KzComm User's Guide

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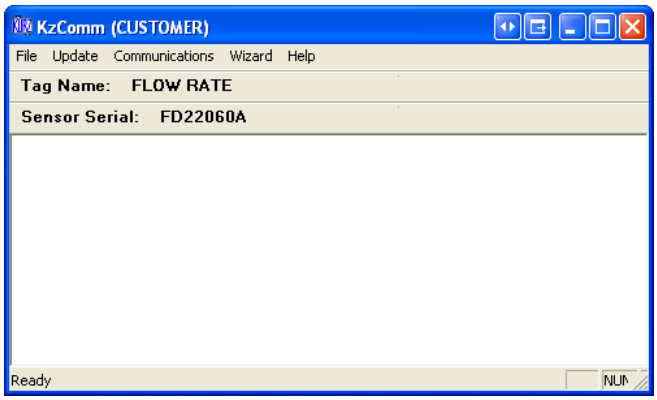
Introduction

The KzComm Windows PC program supports the following functions for Kurz flow transmitters:

- Configuration file loading and extraction (upload/download)
- Configuration file conversion for human reading (printable file)
- Extraction of internal log files: min/max, event, and trend
- Sensor data loading: flow calibration and temperature compensation parameters
- Basic meter configuration changes, both online and offline

KzComm is a computer program that uses XMODEM or MODBUS RTU protocols to communicate with the Kurz Instruments devices. These devices are limited to those that have the following firmware names: MFT, PTA and MFT-B. The MFT and PTA firmware uses the XMODEM communication protocol via RS-232C port and the MFT-B firmware uses the XMODEM communication protocol via USB port or MODBUS protocol via RS-485 port or MODBUS TCP. The MFT-B firmware requires the Kurz USB Device Driver for the PC to be installed prior to using the USB port on the MFT-B electronics.



Interconnection Requirements

The models with MFT-B firmware, e.g. 504FTB, 454FTB, 534FTB, and KBAR2000B, need a two-wire shielded cable for Modbus RTU, a USB Type A to mini B cable for the XMODEM protocol, or an ethernet cable to a Modbus TCP to RS-485 gateway for the Modbus TCP protocol. The PC requires the Kurz USB Device Driver for the PC to be installed prior to connecting a USB cable to the MFT-B electronics.

Models that have the MFT firmware, like the 504FT, 454FT, 534FT and KBAR-2000, need a cable with a DB-9 connector at both ends and 1 to 1 pin configuration of the communication cable. If the PC does not have the DB-9 COM port but has the DB-25, use an adapter (DB-25 to DB-9). The PC must have at least one RS-232C communication port. The communication cable can be purchased at the factory with the part number 260102. A USB to RS-232 "dongle" can also be used in some cases, but it depends on the device.

Models that have the PTA firmware, like the Series 2440, need a cable with a DB-9 connector at both ends and 1 to 1 pin configuration of the communication cable. If the PC does not have the DB-9 COM port but has the DB-25, use an adapter (DB-25 to DB-9). It is necessary that the I/O adapter board is available. The I/O adapter board can be purchased as an option for the Series 2440 models. The I/O adapter board part number is 260106.

Using KzComm

Running KzComm

After installing the program, KzComm can be run by double clicking its icon on the desktop or clicking the **Start** button, **All Programs**, **Kurz Instruments**, and **KzComm Version x.xx**. All program data is, by default, sent to the [Common App Data Folder]\KzComm. This folder is located, by default, on Windows 2000 and XP, at C:\Documents and Settings\All Users\Application Data\Kurz Instruments\KzComm and Windows Vista and 7 at C:\Program Data\Kurz Instruments\KzComm. Kurz Instruments Models with MFT-B firmware devices using the USB port on the electronics require the Kurz USB Device Driver for the PC to be installed.

KzComm Messages

Upon a communications setup change, KzComm will attempt to display the sensor serial number and the tag name of the connected Kurz Instruments device. See Device Identification for more information on the messages.

Windows Vista Support

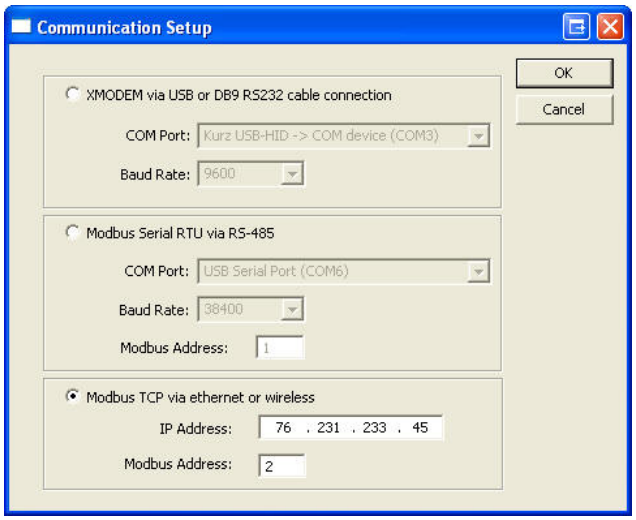
Windows Vista is supported by KzComm. A known issue exists when downloading the volatile trend log. This issue is rare and causes the operating system to freeze. The symptoms include the display not updating when the mouse is moved or keys are pressed. To correct the problem, restart the machine by pressing the manual power button on your computer. Note that the manual power restart may require holding the power button for at least 5 seconds. When the system recovers, continue as normal.

Configuring the Communication Port

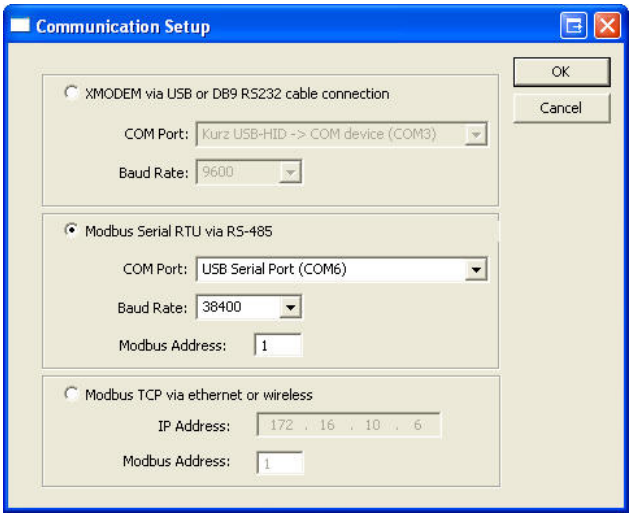
Before any communication is initiated, make sure that the PC and the Kurz Instruments Device have the same communication parameters.

Configure the communication port for KzComm as follows:

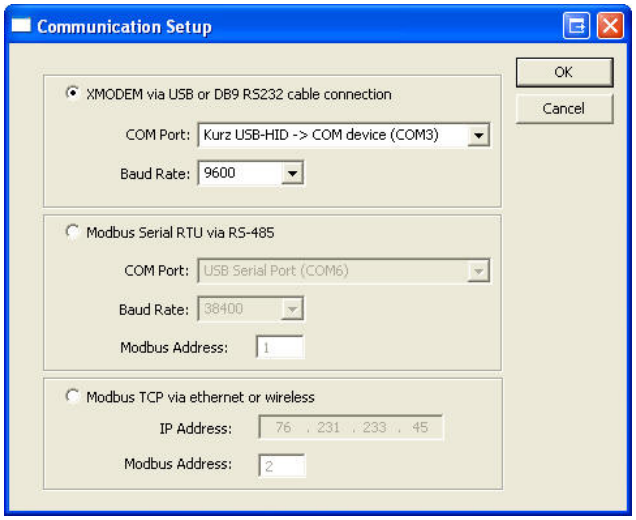
1. Click the **Communication** on the menu bar and click **Configure** on the popup menu.
2. Choose the desired communications protocol by clicking on the radio button or section title.



