click the appropriate connect button, **USB Connect** or **Ethernet Connect**, at the top of the screen to let the PC communicate with the instrument (with cable connection already made).

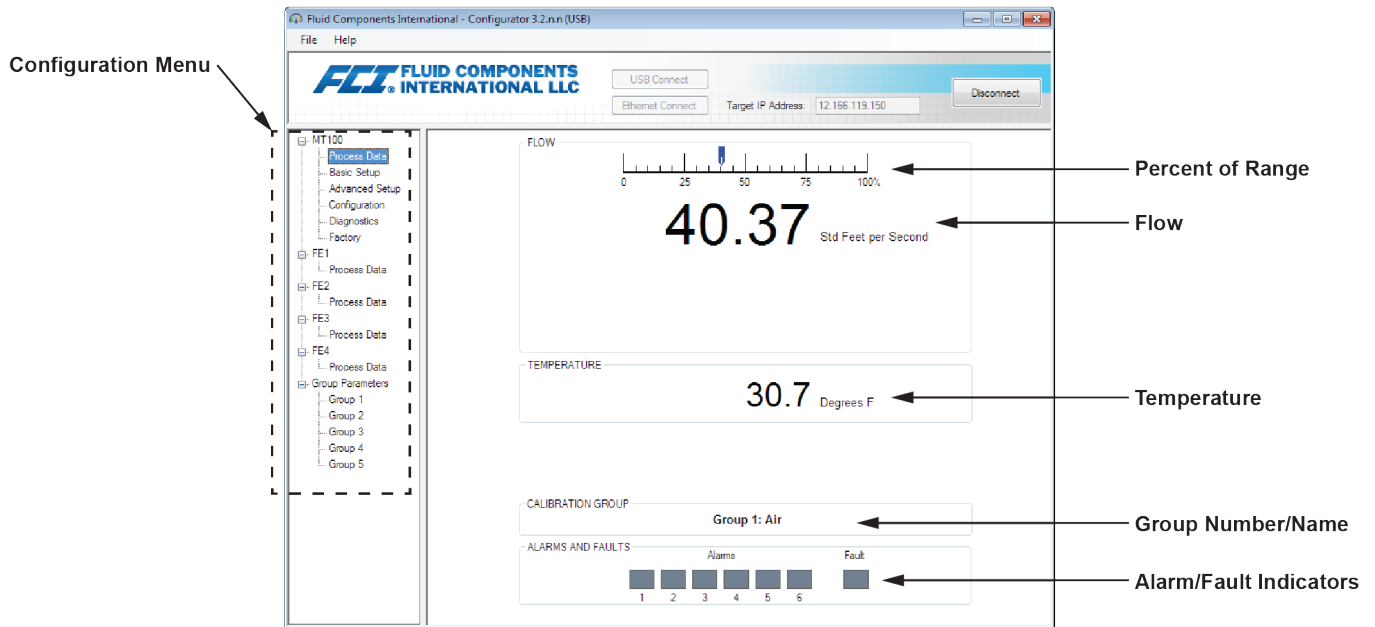


C01381-2-1

**Figure 2 – Welcome Screen**

Once connected, the application window shows the Process Data screen as shown in the figure below. The displayed information, which is the same as that shown on the HMI front panel display, includes the following:

- Flow as percent of range (scale)
- Flow with engineering units
- Total Flow (if Mass or Volumetric units used)
- Temperature
- Calibration Group **number** and Group **name**
- Alarm/Fault indicators



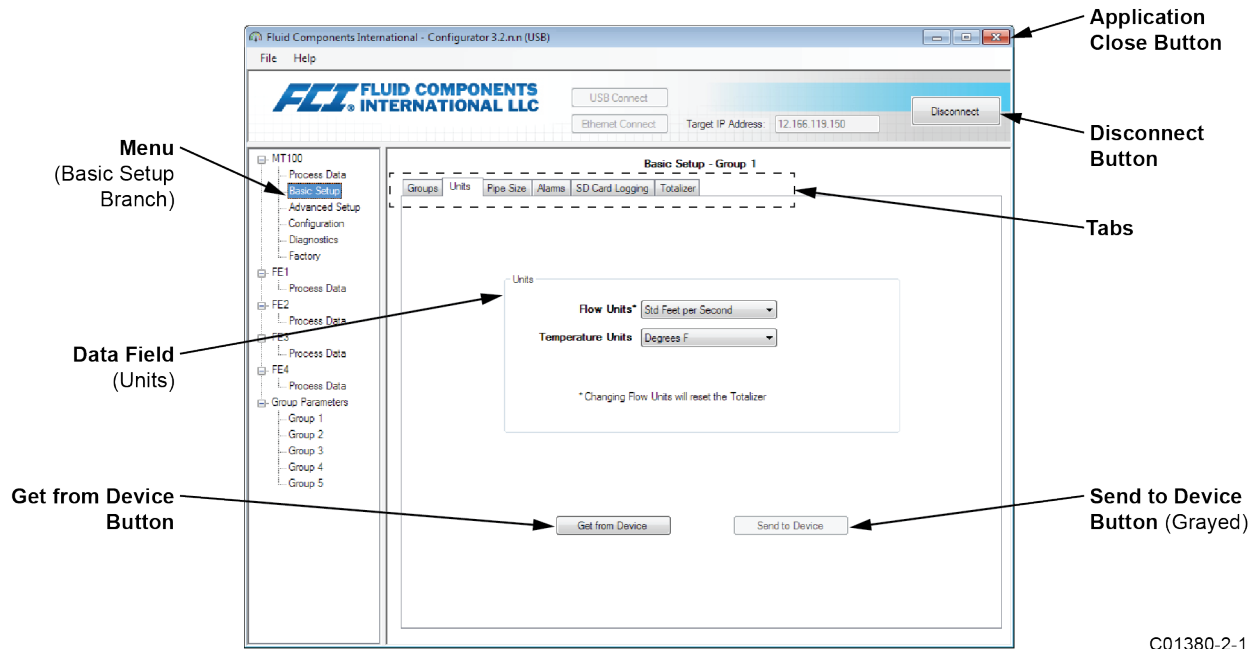
C01378-2-1

Figure 3 – Example Process Data Screen

**Configuration Software Basics**

The MT100 is set up using a configuration menu arranged in a hierarchical tree structure on the left side of the window. Select a menu item to see the related tabs on the right side of the window. Within the tab area parameter data is typically organized into one or more data fields, which are set off with a thin divider line or a thin box outline.

Many screens show **Get from Device** and/or **Send to Device** buttons at the bottom portion of the window. These buttons are shown if the window tab includes parameter data that can be retrieved from the instrument for display (**Get from Device**) and/or transmitted to the instrument for programming (**Send to Device**). The **Send to Device** button is normally grayed out (inactive) initially until a change is made in a data field. Once a parameter change is detected, the **Send to Device** button becomes active as shown by its solid appearance.



C01380-2-1

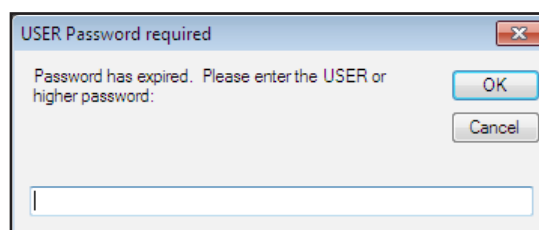
**Figure 4 – Basic Application Screen Elements**

Click **Disconnect** to break the connection between the PC and MT100. Click the application window *Close* button or type ALT+F4 (with the application window having the focus) to quit the application altogether.

**Note:** Once the PC's configuration software is communicating with the instrument, some HMI display items/menus are inactive due to control being handed over to the configuration application. For example, front panel selection of groups via the **MENU** button is inactive (inactive HMI display menu items are shown with an asterisk). Similarly, for a unit with optional CEMS, the front panel **SYS CHK** button is inactive.

**Password Protection**

To protect against unwanted/unauthorized change, two levels of password protection are provided: *User* and *Factory*. The User level password is associated with common user-accessed parameters that can only be changed after entering the User password. The Factory level password is associated with more sensitive programming that can only be modified by the factory or its representatives. The dialog box for password entry is shown below. When prompted, type the password and then click **OK**. The User password is: 2772. The password is also shown in this manual with the tab summary tables.





### Basic Setup Tab Screens

Select the **Basic Setup** branch on the menu tree to access basic setup items. The **Groups tab** is the first of several tabs across the top of the screen. Each tab provides a particular menu within the **Basic Setup** branch.

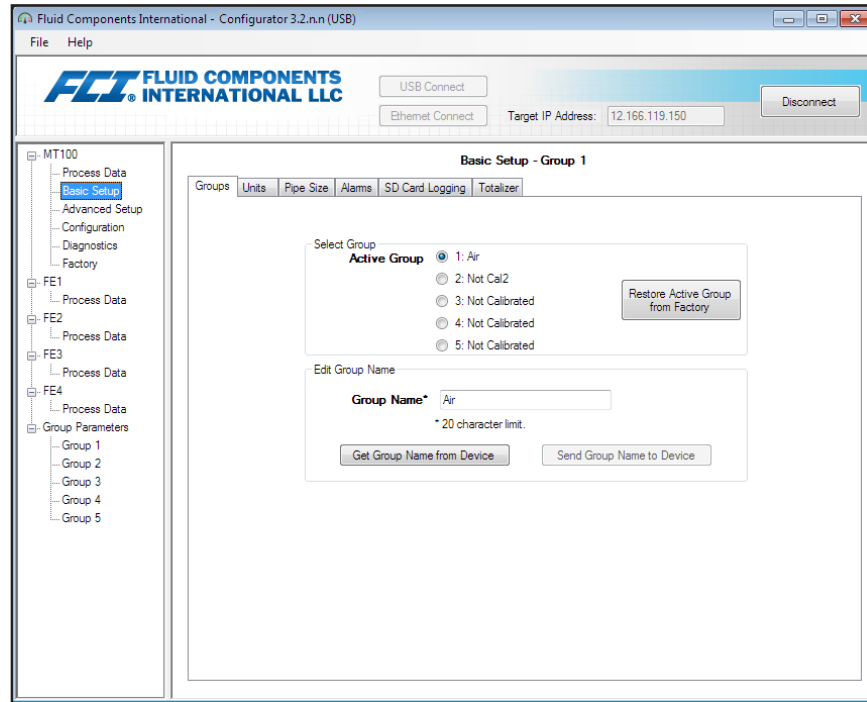


Figure 5 – Example Groups Tab (Basic Setup)

The table below summarizes the tabs within the **Basic Setup** branch.

Table 1 – Basic Setup Tabs

Tab Name	Tab Description	Password Level
Groups	Select and name groups. Switching between established groups takes place immediately once the radio button is clicked (no password required).	User
Units	Select flow and temperature units.	User
Pipe Size	Select pipe type and dimensions.	User
Alarms	Select and set alarm requirements.	User
SD Card Logging	Select logging requirements. Refer to <i>Data Logging</i> in the Operation section of the main manual 06EN003460 for details on how to use this feature.	User
Totalizer	Select and reset Totalizer requirements.	User

[User password 2772]

To verify the current configuration of any setup parameter, click **Get from Device** on any of the Setup menus. After changing any of the setup parameters, click **Send to Device**. Click **Get from Device** again to verify the parameter(s) change. Observe that the changed parameters are now displayed. The remaining **Basic Setup** tab screens are shown below.

