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 IDR 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).
**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).
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

![Figure 3 – Example Process Data Screen](image-url)
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.

![Figure 4 – Basic Application Screen Elements](image)

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.

![Password Protection Dialog Box](image)
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.

![Groups Tab Example](image)

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

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

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

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

<table>
<thead>
<tr>
<th>Tab Name</th>
<th>Tab Description</th>
<th>Password Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>User Parameters</td>
<td>Shows min/max process variable limits, K Factor, and 50% Rule(^1) enable/disable.</td>
<td>User</td>
</tr>
<tr>
<td>Ethernet</td>
<td>Sets Ethernet address values (unit IP address, gateway address, and subnet mask).</td>
<td>User</td>
</tr>
<tr>
<td>Date and Time</td>
<td>In the <strong>Date and Time</strong> field, set the date using the drop down calendar date picker and the time using the spinner controls. Alternatively, click <strong>Set to System Date/Time</strong> to copy the host PC system's date/time and transmit it to the instrument's battery-backed real time clock.</td>
<td>User</td>
</tr>
<tr>
<td>Download Calibration</td>
<td>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.</td>
<td>User</td>
</tr>
<tr>
<td>Reboot Device</td>
<td>Click <strong>Reboot Device</strong> to perform a warm boot of the MT100. Be aware that rebooting the instrument affects device outputs and interrupts communications.</td>
<td>User</td>
</tr>
<tr>
<td>Flow Filtering</td>
<td>Sets flow filtering via Flow Output Damping(^2) and/or Flow Input Moving Average Filter(^3). Refer to Flow Filtering in the Operation section of the main manual 06EN003460 for details on these features.</td>
<td>User</td>
</tr>
</tbody>
</table>

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.

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 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

<table>
<thead>
<tr>
<th>Tab Name</th>
<th>Tab Description</th>
<th>Password Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output</td>
<td>Sets: 4-20 mA channels parameter and units assignment¹, Frequency and Pulse output assignment and Range and Multiplier select, and digital bus selection (Modbus or FF/Profibus)².</td>
<td>User</td>
</tr>
<tr>
<td>4-20mA User</td>
<td>Manual mA Output loop check; configure/enable NAMUR fault. Note that an analog output must be set to Flow (in Output tab) for NAMUR parameters (including enable/disable checkbox) to display for that channel.</td>
<td>User</td>
</tr>
<tr>
<td>Modbus</td>
<td>Sets Modbus communication parameters.</td>
<td>User</td>
</tr>
<tr>
<td>Extended Op. Mode</td>
<td>Expands flow measurement capabilities by providing 3 additional modes of operation. Refer to Extended Operation Modes in main manual 06EN003460 for more information.</td>
<td>User</td>
</tr>
<tr>
<td>Group Switch Setup</td>
<td>Sets up automatic calibration group switching depending on an external 4-20 mA output driving the MT100 auxiliary input port. Refer to External Control Group Switching (EGS) in the Operation section of the main manual 06EN003460 for more information.</td>
<td>User</td>
</tr>
</tbody>
</table>

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)](image)

![Figure 19 – Example Modbus Tab (Configuration)](image)
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)](image)

<table>
<thead>
<tr>
<th>Tab Name</th>
<th>Tab Description</th>
<th>Password Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Status</td>
<td>Indicates system status and fault flags.</td>
<td>Read only</td>
</tr>
<tr>
<td>Fault Log</td>
<td>Shows fault history. Click Get Fault Logs from Device to list the faults in the scrollable text box. Click Clear Fault Log to clear the log.</td>
<td>User</td>
</tr>
<tr>
<td>idR Scheduled Tests¹</td>
<td>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 FEx idR Test Results field (table format) when finished.</td>
<td>User</td>
</tr>
<tr>
<td>idR Test Logs</td>
<td>Click Get Test Log from Device to show idR test results in the scrollable text box. Click Clear Test Logs to clear the log.</td>
<td>User</td>
</tr>
<tr>
<td>CEMS On-Demand</td>
<td>For units with optional CEMS only: Start CEMS test on demand (same as SYS CHECK front panel button). Display test results of previous CEMS test. (Note: Test results² are displayed in a second window.) Refer to CEMS Operation (Option) in main manual 06EN003460 for more information.</td>
<td>User</td>
</tr>
<tr>
<td>CEMS Scheduled¹</td>
<td>For units with optional CEMS only: Program CEMS test to run at a specified start time daily. Display test results of previous CEMS test. (Note: Test results² are displayed in a second window.) Refer to CEMS Operation (Option) in main manual 06EN003460 for more information.</td>
<td>User</td>
</tr>
<tr>
<td>CEMS Settings</td>
<td>For units with optional CEMS only: Sets CEMS test parameters and Schedule enable/disable.</td>
<td>User</td>
</tr>
</tbody>
</table>

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)](image-url)
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

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

![Example Factory Parameters Tab (Factory)](image-url)

**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).

![Example Process Data Screen (FE1)](image)

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.
**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.
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. For product support call 1 (800) 854-1993 and follow the prerecorded 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.
MT100 Configuration Software

Flow & Level Instrumentation
Solutions for Industrial Processes

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