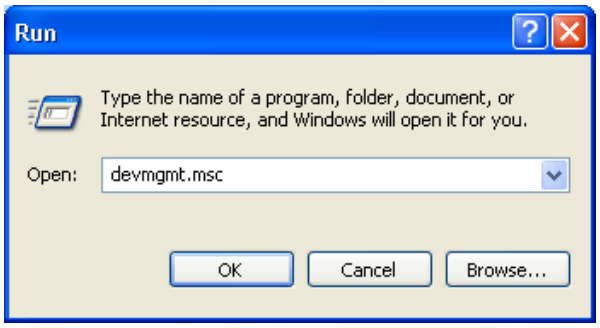
3. In the Modbus TCP section, enter the IP address of the Modbus TCP device and the Modbus address of the device with which to communicate.



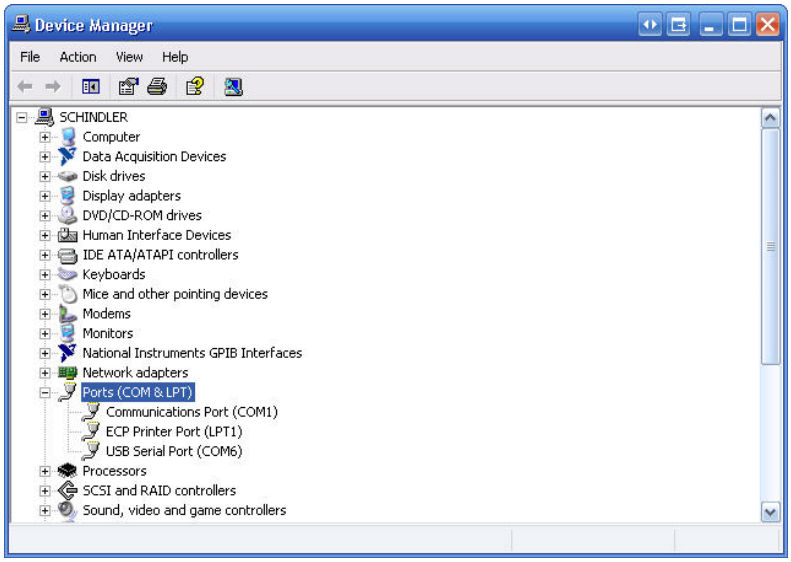
4. In the Modbus Serial RTU section, select the communications port of the Modbus device, baud rate, and Modbus address of the device with which to communicate. See Step 5 on how to determine the COM port of the Modbus device.



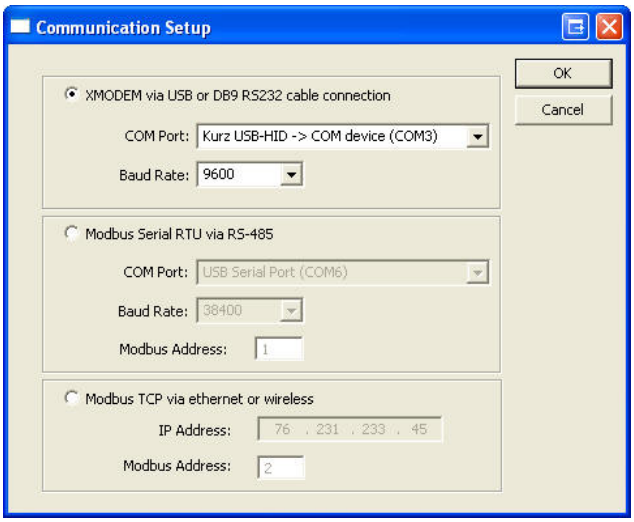
5. In the XMODEM section, select the communication port of the PC that will be used on the **Com Port** list box. Note that if a USB to RS-232 or USB To RS-485 device is used then it will enumerate as a COM port. To determine which COM port was assigned, if the enumerated name is not specific enough, open the device manager by clicking the Start Menu and then Run. In the text field input **devmgmt.msc** and hit enter, as shown below. The Kurz Instruments Device which should be labeled as **Kurz USB-HID -> COM device**, if delivered prior to September 2011, or **USB Serial Port**, if delivered after that date. If a USB to RS-485 device is used, its name may reference the manufacturer so to verify which port it is, unplug it, and plug it back in. The COM port that disappears and reappears will be the port to be used. See the USB Driver Installation Guide for device driver issues. Note that the Kurz Instruments Devices with MFT-B firmware only support 9600 baud for the XMODEM protocol.



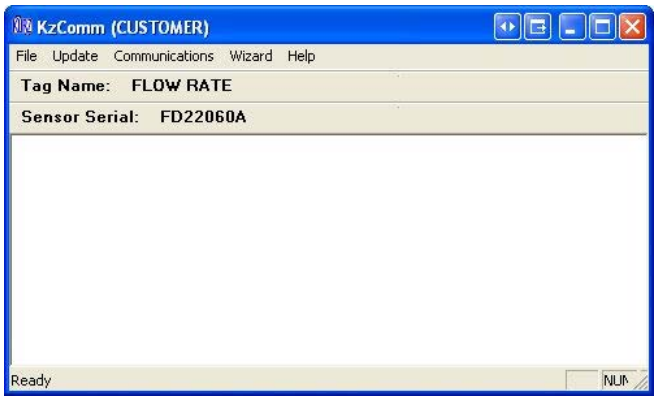
When the Device Manager opens expand the **Ports (COM & LPT)** section by clicking on the **+** symbol or double clicking the section header.



6. In the KzComm Communications Setup window, select the baud rate that will be used in the Baud Rate list box.

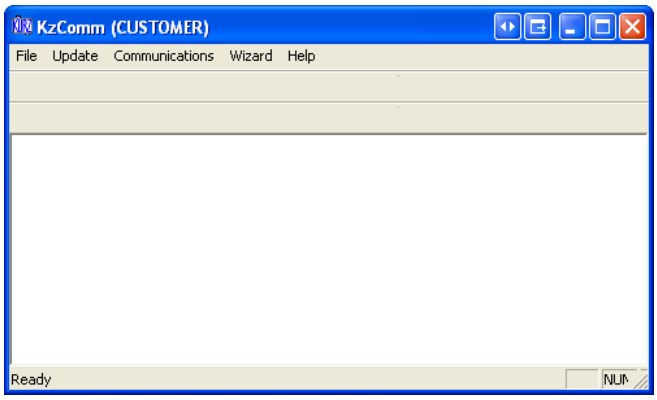


7. When the COM port and baud rate have been set, click the **OK** button on the Communications Setup window. KzComm will then determine the sensor serial number and tag name of the device with which it has been configured to communicate. Note this feature will only return valid information for Kurz Instruments Devices with MFT-B firmware 1.05 or later.