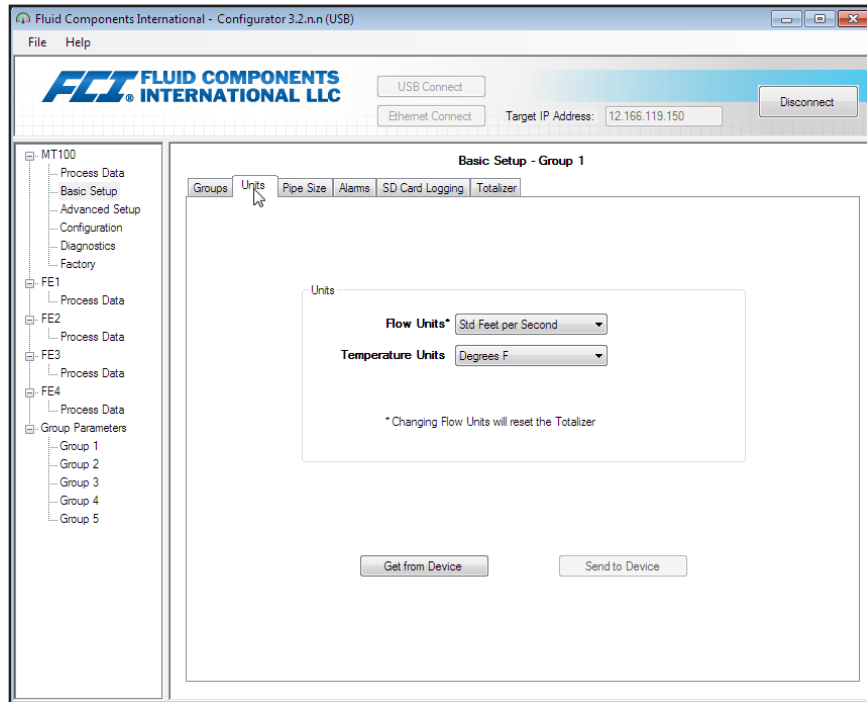


Figure 6 – Example Units Tab (Basic Setup)

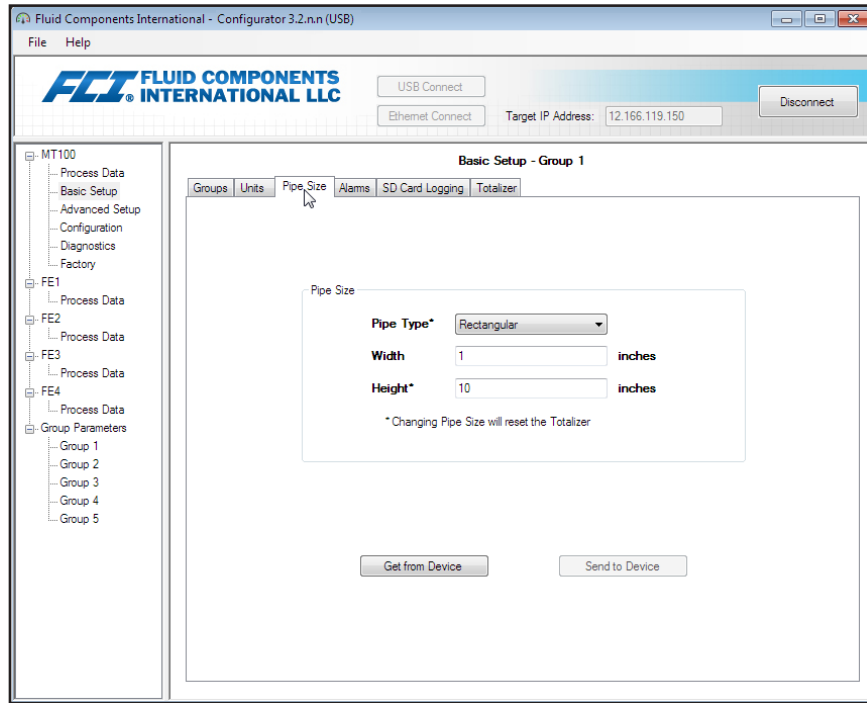


Figure 7 – Example Pipe Size Tab (Basic Setup)

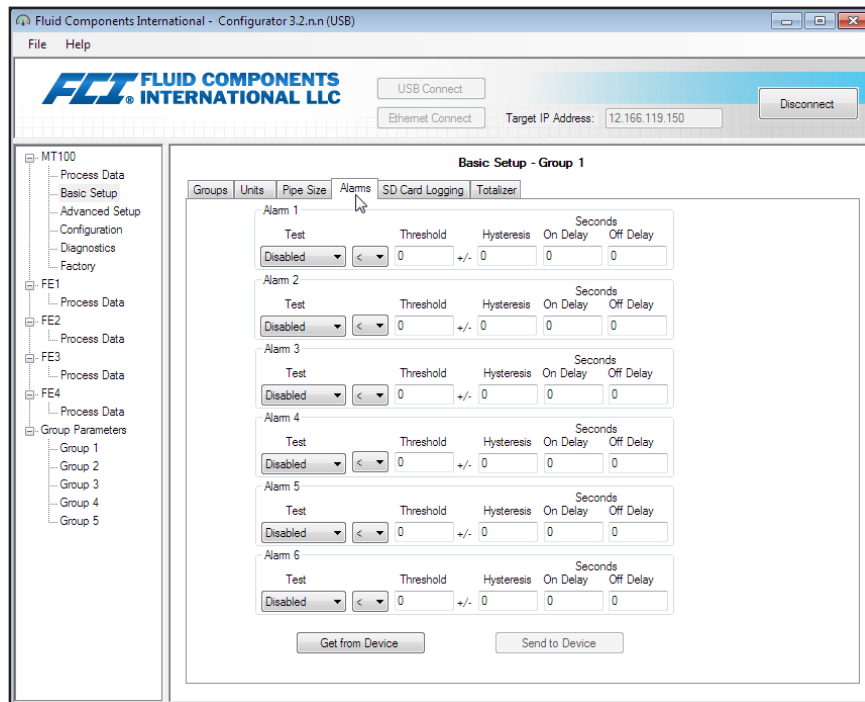


Figure 8 – Example Alarms Tab (Basic Setup)

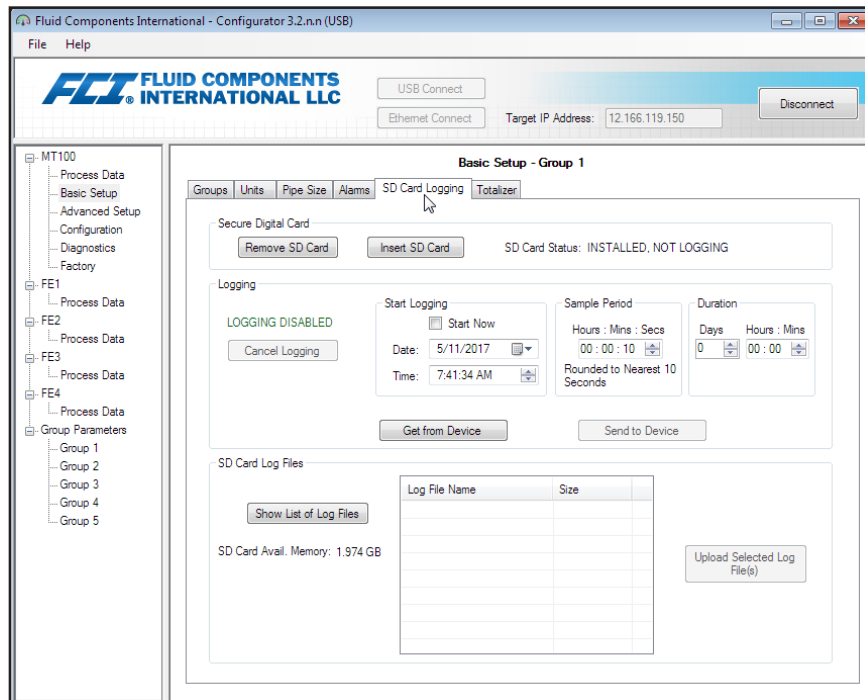


Figure 9 – Example SD Card Logging Tab (Basic Setup)

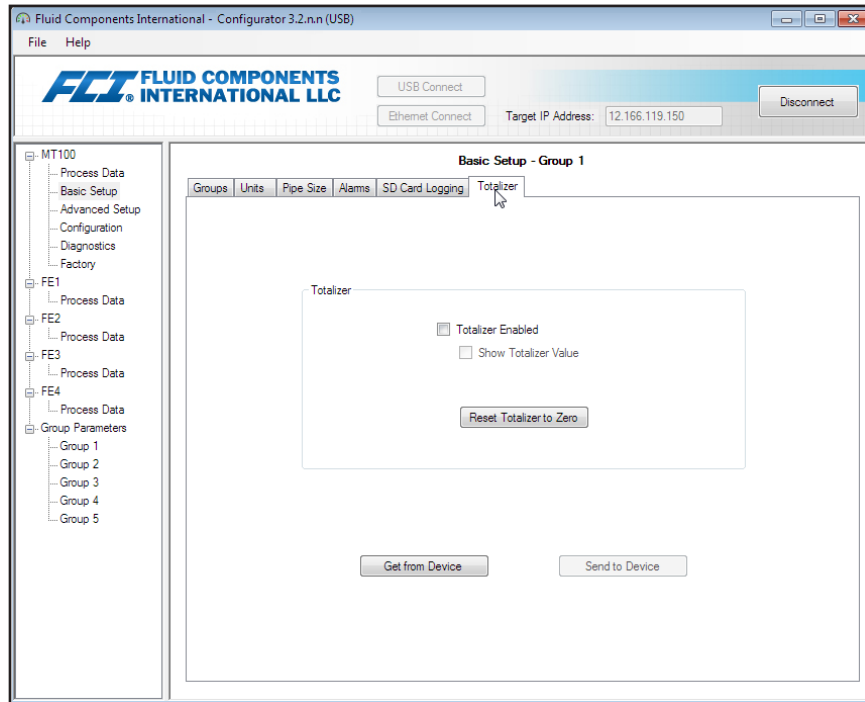


Figure 10 – Example Totalizer Tab (Basic Setup)

**Advanced Setup Tab Screens**

Select the **Advanced Setup** branch on the menu tree to access advanced setup items. The **User Parameters tab** is the first of several tabs across the top of the screen. Each tab provides a particular menu within the **Advanced Setup** branch.

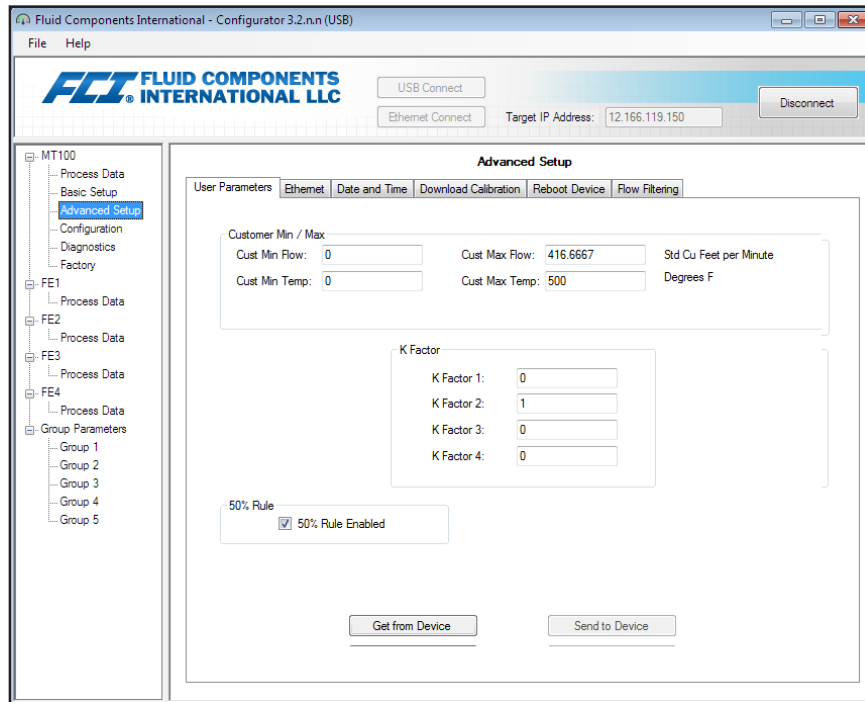


Figure 11 – Example User Parameters Tab (Advanced Setup)

The table below summarizes the tabs within the **Advanced Setup** branch.

**Table 2 – Advanced Setup Tabs**

Tab Name	Tab Description	Password Level
User Parameters	Shows min/max process variable limits, K Factor, and 50% Rule <sup>1</sup> enable/disable.	User
Ethernet	Sets Ethernet address values (unit IP address, gateway address, and subnet mask).	User
Date and Time	In the <i>Date and Time</i> field, set the date using the drop down calendar date picker and the time using the spinner controls. Alternatively, click <b>Set to System Date/Time</b> to copy the host PC system's date/time and transmit it to the instrument's battery-backed real time clock.	User
Download Calibration	Lets users download a full calibration to their MT100 via a text file. Contact FCI to obtain the .txt file that was generated by the factory linearization software (Cal2). See "Download Calibration" on page 11 for details on how to download the calibration file.	User
Reboot Device	Click <b>Reboot Device</b> to perform a warm boot of the MT100. Be aware that rebooting the instrument affects device outputs and interrupts communications.	User
Flow Filtering	Sets flow filtering via Flow Output Damping <sup>2</sup> and/or Flow Input Moving Average Filter <sup>3</sup> . Refer to <i>Flow Filtering</i> in the Operation section of the main manual <b>06EN003460</b> for details on these features.	User

Note 1. **50% Rule Enabled:** When 50% or more of the total enabled flow elements (FEs) are functioning, the MT100 system outputs the averaged flow and temperature values of the functional FEs. When less than 50% of the enabled FEs are functioning, the MT100 system outputs zeros for flow and temperature. **50% Rule Disabled:** The MT100 system outputs the averaged values of any working FE in the system, even if it is down to one functional FE. Flow damping smooths out flow signal output. Flow response is reduced with high flow damping values.

Note 2. Flow damping smooths out flow signal output. Flow response is reduced with high flow damping values.

Note 3. The flow input moving average filter smooths out the input flow signal using a moving average (boxcar) filter that averages the last X number of readings.

[User password 2772]

To verify the current configuration of any setup parameter, click **Get from Device** on any of the Setup menus. After changing any of the setup parameters, click **Send to Device**. Click **Get from Device** again to verify the parameter(s) change. Observe that the changed parameters are now displayed. The remaining **Advanced Setup** tab screens are shown below.

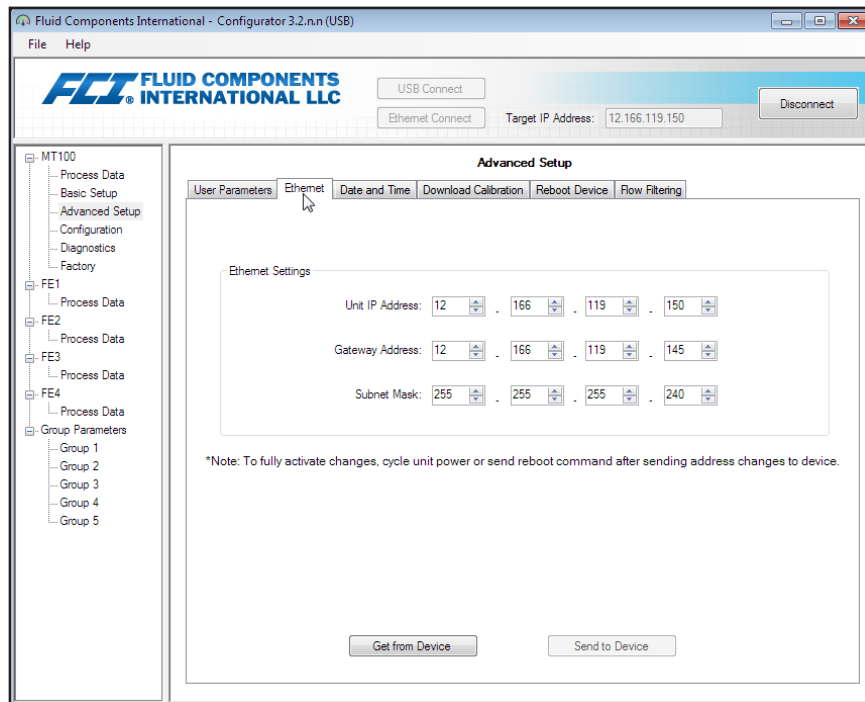


Figure 12 – Example Ethernet Tab (Advanced Setup)

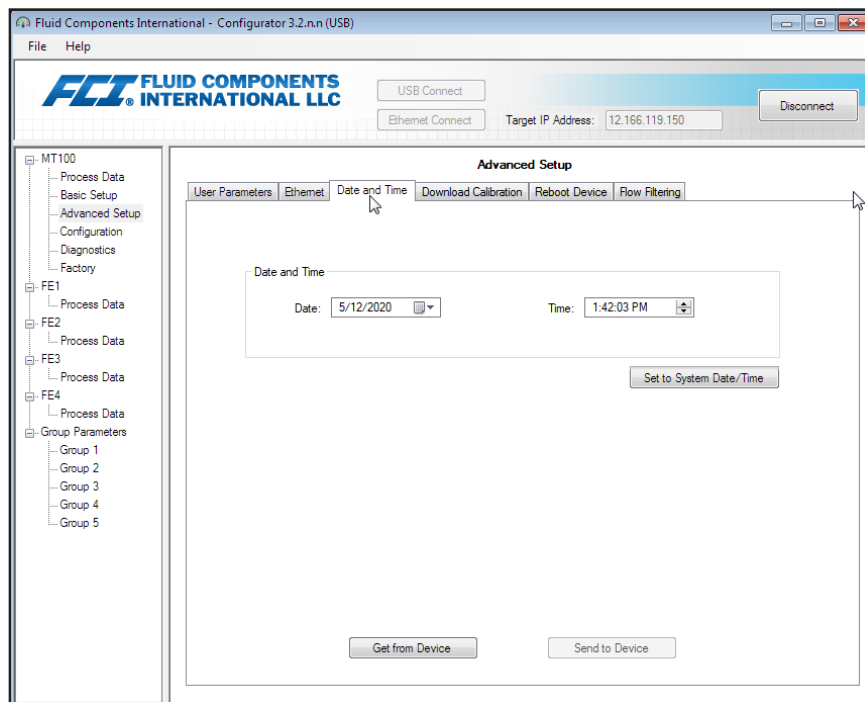


Figure 13 – Example Data and Time Tab (Advanced Setup)

## Download Calibration

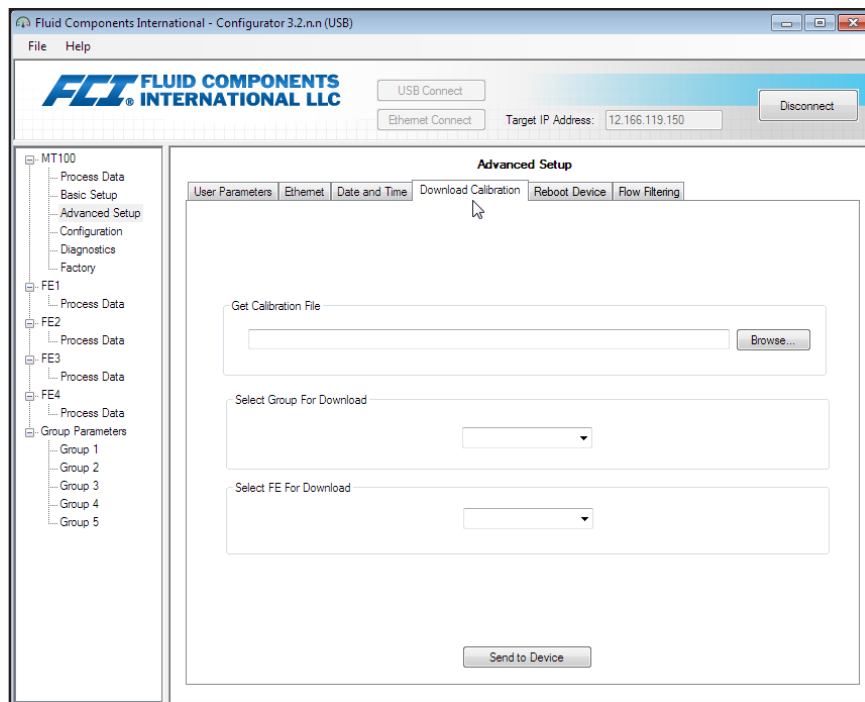
Follow these steps to download the calibration file directly to the instrument. Refer to the screen shown in “Figure 14 – Example Download Calibration Tab (Advanced Setup)”.

1. In the *Get Calibration File* field, click **Browse...**
2. Observe that an Open File dialog appears. Navigate to the Cal2-generated text file’s directory/folder (local drive or network), select the appropriate file, and then click **Open**. Observe that the text box shows the file’s path.
3. In the *Select Group For Download* field, use the drop down list to select the applicable group.
4. In the *Select FE For Download* field, use the drop down list to select the FE (FE1 through FE4, or through FE8).
5. Click **Send to Device** (enter User password as required).

**Note:** The calibration file is a text file with the following default filename format:

**SerialNo\_CustomerNo\_CalGroup\_FE/Head.txt.**

Example: For an instrument with serial number 492890, customer number C076370, calibration group 1, and first FE/head, the calibration file filename would be: *492890\_C076370\_1\_1.txt*.



**Figure 14 – Example Download Calibration Tab (Advanced Setup)**

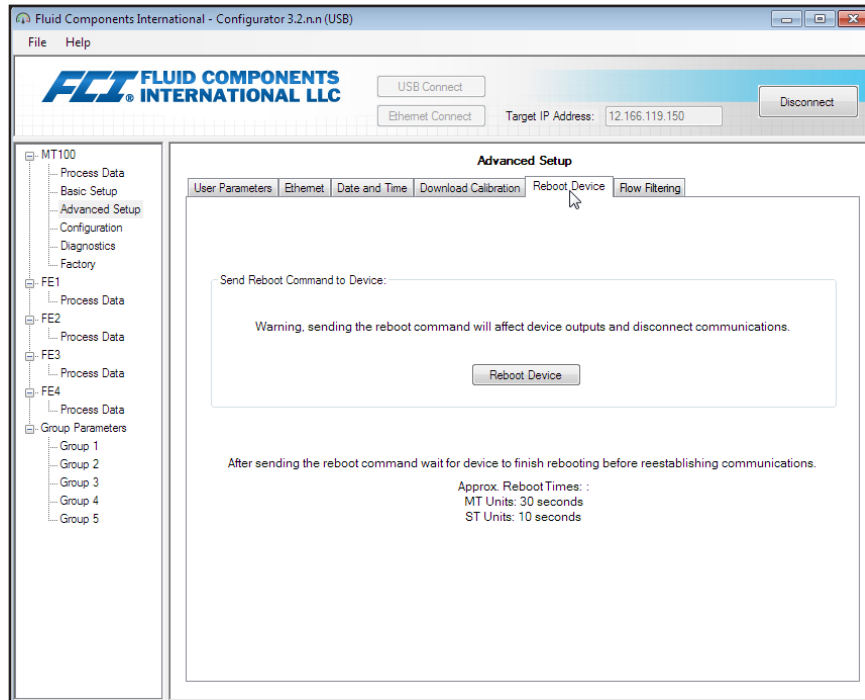


Figure 15 – Example Reboot Device Tab (Advanced Setup)

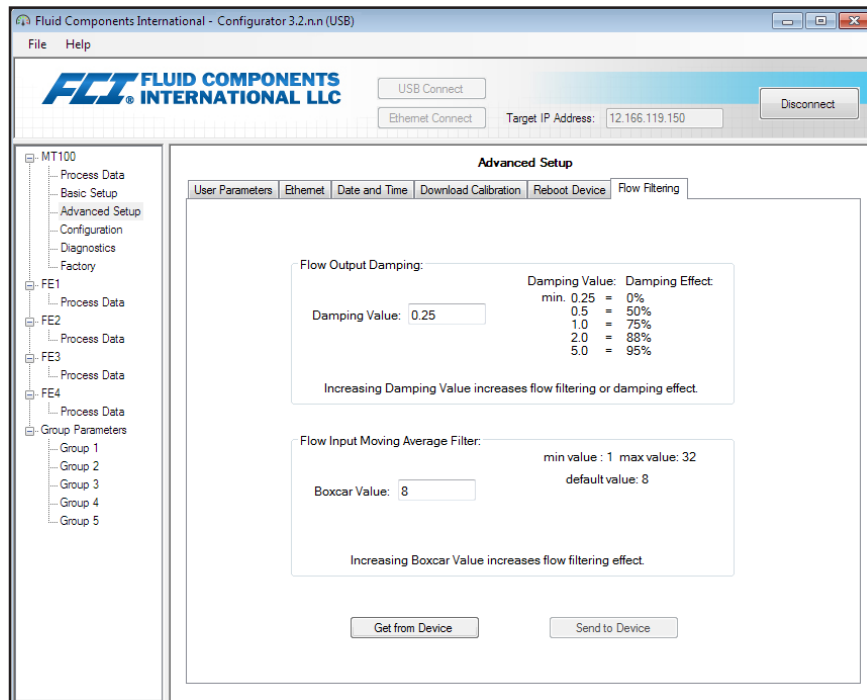
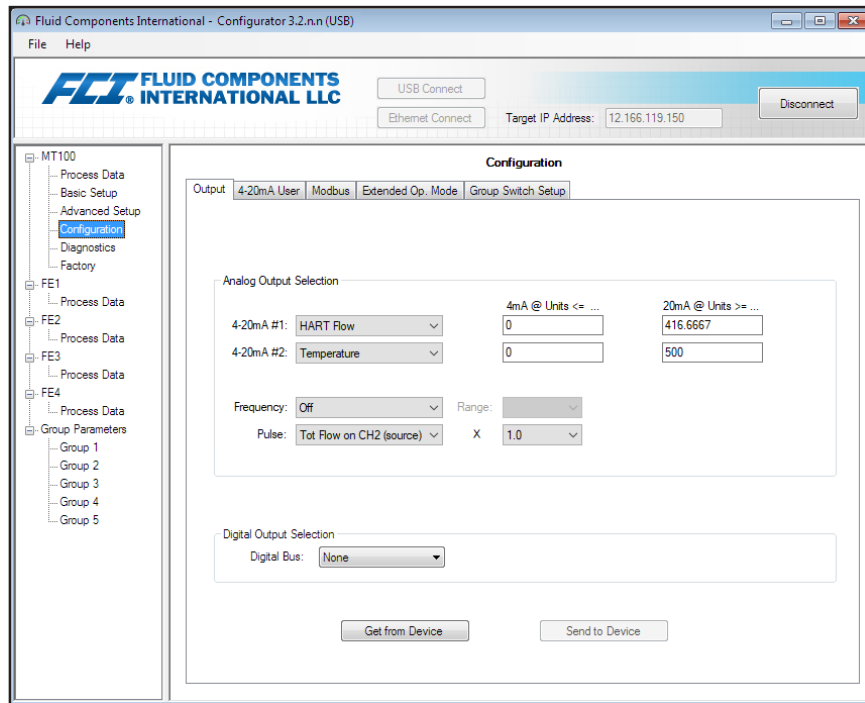


Figure 16 – Example Flow Filtering Tab (Advanced Setup)



**Configuration Tab Screens**

Select the **Configuration** branch on the menu tree to access configuration setup items. The **Output tab** is the first of several tabs across the top of the screen. Each tab provides a particular menu within the **Configuration** branch.