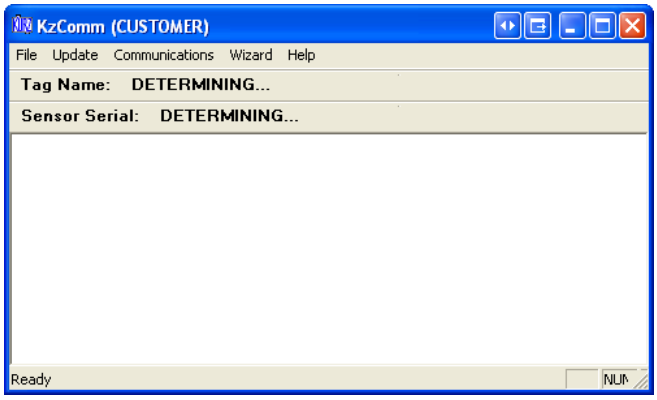


Device Identification

Upon first loading the program the following will be displayed.



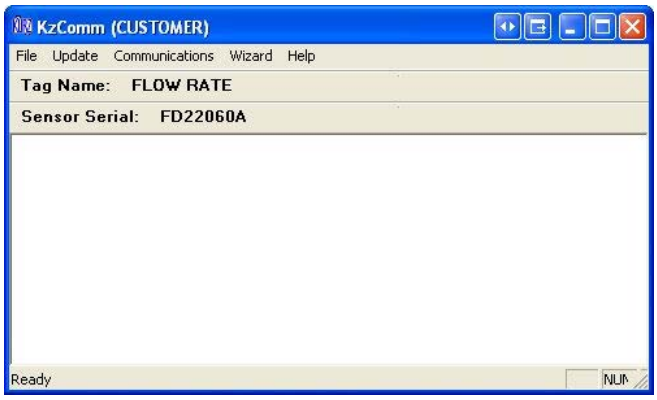
After going to **Communications -> Configure**, selecting valid communication options and clicking **OK,** you should see the following:



Then one of the following results will occur:

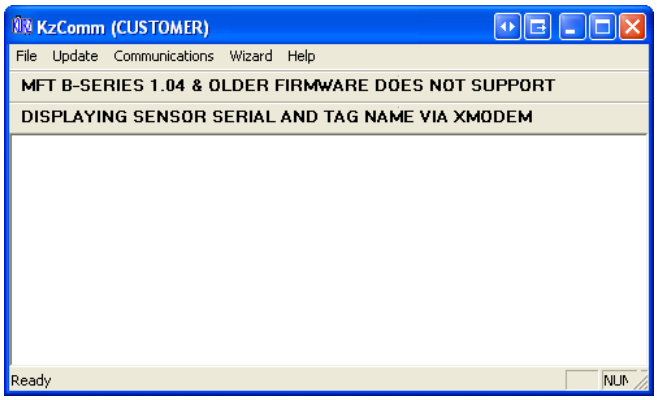
1. When connecting with Xmodem, a MFT B-Series device using firmware 1.05 or newer will display the normal startup identification. The device's sensor serial number and tag name will be displayed as shown below. Uploading, downloading, and updating of the Flow Calibration Data can be performed. Downloading of the Min/Max, Event, and Trend logs are dependent on the version of the device's firmware. Note that the sensor serial number will be used as the default filename for downloading the configuration, Min/Max, Event, and Trend logs. Sometimes when connecting with Xmodem, the Configure may fail to read the Sensor Serial Number and Tag Name. Try Reset Xmodem COM Port and then Configure again.

2. When connecting with Modbus, a MFT B-Series device using firmware 1.00 or newer will display the normal startup identification. The device's sensor serial number and tag name will be displayed as shown below. Uploading, downloading, and updating of the Flow Calibration Data can be performed. Downloading of the Min/Max, Event, and Trend logs are dependent on the version of the device's firmware. Note that the sensor serial number will be used as the default filename for downloading the configuration, Min/Max, Event, and Trend logs.



3. When connecting with Xmodem, a MFT B-Series device using firmware 1.04 or older will not display the normal startup identification. The following popup will be displayed.

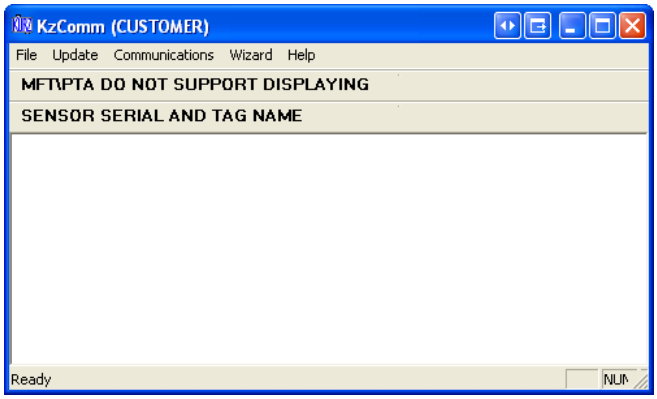
Then the main window will be displayed as follows:



Uploading, downloading, and updating of the Flow Calibration Data can be performed. Downloading of the Min/Max, Event, and Trend logs are dependent on the version of the devices firmware.

4. When connecting to a MFT or PTA device using any firmware will not display the normal startup identification. The following popup will be displayed.

Then the main window will be displayed as follows:



Uploading, downloading, and updating of the Flow Calibration Data can be performed, but downloading of the Min/Max, Event, and Trend logs are not supported.

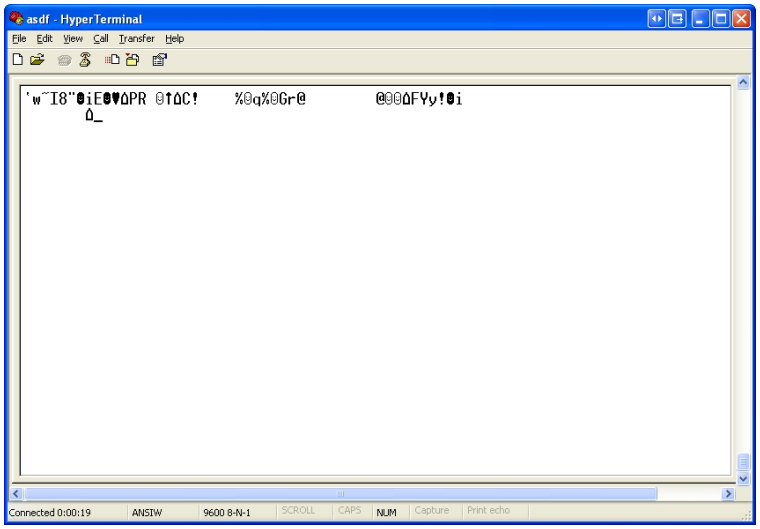
5. For any invalid communications setup, the following popup will be displayed. Sometimes when connecting with Xmodem, the Configure may fail to read the Sensor Serial Number and Tag Name. Try Reset Xmodem COM Port and then Configure again.

The main window will be displayed as follows:

Uploading, downloading, and updating of the Flow Calibration Data cannot be performed until the communications are established.

MFT B-Series to PC via USB Connection Problems

Issue: When connecting via HyperTerminal, gibberish characters may be displayed.



Terminal Emulator Displaying Gibberish

General Notes: Always disconnect from the terminal before disconnecting or powering down the MFT B-Series unit.

KzComm: See Reset XMODEM COM Port.

Terminal Emulator:

Solution 1: Use Tera Term Pro 4.70 or latest (Supports COM1 through COM15).

1. Open Tera Term Pro.
2. Connect
   a. Tera Term Pro only allows connections to COM1 through 15. Use the Device Manager (type **devmgmt.msc** from the **Start -> Run** window) to change the COM port to a lower number.
   b. Only the COM port needs to be chosen.
3. If gibberish is seen then select **Control -> Reset** port.
4. Save the setup by selecting **Setup -> Save Setup...**
5. Create a shortcut to Tera Term Pro on your desktop.