**Figure 17 – Example Output Tab (Configuration)**

The table below summarizes the tabs within the **Configuration** branch.

**Table 3 – Configuration Tabs**

Tab Name	Tab Description	Password Level
Output	Sets: 4-20 mA channels parameter and units assignment <sup>1</sup> , Frequency and Pulse output assignment and Range and Multiplier select, and digital bus selection (Modbus or FF/Profibus) <sup>2</sup> .	User
4-20mA User	Manual mA Output loop check; configure/enable NAMUR fault. Note that an analog output must be set to <b>Flow</b> (in <i>Output</i> tab) for NAMUR parameters (including enable/disable checkbox) to display for that channel.	User
Modbus	Sets Modbus communication parameters.	User
Extended Op. Mode	Expands flow measurement capabilities by providing 3 additional modes of operation. Refer to <i>Extended Operation Modes</i> in main manual <b>06EN003460</b> for more information.	User
Group Switch Setup	Sets up automatic calibration group switching depending on an external 4-20 mA output driving the MT100 auxiliary input port. Refer to <i>External Control Group Switching (EGS)</i> in the Operation section of the main manual <b>06EN003460</b> for more information.	User

Note 1. To set **HART** operation, select *HART Flow* from 4-20 mA #1 drop-down list (in *Analog Output Selection* field).

Note 2. Digital busses (includes HART, Modbus, and FF/Profibus) are mutually exclusive, meaning only one can be active at a time. Attempting to enable HART when Modbus or FF/Profibus is in effect causes the Digital Bus Deactivation Warning dialog to display: Click **OK** to make the change and force the Digital Output Selection to *None* or click **Cancel** to leave the setting unchanged. Attempting to enable Modbus or FF/Profibus when HART is in effect causes the HART Deactivation Warning dialog to display: Click **OK** to make the change and force the 4-20 mA #1 Selection to *Flow* or click **Cancel** to leave the setting unchanged.

[User password 2772]

To verify the current configuration of any setup parameter, click **Get from Device** on any of the Setup menus. After changing any of the setup parameters, click **Send to Device**. Click **Get from Device** again to verify the parameter(s) change. Observe that the changed parameters are now displayed. The remaining **Configuration** tab screens are shown below.

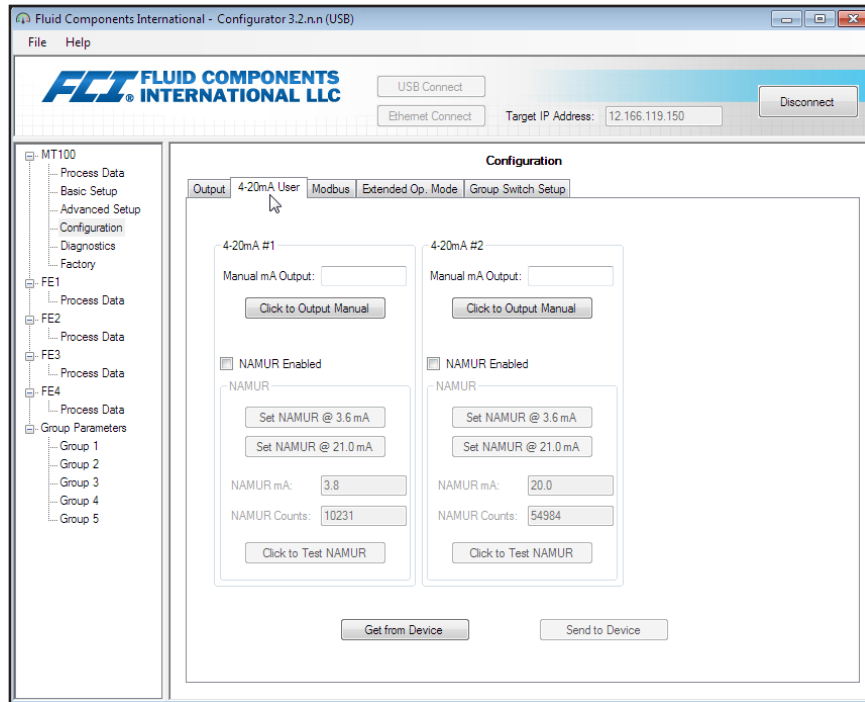


Figure 18 – Example 4-20mA User Tab (Configuration)

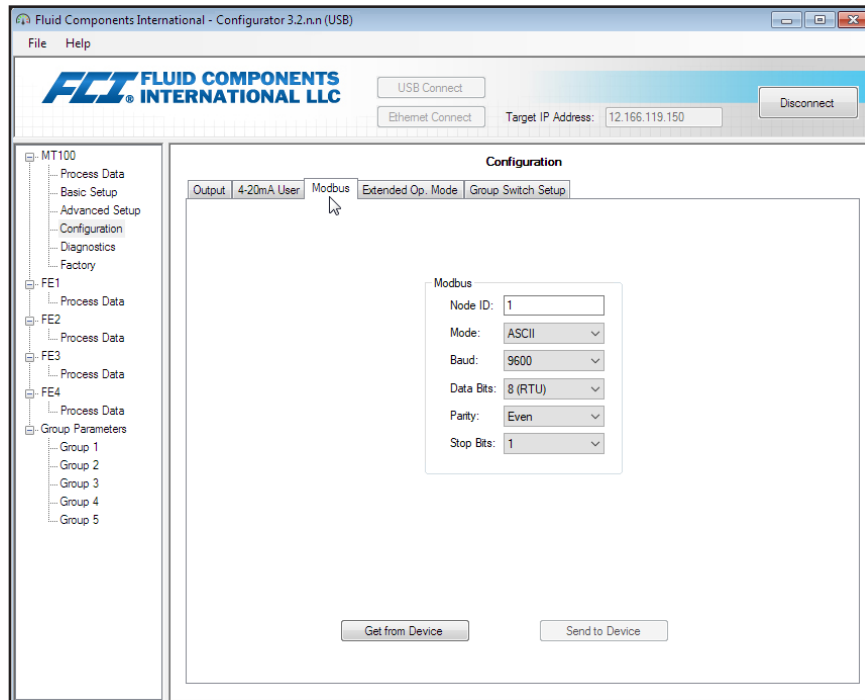


Figure 19 – Example Modbus Tab (Configuration)

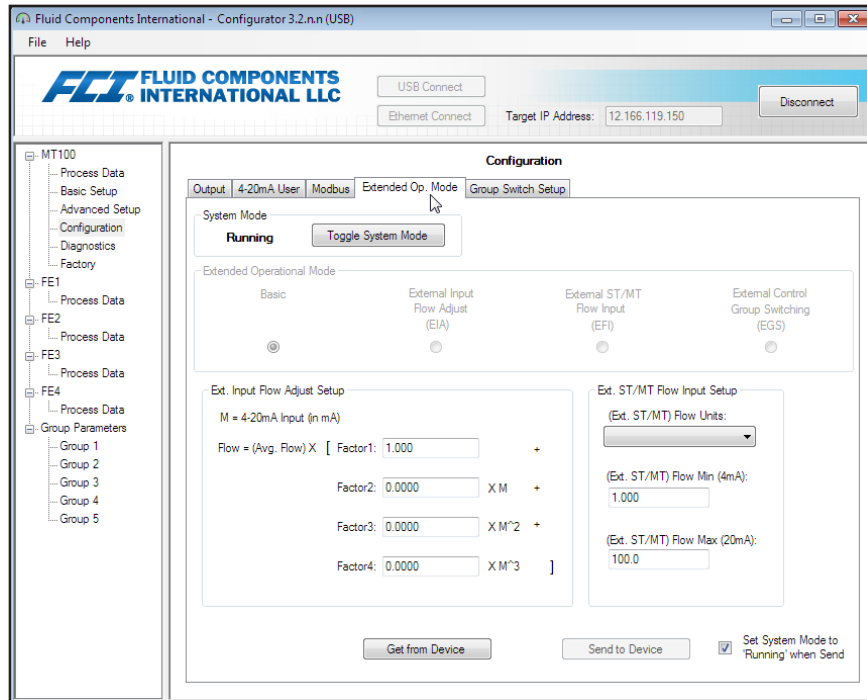


Figure 20 – Example Extended Op. Mode Tab (Configuration)

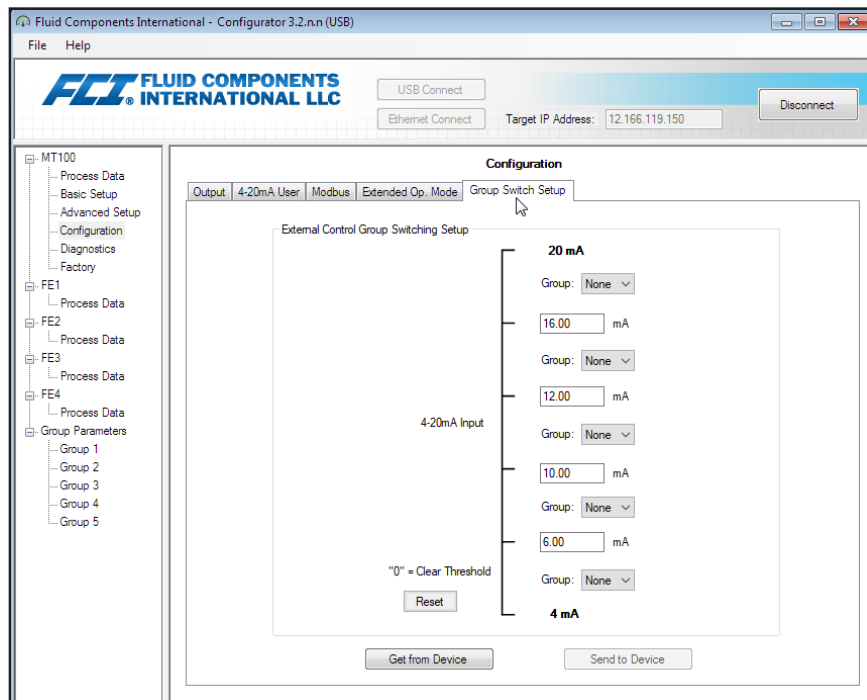


Figure 21 – Example Group Switch Setup Tab (Configuration)

## Diagnostics Tab Screens

Select the **Diagnostics** branch on the menu tree to access diagnostic items. The **Status tab** is the first of several tabs across the top of the screen. Each tab provides a particular menu within the **Diagnostics** branch. The table below summarizes the tabs within the **Diagnostics** branch.

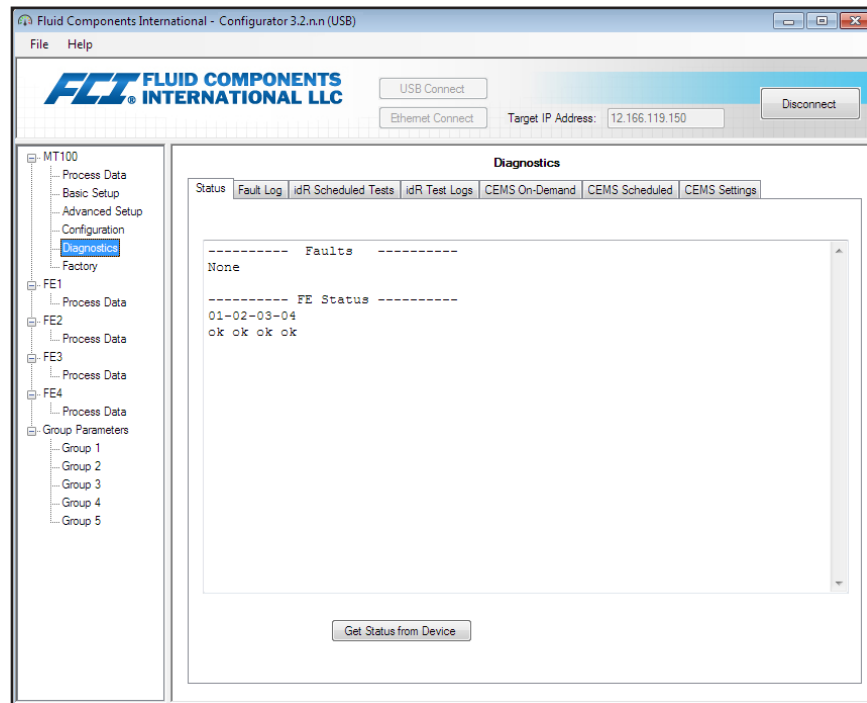


Figure 22 – Example Status Tab (Diagnostics)

Table 4 – Diagnostics Tabs

Tab Name	Tab Description	Password Level
Status	Indicates system status and fault flags.	Read only
Fault Log	Shows fault history. Click <b>Get Fault Logs from Device</b> to list the faults in the scrollable text box. Click <b>Clear Fault Log</b> to clear the log.	User
idR Scheduled Tests <sup>1</sup>	For internal Delta R (idR) resistance check – Select FE (FE1-FE4 or FE1-FE8), set pass/fail criteria, set FE output mode during test, schedule periodic idR test, display previous idR test results, and start idR test on-demand. Test results display in <b>FE idR Test Results</b> field (table format) when finished.	User
idR Test Logs	Click <b>Get Test Log from Device</b> to show idR test results in the scrollable text box. Click <b>Clear Test Logs</b> to clear the log.	User
CEMS On-Demand	For units with optional CEMS only: Start CEMS test on demand (same as <b>SYS CHECK</b> front panel button). Display test results of previous CEMS test. ( <b>Note:</b> Test results <sup>2</sup> are displayed in a second window.) Refer to <b>CEMS Operation (Option)</b> in main manual <b>06EN003460</b> for more information.	User
CEMS Scheduled <sup>1</sup>	For units with optional CEMS only: Program CEMS test to run at a specified start time daily. Display test results of previous CEMS test. ( <b>Note:</b> Test results <sup>2</sup> are displayed in a second window.) Refer to <b>CEMS Operation (Option)</b> in main manual <b>06EN003460</b> for more information.	User
CEMS Settings	For units with optional CEMS only: Sets CEMS test parameters and Schedule enable/disable.	User

Note 1. With default CEMS settings, 10 minutes is the absolute minimum start time difference between **idR Scheduled Tests** and **CEMS Scheduled**. If CEMS default time(s) have changed make sure that the start time for **CEMS Scheduled** as well as the overall duration of **CEMS Scheduled** do not overlap with **idR Scheduled Tests**.

Note 2. Refer to “CEMS Test Results” on page 20.

[User password 2772]

The remaining **Diagnostics** tab screens are shown below.

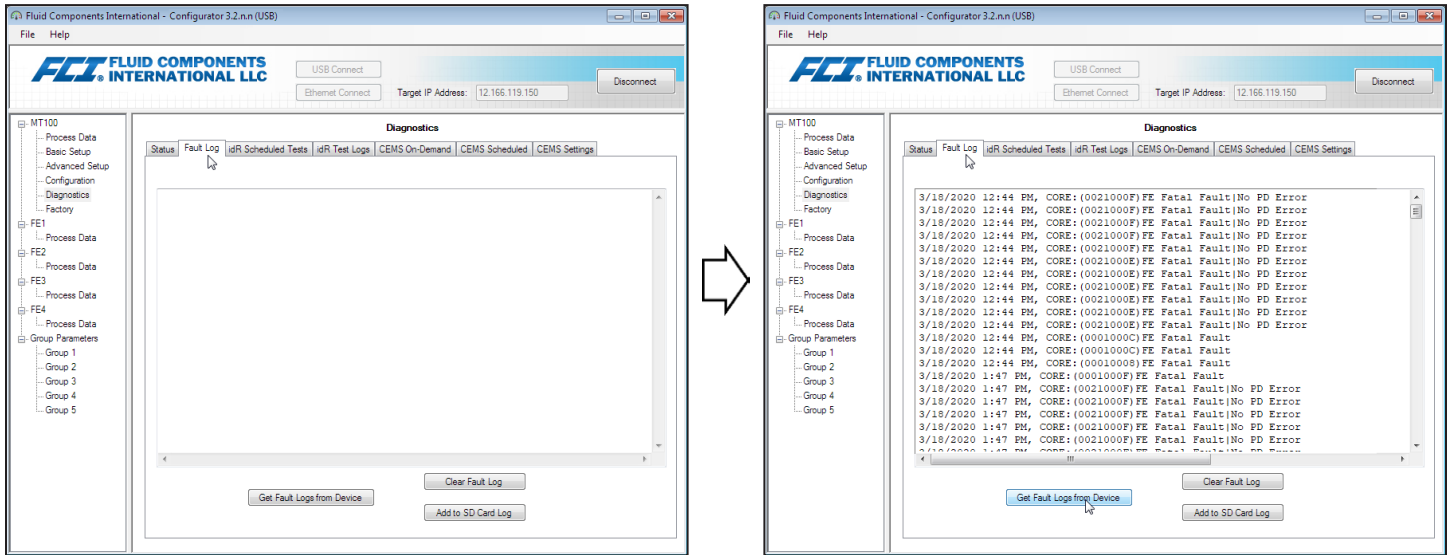


Figure 23 – Example Fault Log Tab and Example Fault Log List (Diagnostics)

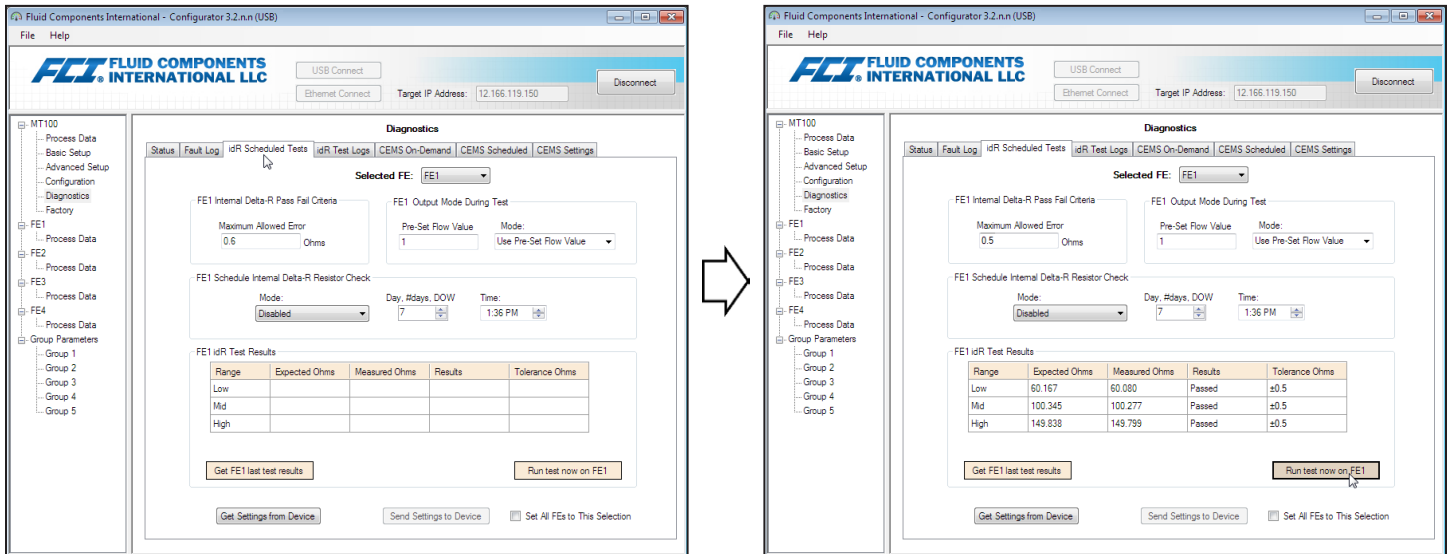


Figure 24 – Example idR Scheduled Tests Tab and Example idR On-Demand Test Results Display (Diagnostics)

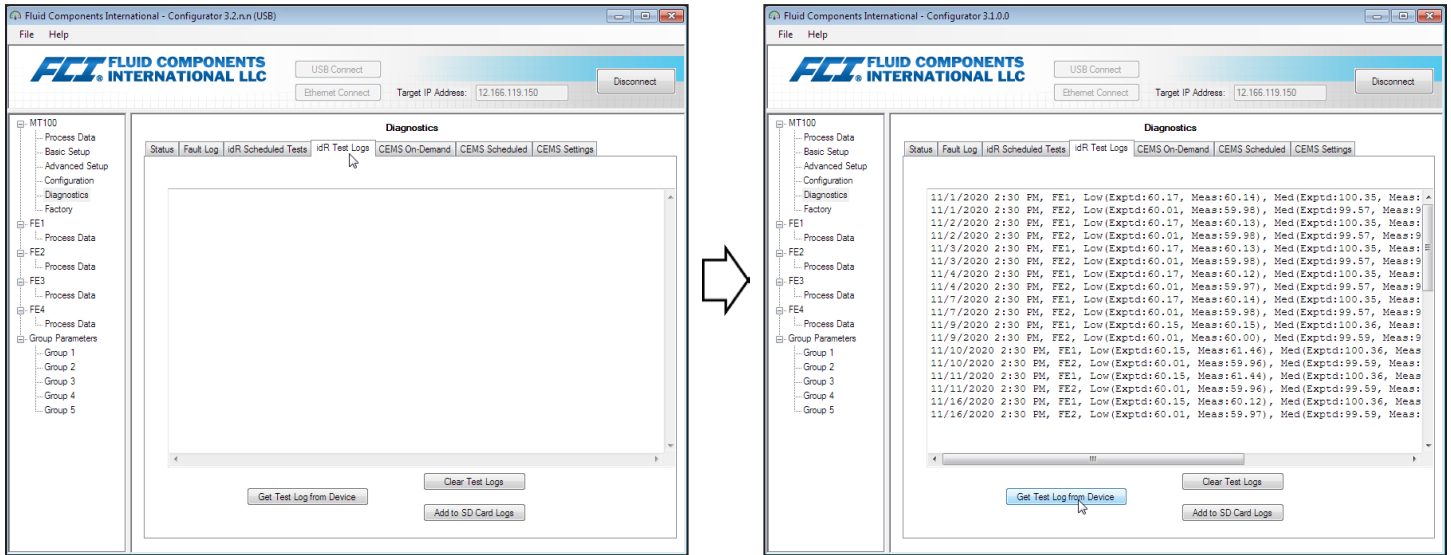


Figure 25 – Example idR Test Logs Tab and Example idR Test Log List (Diagnostics)

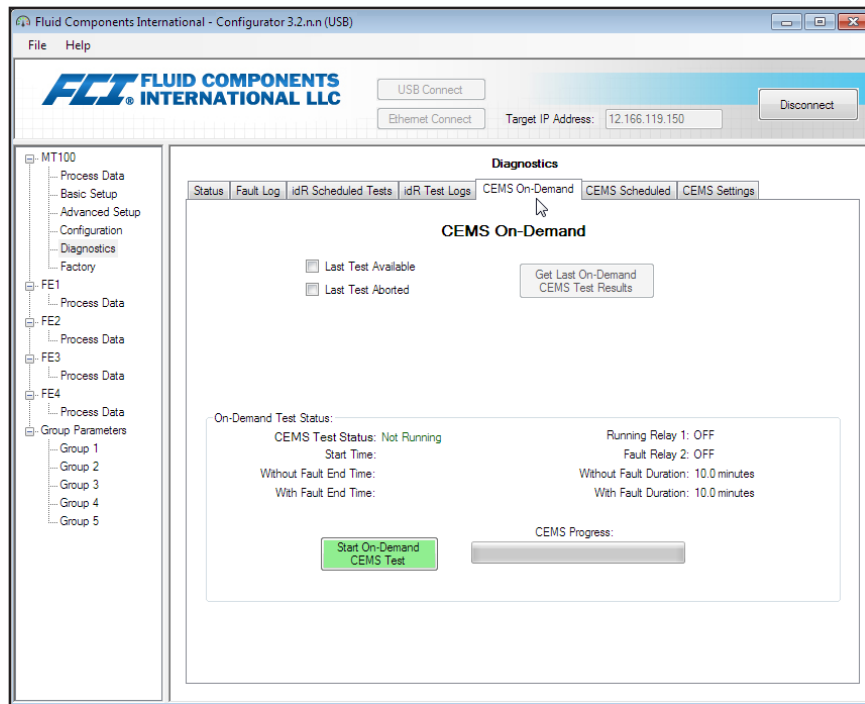


Figure 26 – Example CEMS On-Demand Tab (Diagnostics)