Solution 2: Use Tera Term Pro 3.1.3 (Only supports COM1 through 4).

See Solution 1, but only supports COM1 through 4.

Solution 3: Use HyperTerminal

1. Setup HyperTerminal with the correct COM port, 9600 baud rate, 8 data bits, no parity, 1 stop bit, and no flow control.
2. **File -> Save As** and save it to your desktop.
3. Open the connection. If gibberish disconnect and exit HyperTerminal and repeat until the 3rd failure.
4. If gibberish, disconnect and close HyperTerminal. Open the Device Manager (type **devmgmt.msc** from the **Start -> Run** window) to change the COM port baud rate to any other value not previously used and exit the COM properties window. Disconnect the USB from the computer wait a few seconds and reconnect.
5. Go to Step 3 and repeat until working.

Downloading Configuration File

KzComm supports downloading the configuration files from Kurz Instruments Models with MFT, PTA and MFT-B firmware. It is necessary to download and save the configuration file from a Kurz Instruments device for two reasons:

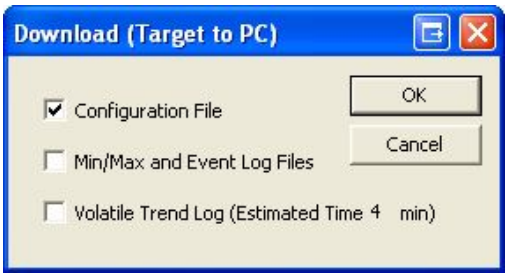
1. To have a backup of how the unit was setup (that can be moved to different hardware).

2. The configuration file can be converted to text file so you can review how the unit was setup.

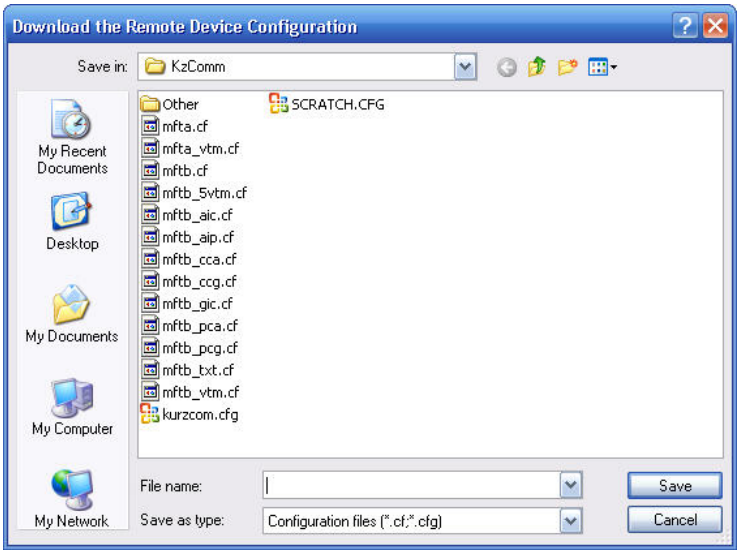
To download the configuration file, perform the following:

1. Click the **File** on the menu bar then click **Download**.

2. Check the Configuration File checkbox and click **OK** as shown below.



3. Enter or select the filename on the new popup window. If the **Communications -> Config** option is used prior to downloading the configuration file, the sensor serial number will be shown as the default filename. See Running KzComm for the default file locations.



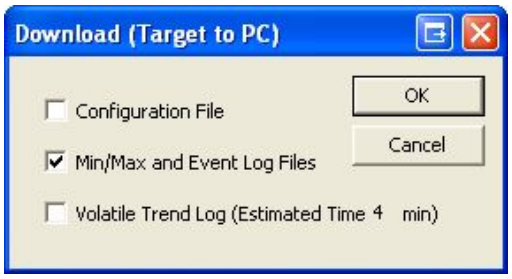
4. If an error occurred, click the **OK** button and repeat the above steps. Note that the configuration file will be converted to viewable file with the same filename except that its extension will be ".txt". It will also be opened for viewing in the default text editor.

Downloading Min/Max and Event Log Files

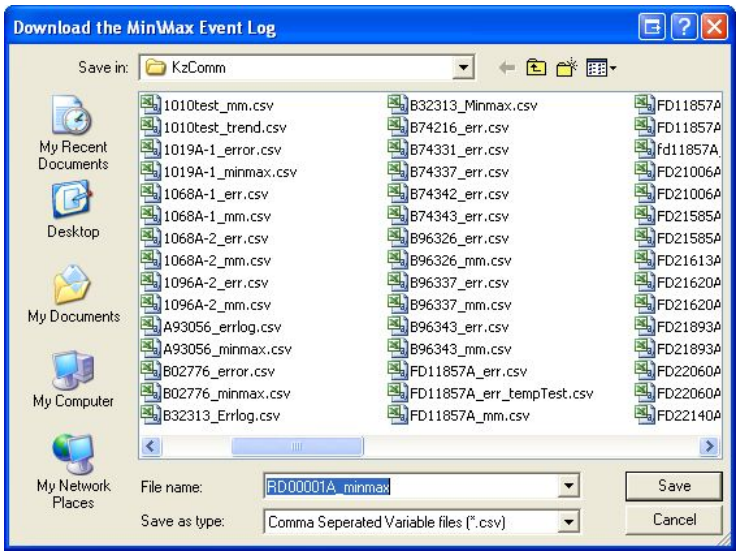
KzComm supports downloading the log files from Kurz Instruments Models with MFT-B 1.05 firmware or later. The Min/Max log file contains 20 records for each of the following events: minimum flowrate, maximum flowrate, minimum process temperature, maximum process temperature, minimum electronics temperature, and maximum electronics temperature. This log can be used to determine the range of the flowrate, temperature, and electronics temperature for the process being measured by the Kurz Instruments MFT B-Series Device. The Event log file contains up to 260 of the most recent events determined and reported by the Kurz Instruments MFT B-Series Device. The log files are saved in Comma Separated Variable format (*.csv) that is easily imported into any spreadsheet program.

To download the Min/Max and Event log files, perform the following:

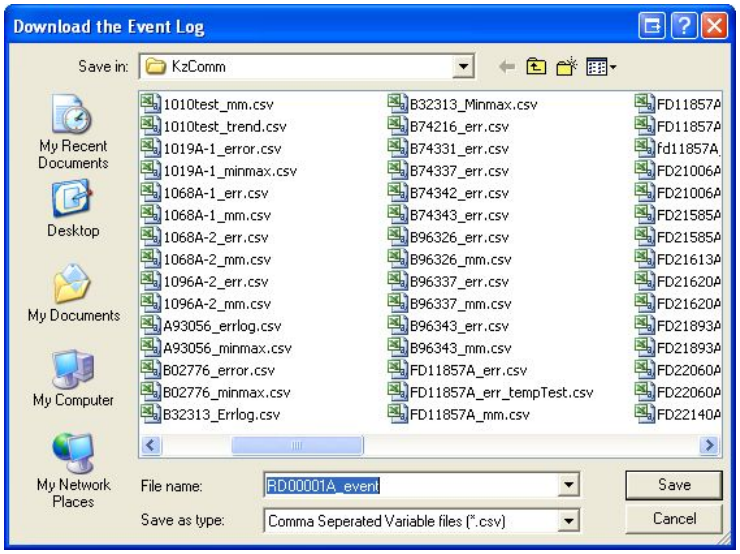
1. Click the **File** on the menu bar then click **Download**.
2. Check the Min/Max and Event Log Files checkbox and click **OK** as shown below.