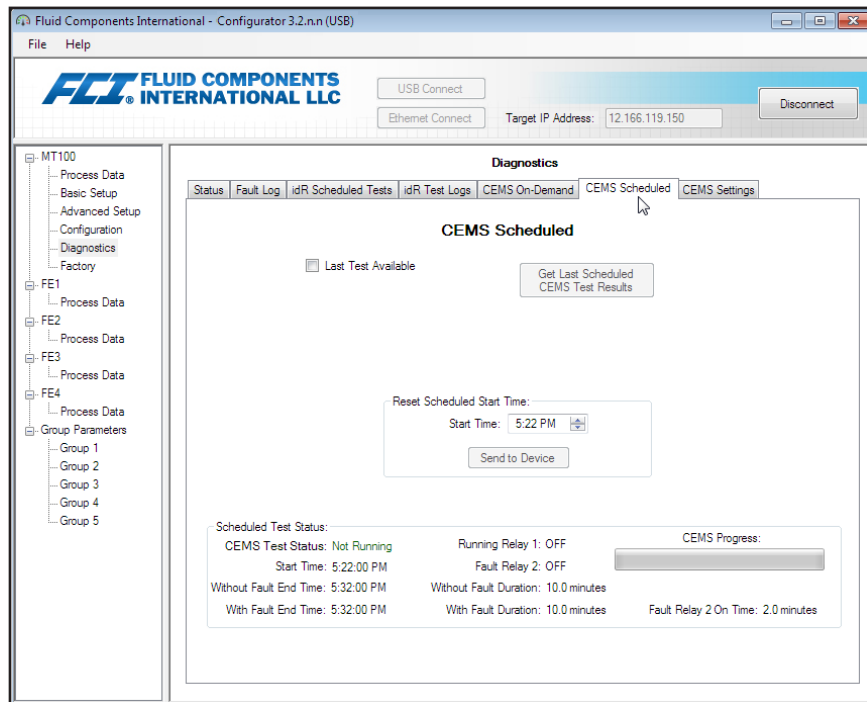


Figure 27 – Example CEMS Scheduled Tab (Diagnostics)

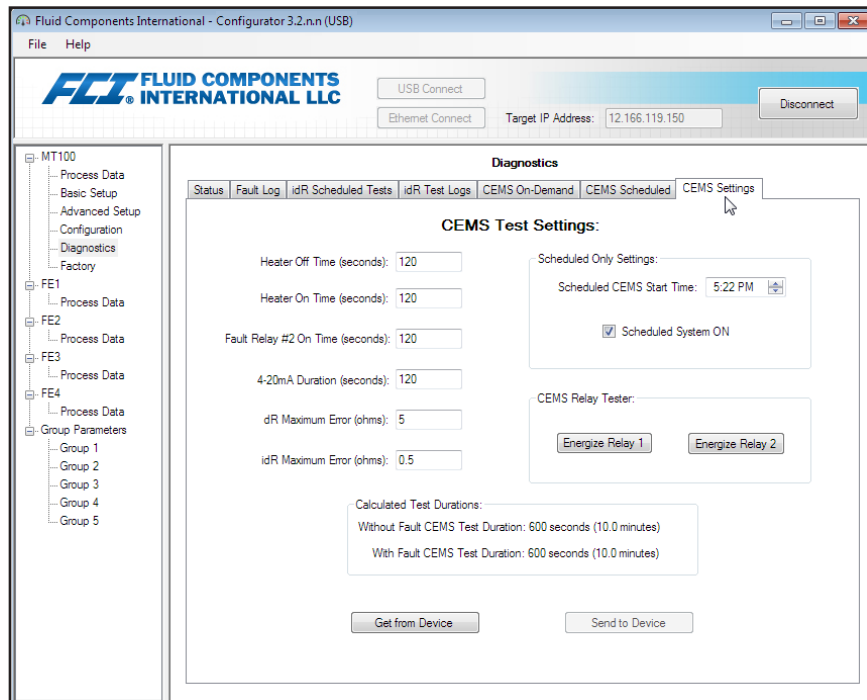


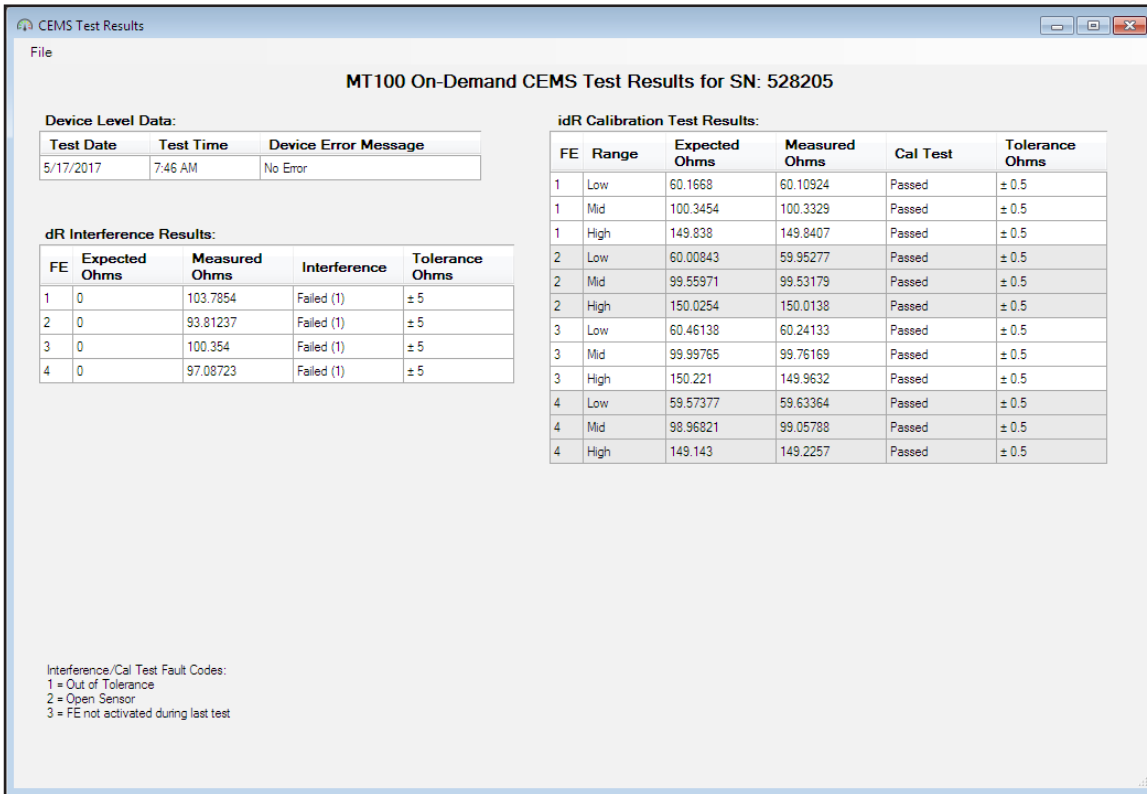
Figure 28 – Example CEMS Settings Tab (Diagnostics)

### CEMS Test Results

CEMS test results are available for display when the **Last Test Available** checkbox in the **CEMS On-Demand** or **CEMS Scheduled** tab is ticked. Click **Get Last On-Demand CEMS Test Results** or **Get Last Scheduled CEMS Test Results** to bring up a second window showing the CEMS test results similar to the figure below (for **CEMS Scheduled** the test results window header shows *MT100 Scheduled CEMS Test Results...*).

Use the CEMS Test Results window's *File|Save as...* menu to save the results as text files \*.txt, comma delimited files \*.csv or Excel files \*.xlsx to a location of your choosing on your computer or network.

**Note:** The CEMS test results windows must be closed to continue use of the configuration software (i.e., to select other tabs/menus).



**Figure 29 – Example On-Demand CEMS Test Results Window (Diagnostics)**

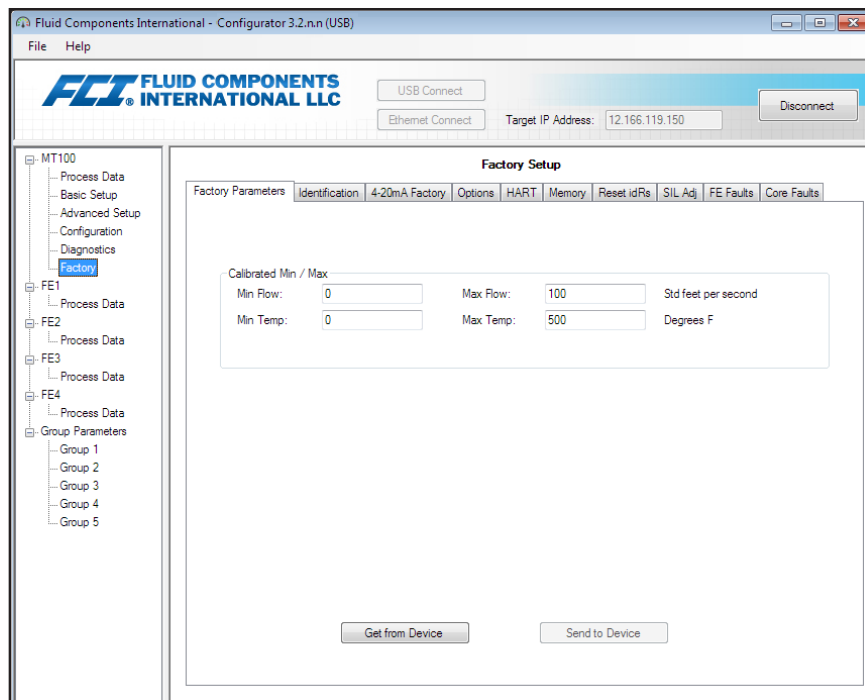


**Factory Tab Screens**

The **Factory** branch on the menu tree provides factory-only setup items. Only the factory or its representatives can change data in this group.

**Table 5 – Factory Tabs**

Tab Name	Tab Description	Password Level
Factory Parameters	Factory use only. (Calibrated Min/Max data.)	Factory
Identification	Factory use only. (Instrument ID data and unit MAC address.)	Factory
4-20mA Factory	Factory use only. (4-20 mA output DAC count scaling and manual output control, plus 4-20 mA input gain & offset adjustment.)	Factory
Options	Factory use only. (Option inventory: HMI display, FEs, SB8 expansion board.)	Factory
HART	Factory use only. (HART ID info: electronics revision, HART ID, int. HART rev.)	Factory
Memory	Factory use only. (Erase various memory spaces.)	Factory
Reset idRs	Factory use only. (Click <b>Run FEx idR Check</b> for selected FE, and then click <b>Reset Expected idR Values</b> to set displayed <i>Measured Ohms</i> values as new baseline for <i>Expected Ohms</i> values.)	Factory
SIL Adj	Factory use only. (Adjusts calibration for accurate reading of power supply voltages [+24 VDC, +5 VDC] and 4-20 mA Output #1.)	Factory
FE Faults	Factory use only. (Select the FE from the dropdown list, then click <b>Get Current FEx Faults</b> to display the enable or trip status, or both, for all possible FE faults. In the screen's <i>Enabled</i> column, make any fault enable/disable change by checking (fault enabled) or unchecking (fault disabled) the box and then clicking <b>Send FT Enabled Map Changes</b> (requires Factory level password).	Factory
Core Faults	Factory use only. (Click <b>Get Current Faults</b> to display all possible core faults with trip status.	Factory



**Figure 30 – Example Factory Parameters Tab (Factory)**

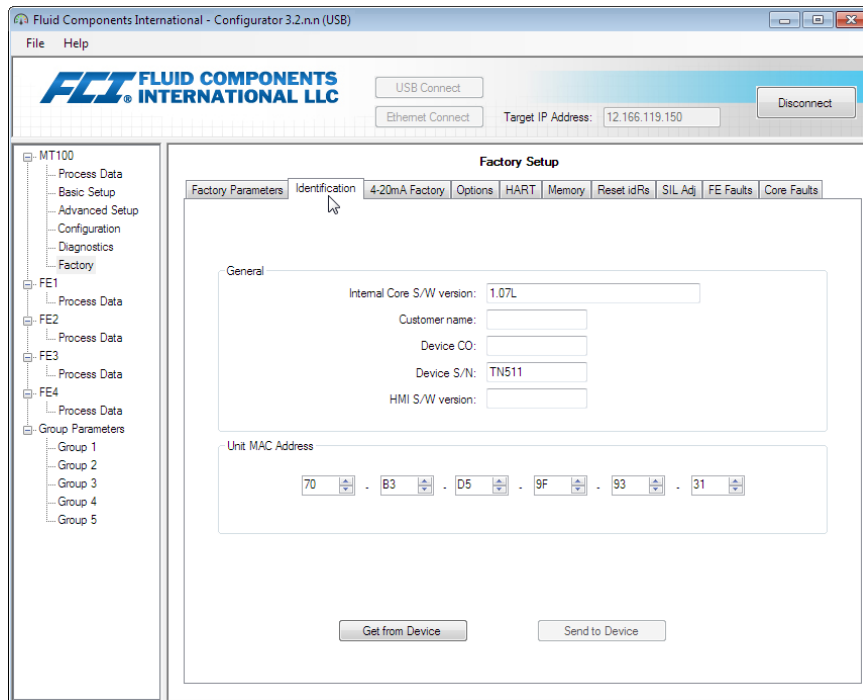


Figure 31 – Example Identification Tab (Factory)

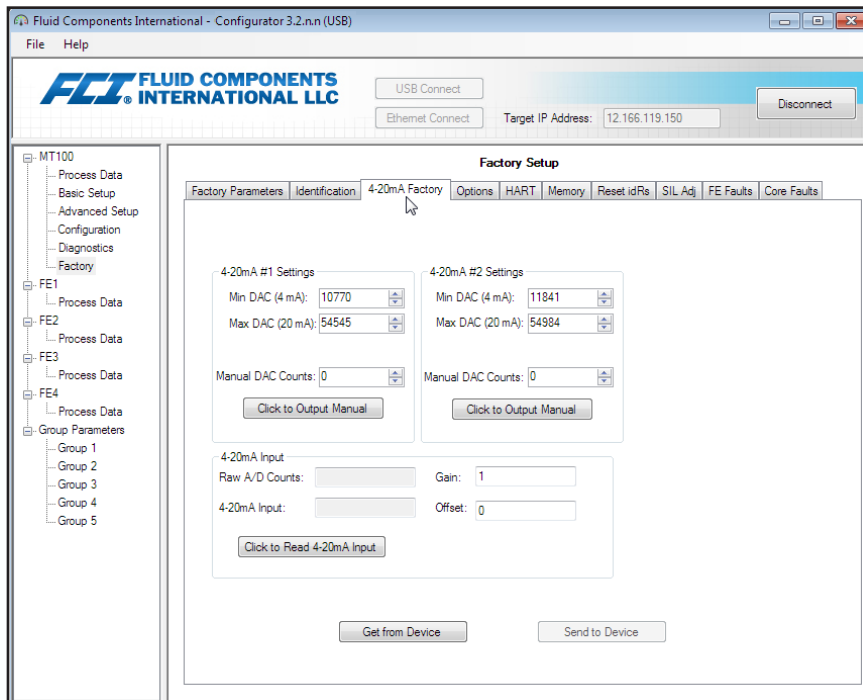


Figure 32 – Example 4-20mA Factory Tab (Factory)

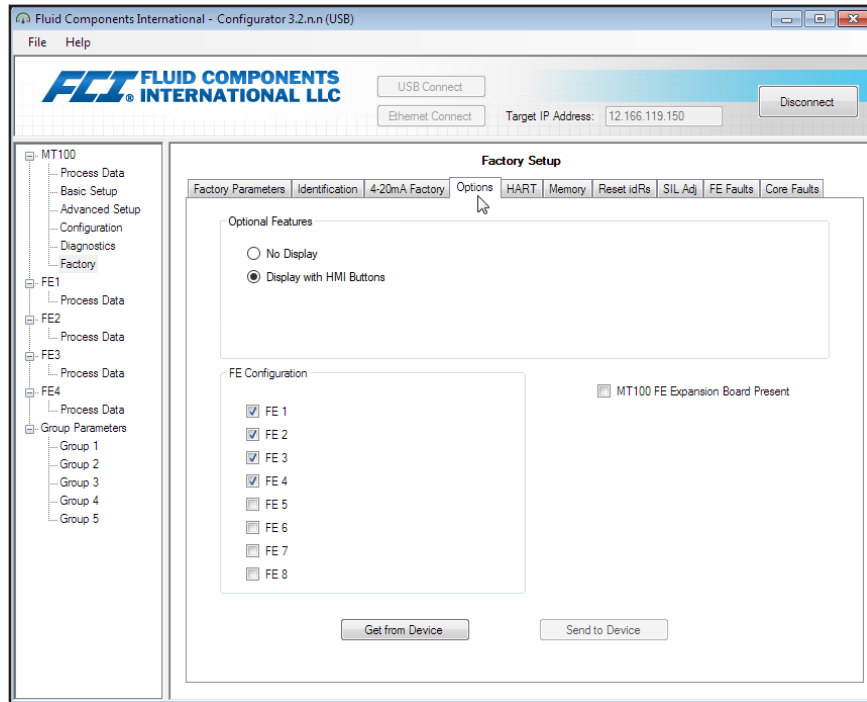


Figure 33 – Example Options Tab (Factory)

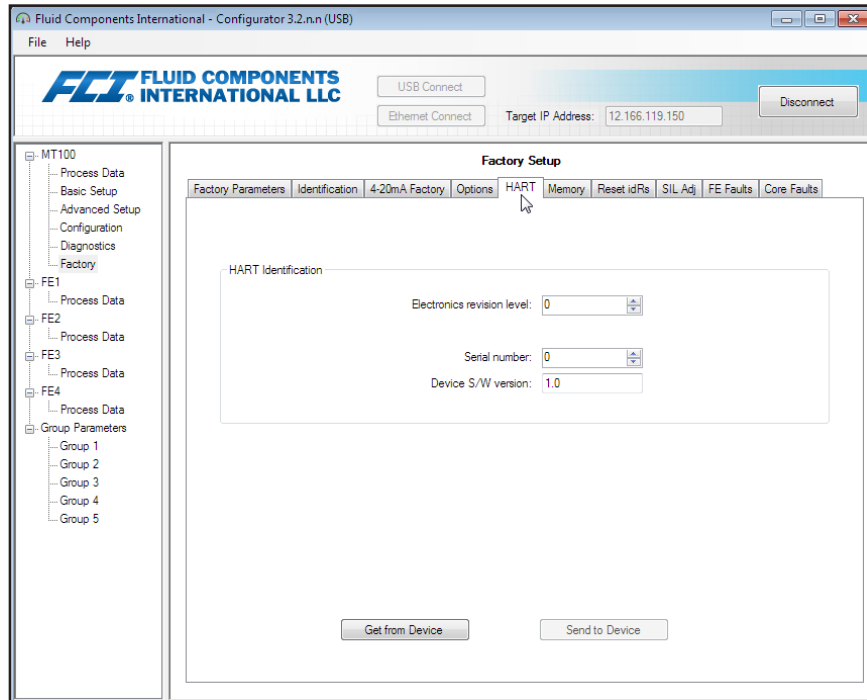


Figure 34 – Example HART Tab (Factory)

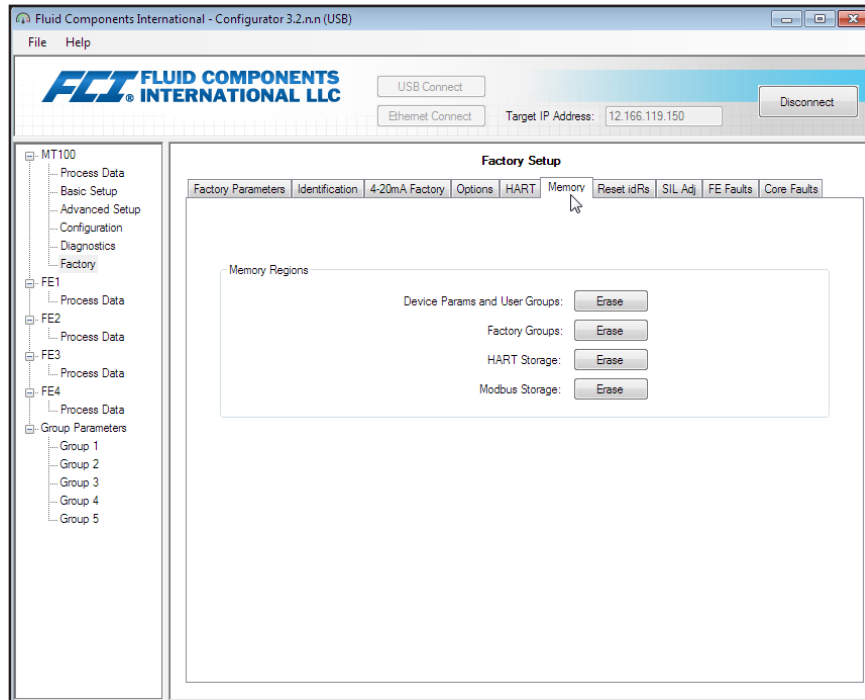


Figure 35 – Example Memory Tab (Factory)

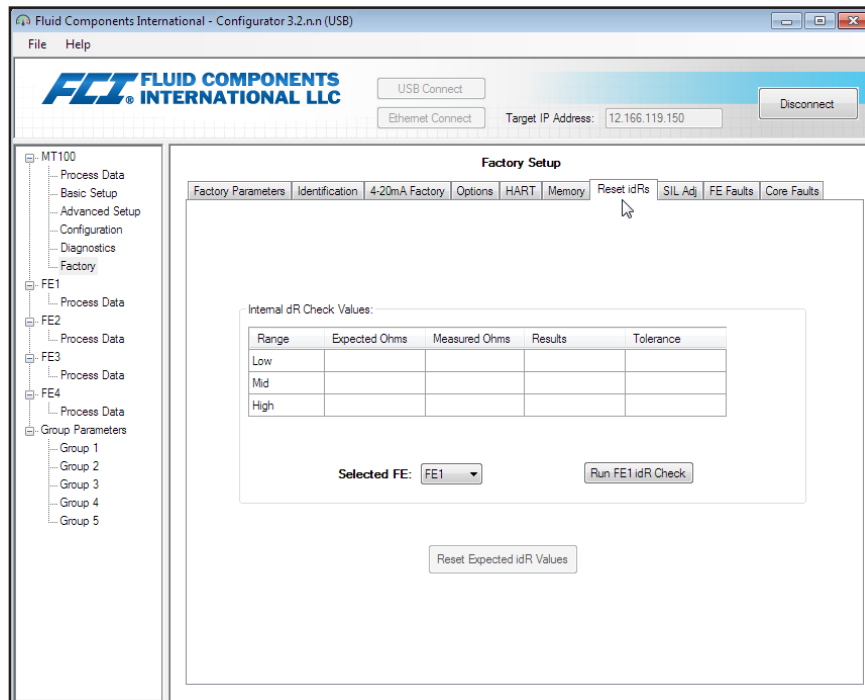


Figure 36 – Example Reset idRs Tab (Factory)

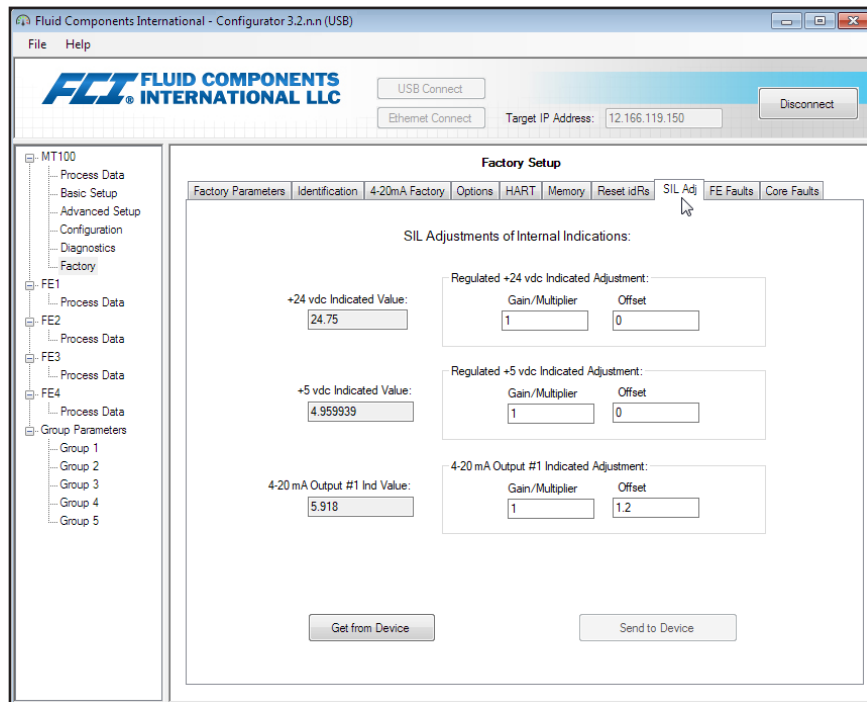


Figure 37 – Example SIL Adj Tab (Factory)