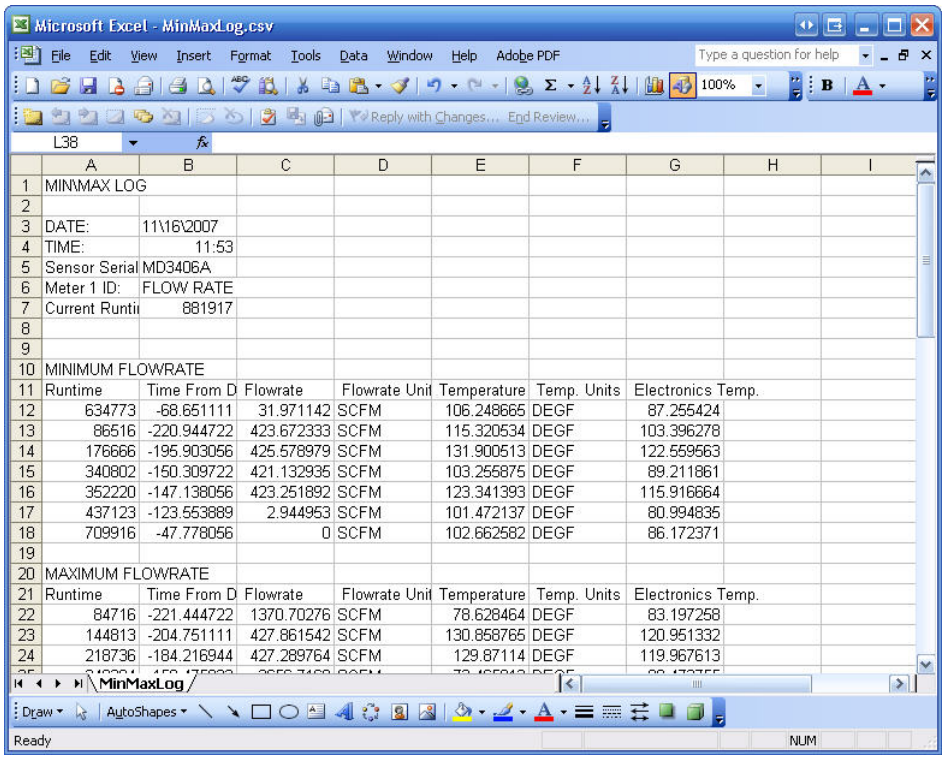
3. Enter or select the filename of the Min/Max Event log on the new popup window. If the **Communications -> Config** option is used prior to downloading the log files, the sensor serial number will be shown as the default filename with _minmax appended. See Running KzComm for the default file locations.



4. Enter or select the filename of the Event log on the new popup window. If the **Communications -> Config** option is used prior to downloading the log files, the sensor serial number will be shown as the default filename with _event appended. See Running KzComm for the default file locations.



5. If an error occurred, click the **OK** button, verify that the MFT-B is not in boot-up mode, and repeat the above steps. Note that the log files will be opened for viewing by the program defaulted to the .csv extension. If Microsoft Excel or OpenOffice Calc is installed it will open in the installed program. Windows' default program for .csv files is WordPad.

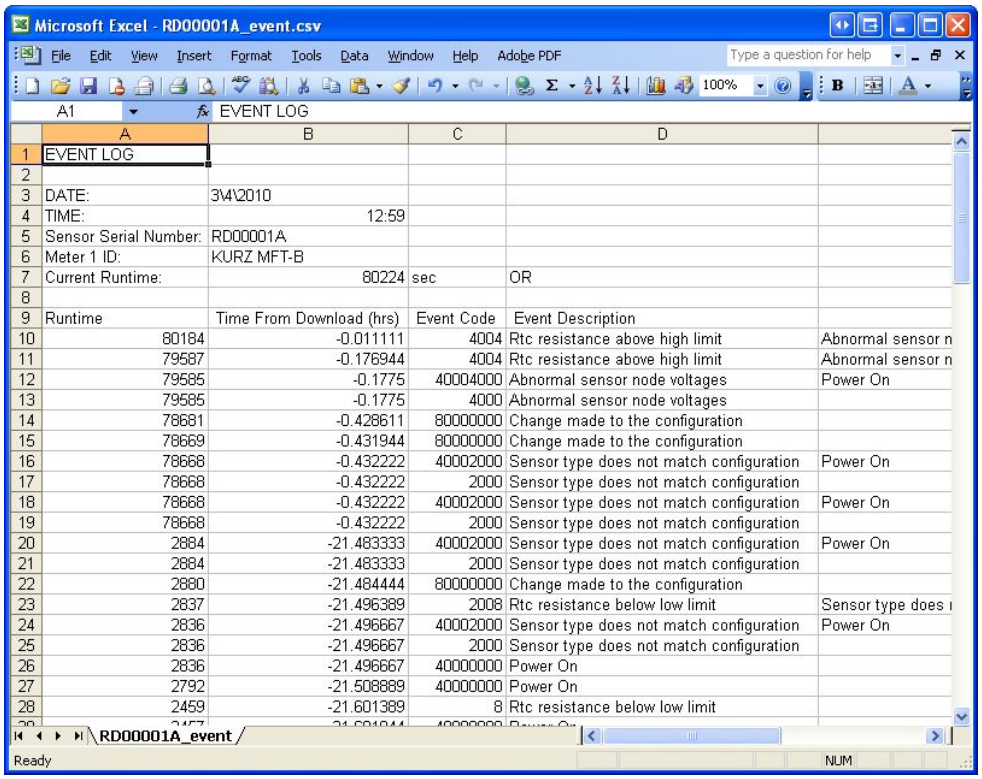


Microsoft Excel - MinMaxLog.csv

	A	B	C	D	E	F	G	H	I
1	MINMAX LOG								
2									
3	DATE:	11\16\2007							
4	TIME:	11:53							
5	Sensor Serial	MD3406A							
6	Meter 1 ID:	FLOW RATE							
7	Current Runti	881917							
8									
9									
10	MINIMUM FLOWRATE								
11	Runtime	Time From D	Flowrate	Flowrate Unit	Temperature	Temp. Units	Electronics Temp.		
12	634773	-68.651111	31.971142	SCFM	106.248665	DEGF	87.255424		
13	86516	-220.944722	423.672333	SCFM	115.320534	DEGF	103.396278		
14	176666	-195.903056	425.578979	SCFM	131.900513	DEGF	122.559563		
15	340802	-150.309722	421.132935	SCFM	103.255875	DEGF	89.211861		
16	352220	-147.138056	423.251892	SCFM	123.341393	DEGF	115.916664		
17	437123	-123.553889	2.944953	SCFM	101.472137	DEGF	80.994835		
18	709916	-47.778056	0	SCFM	102.662582	DEGF	86.172371		
19									
20	MAXIMUM FLOWRATE								
21	Runtime	Time From D	Flowrate	Flowrate Unit	Temperature	Temp. Units	Electronics Temp.		
22	84716	-221.444722	1370.70276	SCFM	78.628464	DEGF	83.197258		
23	144813	-204.751111	427.861542	SCFM	130.858765	DEGF	120.951332		
24	218736	-184.216944	427.289764	SCFM	129.87114	DEGF	119.967613		

MinMaxLog

Ready NUM



Microsoft Excel - RD00001A_event.csv

	A	B	C	D	
1	EVENT LOG				
2					
3	DATE:	3\4\2010			
4	TIME:	12:59			
5	Sensor Serial Number:	RD00001A			
6	Meter 1 ID:	KURZ MFT-B			
7	Current Runtime:	80224	sec	OR	
8					
9	Runtime	Time From Download (hrs)	Event Code	Event Description	
10	80184	-0.011111	4004	Rtc resistance above high limit	Abnormal sensor n
11	79587	-0.176944	4004	Rtc resistance above high limit	Abnormal sensor n
12	79585	-0.1775	40004000	Abnormal sensor node voltages	Power On
13	79585	-0.1775	4000	Abnormal sensor node voltages	
14	78681	-0.428611	80000000	Change made to the configuration	
15	78669	-0.431944	80000000	Change made to the configuration	
16	78668	-0.432222	40002000	Sensor type does not match configuration	Power On
17	78668	-0.432222	2000	Sensor type does not match configuration	
18	78668	-0.432222	40002000	Sensor type does not match configuration	Power On
19	78668	-0.432222	2000	Sensor type does not match configuration	
20	2884	-21.483333	40002000	Sensor type does not match configuration	Power On
21	2884	-21.483333	2000	Sensor type does not match configuration	
22	2880	-21.484444	80000000	Change made to the configuration	
23	2837	-21.496389	2008	Rtc resistance below low limit	Sensor type does
24	2836	-21.496667	40002000	Sensor type does not match configuration	Power On
25	2836	-21.496667	2000	Sensor type does not match configuration	
26	2836	-21.496667	40000000	Power On	
27	2792	-21.508889	40000000	Power On	
28	2459	-21.601389	8	Rtc resistance below low limit	

RD00001A_event

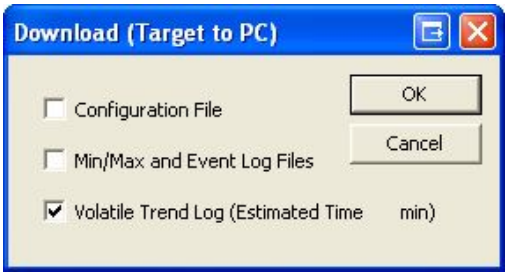
Ready NUM

Downloading Volatile Trend Log File

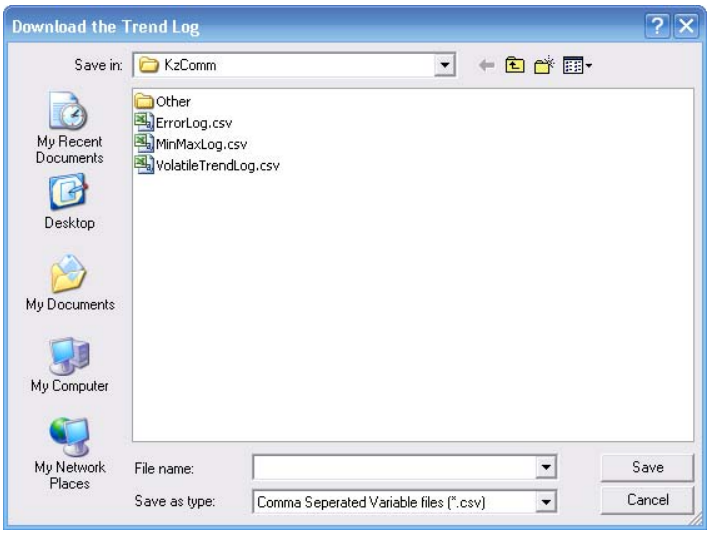
KzComm supports downloading the log files from Kurz Instruments Models with MFT-B 1.05 firmware or later. The Volatile Trend log file contains 20416 records. Each record contains the runtime, flowrate, and process temperature and they are taken every 10 seconds with the oldest record being replaced by the newest when all of the records have been used. This log contains approximately 2 ½ days worth of data. This log can be used to determine how the process being measured by the Kurz Instruments MFT B-Series Device changes with time and if an unusual event occurs this log may contain more detailed data on what happened with the process. Note that this log is in volatile memory and therefore a power cycle will clear the trend log. The log files are saved in Comma Separated Variable format (*.csv) that is easily imported into any spreadsheet program. See the Windows Vista Support section for known issues. The downloading of the Volatile Trend Log will take 4 minutes using Modbus RTU at 38400 baud and 17 minutes using the Xmodem protocol.

To download the trend log file, perform the following:

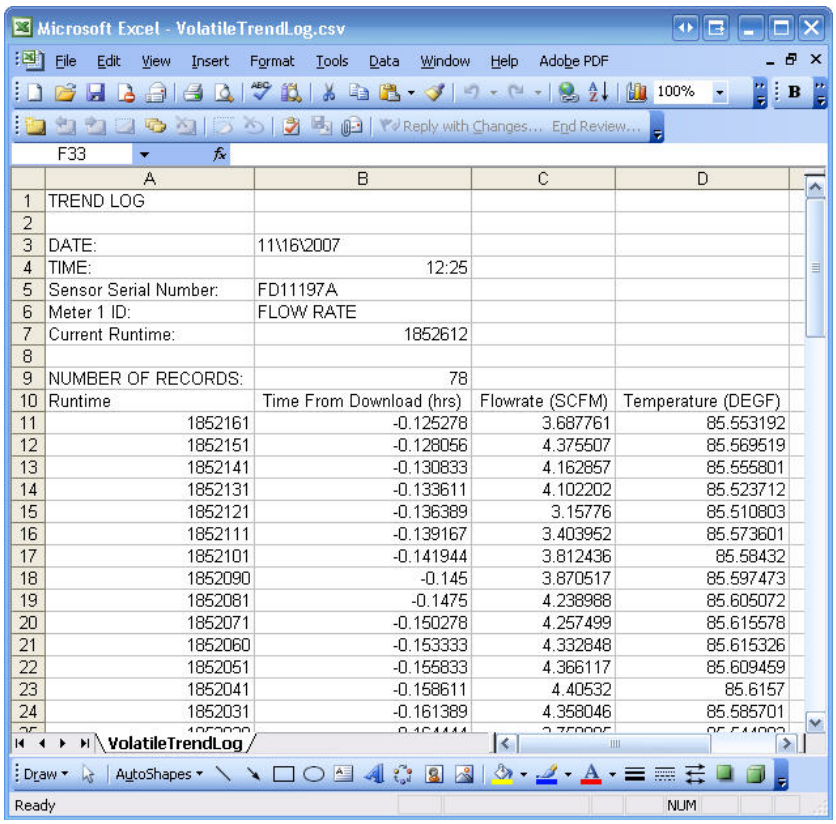
1. Click the **File** on the menu bar then click **Download**.
2. Check the Volatile Trend Log checkbox and click **OK** as shown below. Note that the estimated time for the log file download is displayed.



3. Enter or select the filename of the trend log on the new popup window. If the **Communications -> Config** option is used prior to downloading the log file, the sensor serial number will be shown as the default filename with _trend appended. See Running KzComm for the default file locations.