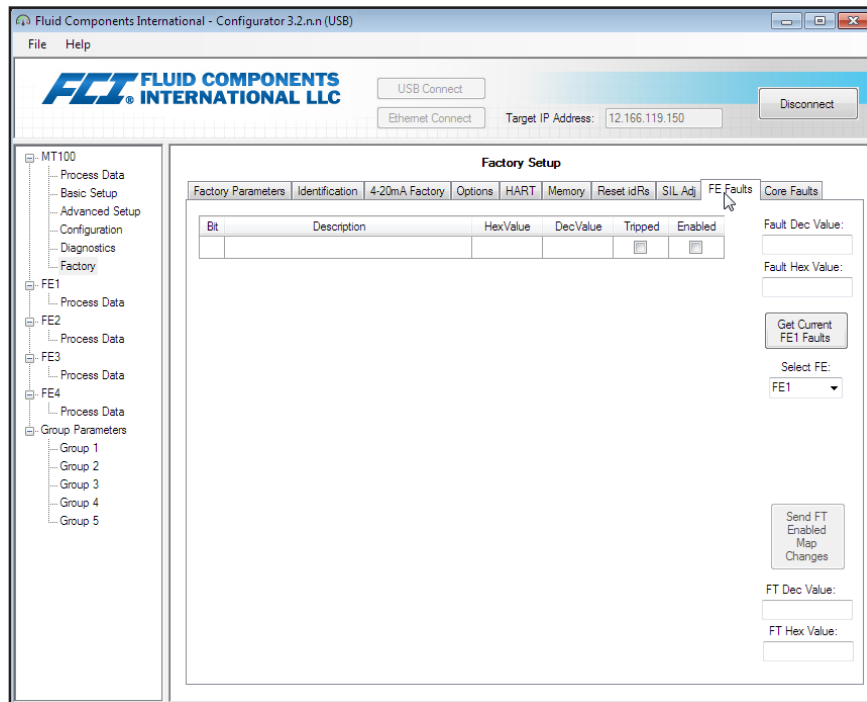


Figure 38 – Example FE Faults Tab (Factory)

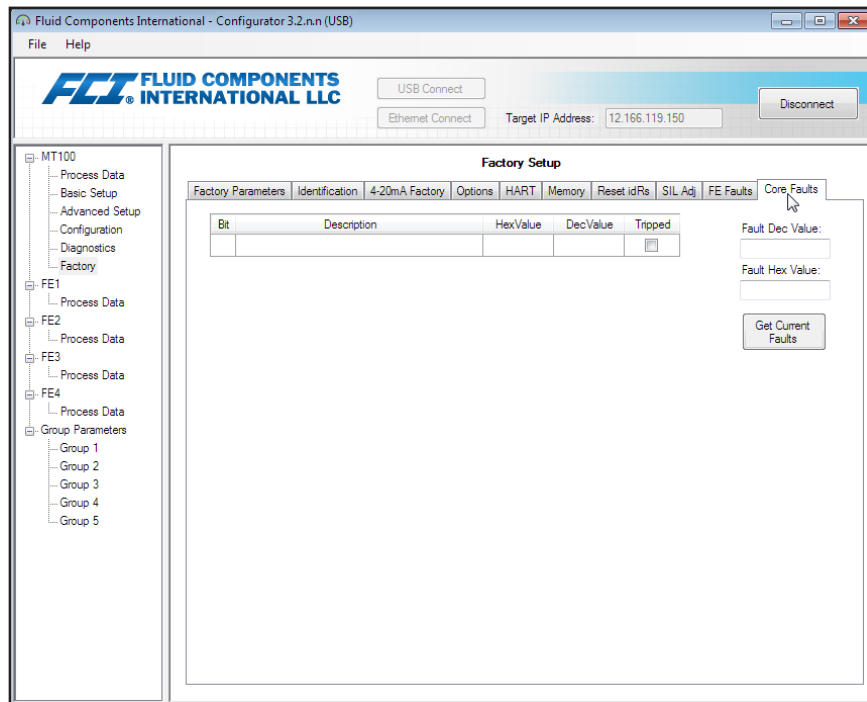
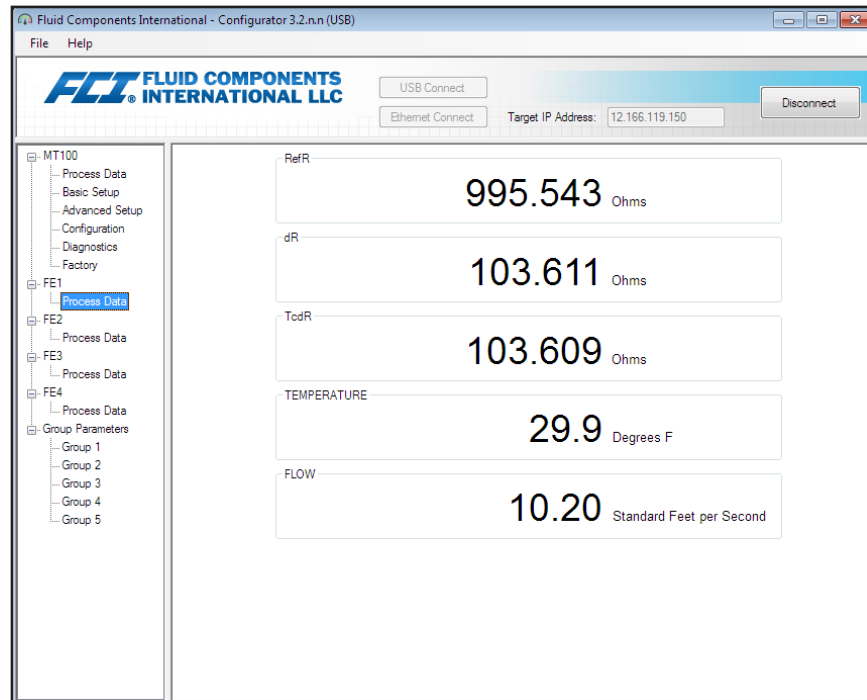


Figure 39 – Example Core Faults Tab (Factory)

## FE1-FE8 Process Data

Depending on the system configuration (options) the application menu tree will show process data for either FE1 through FE4 (SB4 main board only) or FE1 through FE8 (addition of SB8 extension board). For the purpose of this discussion we will focus on **FE1**—the FE2 through FE8 process data screen is similar. Select the **FE1 Process Data** branch on the menu tree. The figure below shows an example FE1 Process Data screen (in a 4-point system).



**Figure 40 – Example Process Data Screen (FE1)**

This screen displays the real time values of the following flow element parameters:

- RefR – Reference RTD resistance
- dR – Delta resistance between the active and reference RTDs
- TCdR – Temperature Compensated dR value
- Temperature – Real time temperature value
- Flow – Real time flow value

This screen can be helpful when diagnosing system faults.

## Parameter Reports

A **Parameter Reports** screen (under *Group Parameters* in the menu tree) displays the calibration and configuration information saved in the MT100 unit for a particular calibration group numbered 1-5. Selecting a parameter report for a particular calibration group displays that group's info/data. Similar to other setup menus there is a **Send Changes to Device** button to transmit (to MT100) any parameter change. Use of the **Send** button, however, is a factory-only operation that requires the Factory level password.

Destination	Parameter Name	Parameter Value
CORE	Date and Time:	5/24/2017 2:45:10 PM
CORE	Unit Serial Number:	528205
CORE	Cust Number:	
CORE	Cust Name:	
CORE	Core Version:	3.03M
CORE	HMI Version:	1.08a
CORE	MAC Address:	1E.30.6C.A2.45.5E
CORE	HART Serial Number:	0
CORE	Ext Op Mode:	1
CORE	Ext Op Submode:	0
CORE	4-20mA Inp Adj Gain:	1
CORE	4-20mA Inp Adj Offset:	0
CORE	EFI Flow Min.:	1
CORE	EFI Flow Max.:	100
CORE	EFI Flow Units:	0
CORE	EGS Threshold1:	0
CORE	EGS Group1 ID:	2
CORE	EGS Threshold2:	0
CORE	EGS Group2 ID:	0
CORE	EGS Threshold3:	0
CORE	EGS Group3 ID:	0
CORE	EGS Threshold4:	0
CORE	EGS Group4 ID:	0
CORE	EGS Group5 ID:	0

Figure 41 – Example Parameter Report, Group 1

Destination	Parameter Name	Parameter Value
CORE	Date and Time:	5/24/2017 2:47:39 PM
CORE	Unit Serial Number:	528205
CORE	Cust Number:	
CORE	Cust Name:	
CORE	Core Version:	3.03M
CORE	HMI Version:	1.08a
CORE	MAC Address:	1E.30.6C.A2.45.5E
CORE	HART Serial Number:	0
CORE	Ext Op Mode:	1
CORE	Ext Op Submode:	0
CORE	4-20mA Inp Adj Gain:	1
CORE	4-20mA Inp Adj Offset:	0
CORE	EFI Flow Min.:	1
CORE	EFI Flow Max.:	100
CORE	EFI Flow Units:	0
CORE	EGS Threshold1:	0
CORE	EGS Group1 ID:	2
CORE	EGS Threshold2:	0
CORE	EGS Group2 ID:	0
CORE	EGS Threshold3:	0
CORE	EGS Group3 ID:	0
CORE	EGS Threshold4:	0
CORE	EGS Group4 ID:	0
CORE	EGS Group5 ID:	0

Figure 42 – Example Parameter Report, Group 5



## **Customer Service/Technical Support**

FCI provides full in-house technical support. Additional technical representation is also provided by FCI field representatives.

### **By Mail**

Fluid Components International LLC  
1755 La Costa Meadows Dr.  
San Marcos, CA 92078-5115 USA  
Attn: Customer Service Department

### **By Phone**

Contact the area FCI regional representative. If a field representative is unable to be contacted or if a situation is unable to be resolved, contact the FCI Customer Service Department toll free at 1 (800) 854-1993.

### **By Fax**

To describe problems in a graphical or pictorial manner, send a fax including a phone or fax number to the regional representative. Again, FCI is available by facsimile if all possibilities have been exhausted with the authorized factory representative. Our fax number is 1 (760) 736-6250; it is available 7 days a week, 24 hours a day.

### **By Email**

FCI Customer Service can be contacted by email at: [techsupport@fluidcomponents.com](mailto:techsupport@fluidcomponents.com).

Describe the problem in detail making sure a telephone number and best time to be contacted is stated in the email.

### **International Support**

For product information or product support outside the contiguous United States, Alaska, or Hawaii, contact your country's FCI International Representative or the one nearest to you.

### **After Hours Support**

For product information visit the FCI website at [www.fluidcomponents.com](http://www.fluidcomponents.com). For product support call 1 (800) 854-1993 and follow the pre-recorded instructions.

### **Point of Contact**

The point of contact for service, or return of equipment to FCI is your authorized FCI sales/service office. To locate the office nearest you, visit the FCI website at [www.fluidcomponents.com](http://www.fluidcomponents.com).







*Flow & Level Instrumentation  
Solutions for Industrial Processes*

**FCI's Complete Customer Commitment. Worldwide  
ISO 9001 and AS9100 Certified**

Visit FCI on the Worldwide Web: [www.fluidcomponents.com](http://www.fluidcomponents.com)

**FCI World Headquarters**

1755 La Costa Meadows Drive | San Marcos, California 92078 USA | Phone: 760-744-6950 Toll Free (US): 800-854-1993 Fax: 760-736-6250

**FCI Europe**

Persephonestraat 3-01 | 5047 TT Tilburg, The Netherlands | Phone: 31-13-5159989 Fax: 31-13-5799036

**FCI Measurement and Control Technology (Beijing) Co., LTD | [www.fluidcomponents.cn](http://www.fluidcomponents.cn)**

Room 107, Xianfeng Building II, No.7 Kaituo Road, Shangdi IT Industry Base, Haidian District | Beijing 100085, P. R. China  
Phone: 86-10-82782381 Fax: 86-10-58851152

**Notice of Proprietary Rights**

This document contains confidential technical data, including trade secrets and proprietary information which is the property of Fluid Components International LLC (FCI). Disclosure of this data to you is expressly conditioned upon your assent that its use is limited to use within your company only (and does not include manufacture or processing uses). Any other use is strictly prohibited without the prior written consent of FCI.