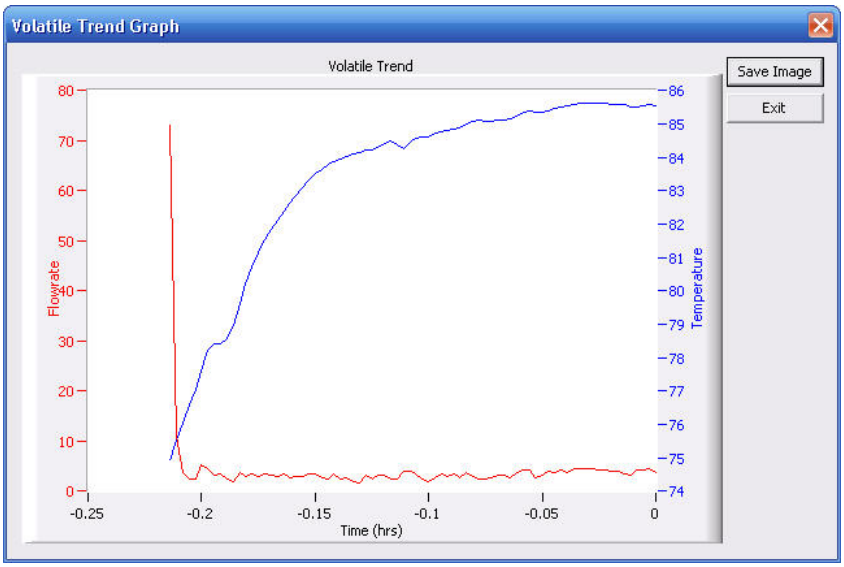


4. If an error occurred, click the **OK** button, verify that the MFT-B is not in boot-up mode, and repeat the above steps. Note that the log files will be opened for viewing by the program defaulted to the .csv extension. If Microsoft Excel or OpenOffice Calc is installed it will open in the installed program. Windows' default program for .csv files is WordPad.



	A	B	C	D
1	TREND LOG			
2				
3	DATE:	11\16\2007		
4	TIME:	12:25		
5	Sensor Serial Number:	FD11197A		
6	Meter 1 ID:	FLOW RATE		
7	Current Runtime:	1852612		
8				
9	NUMBER OF RECORDS:	78		
10	Runtime	Time From Download (hrs)	Flowrate (SCFM)	Temperature (DEGF)
11	1852161	-0.125278	3.687761	85.553192
12	1852151	-0.128056	4.375507	85.569519
13	1852141	-0.130833	4.162857	85.555801
14	1852131	-0.133611	4.102202	85.523712
15	1852121	-0.136389	3.15776	85.510803
16	1852111	-0.139167	3.403952	85.573601
17	1852101	-0.141944	3.812436	85.58432
18	1852090	-0.145	3.870517	85.597473
19	1852081	-0.1475	4.238988	85.605072
20	1852071	-0.150278	4.257499	85.615578
21	1852060	-0.153333	4.332848	85.615326
22	1852051	-0.155833	4.366117	85.609459
23	1852041	-0.158611	4.40532	85.6157
24	1852031	-0.161389	4.358046	85.585701

5. A graph of the trend log will be displayed as shown below. To save the graph as a JPG image and exit click the **Save Image** button, otherwise click the **Exit** button to exit the Volatile Trend Graph. The image of the graph will have the same filename as the log file with the exception of the extension being jpg.



MFT B-Series Boot-up Mode

The MFT-B performs power on test to verify that the configuration, sensor, and wiring are valid. While it is testing, the following display screens can be seen on unit with displays or via a terminal emulator program.

KURZ INSTRUMENTS
DISPLAY DRIVER 4.1

The above display is the version information of the display itself and will not be seen when using a terminal emulator program.

CHECKING TYPE OF
CONNECTED SENSOR

The sensor testing is in progress. If the next display is an error message display then the unit is stuck in boot-up due to a sensor mismatch, wiring or other problem. At this point the MFT-B will not allow downloading of the Min/Max, Event or Trend logs. To force the unit to exit boot-up mode the user must press the 'c' key on the display or via a

terminal emulator program. Once boot-up is complete the following screen will be displayed.

KURZ INSTRUMENTS

SERIES MFT-B

Followed within seconds by the final sensor test, downloading of the Min/Max, Event or Trend logs can now be accomplished.

WAIT PERFORMING

SENSOR LEAK TEST

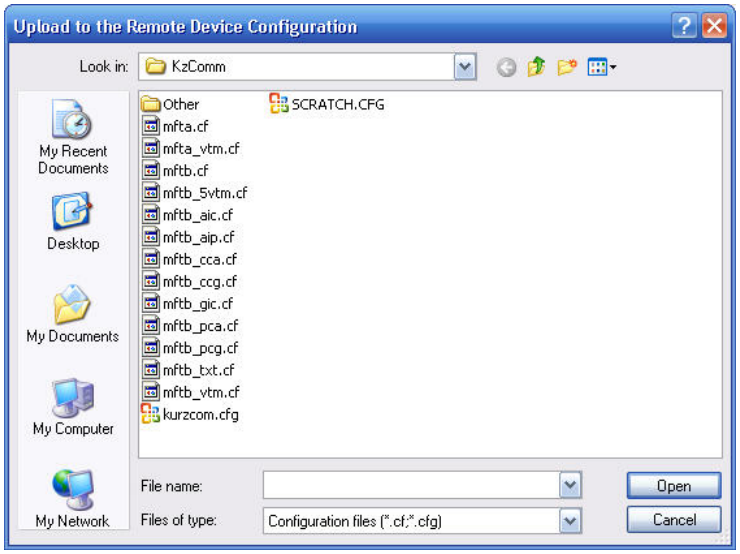
The Run Mode screen will be displayed.

Uploading Configuration File

Kurz Instruments Models with MFT, PTA and MFT-B firmware are supported to upload their configuration file from a PC.

To upload a configuration file, perform the following:

1. Click **File** on the menu bar then **Upload (PC to Target)**.
2. Enter or select the filename on the new popup window. See Running KzComm for the default file locations.



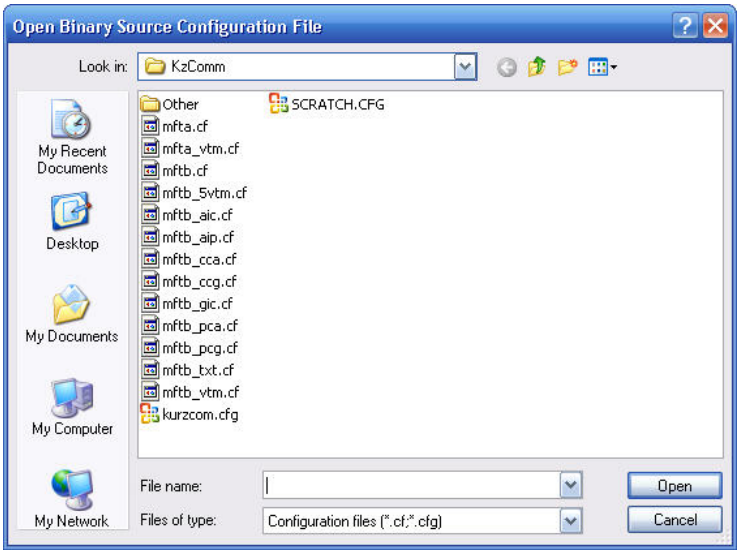
3. If an error occurred, click the **OK** button and repeat it the above operations.

Converting Configuration File from Binary to Text

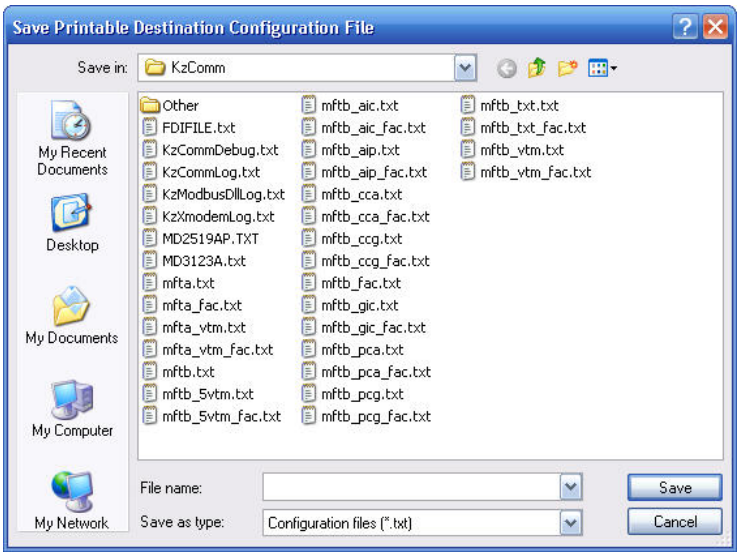
Configuration files are in a binary format. In order to read or print they need to be converted first to a text format.

To convert a binary configuration to a text format, perform the following:

1. Click the **File** on the menu bar then click **Create Printable File**.
2. Enter or select the binary configuration file name in the new popup window. See Running KzComm for the default file locations.



3. Enter or Select the Text configuration file name on the new popup window.



See Viewing the Configuration File on how to view the configuration file.

Viewing the Configuration File

Any text editor or word processor can be used to view the text version of the configuration file because it is in plain text. This program uses the operating system's associated program, based on file type, to view the file. Therefore, do not use a file extension, when Converting Configuration File from Binary to Text, not supported by a default text editor unless the user is knowledgeable enough to change the custom file type to be opened by a text editor.

To view the text version of the configuration file, perform the following:

1. Click **File** on the menu bar then **View**. The **View** option is disabled until the **Create Printable File** is performed.
2. The default text editor will open and load the text version of the configuration file. Close the program when finished.

Printing the Configuration file

Any text editor or word processor can be used to view the text version of the configuration file because it is in plain text. This program uses the operating systems associated program, based on file type, to print the file. Therefore, do not use a file extension, when Converting Configuration File from Binary to Text, not supported by a default text editor unless the user is knowledgeable enough to change the custom file type to be opened by a text editor.

To print the configuration file, perform the following:

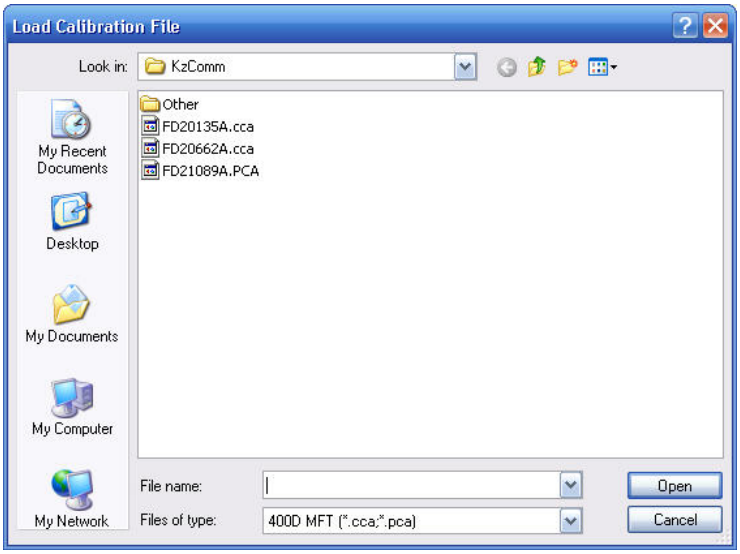
1. Click the **File** on the menu bar then click **Print**. The **Print** option is disabled until the **Create Printable File** is performed.
2. The file will be sent to the default printer. To print to a different printer, see Viewing the Configuration File and print from the program in which it opens.

Updating the Flow Calibration Data

The flow calibration data can be loaded into the Kurz Instruments Models with MFT, PTA, and MFT-B firmware using the update flow calibration data functionality. This option is used to update the flow calibration of the meter to support changing gas types, Velocity Temperature Mapping (VTM) data, or switching between multiple calibration curves.

To update the flow calibration data, perform the following:

1. Click **Update** on the menu bar then **Flow Calibration Data**.
2. Enter or select the filename of the flow calibration file. See Running KzComm for the default file locations.



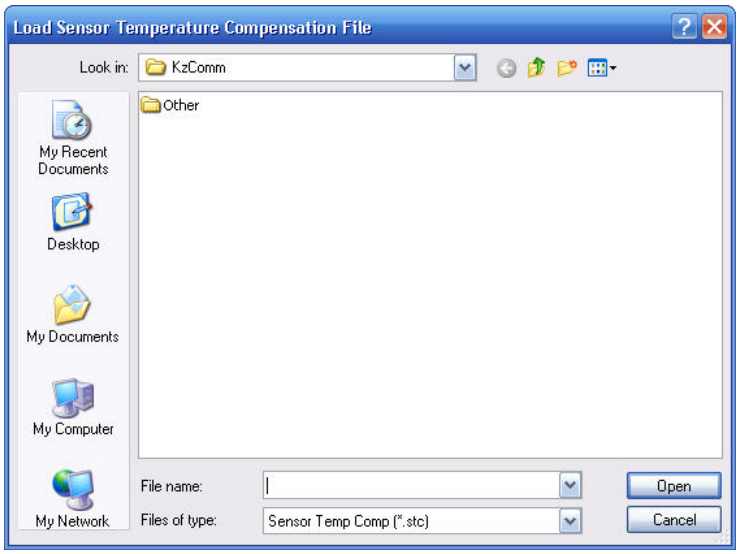
3. If error occurred, click the **OK** button and repeat the above steps.

Updating the Sensor Data

Kurz Instruments Models with MFT-B firmware can have their sensor data loaded by using the update sensor data function. This option is used to update sensor specific Resistance Temperature Device (RTD) calibration coefficients.

To update the temperature compensation data, perform the following:

1. Click **Update** on the menu bar then **Sensor Data**.
2. Enter or select the filename of the temperature compensation data file. See Running KzComm for the default file locations.

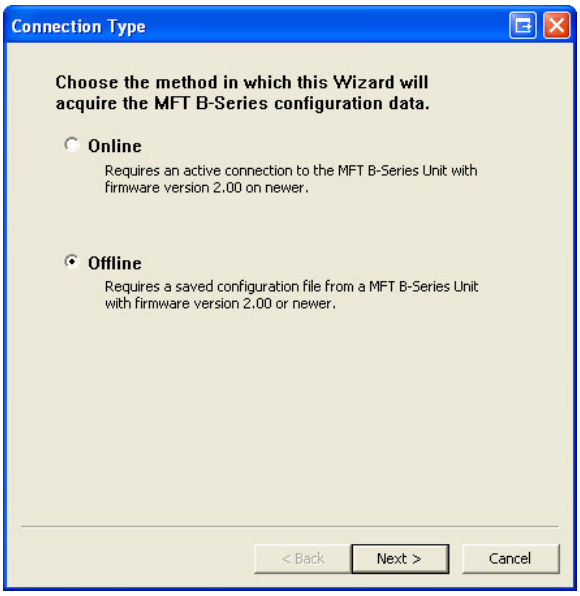


3. If an error occurred, click the **OK** button and repeat the above steps.

B-Series Setup Wizard

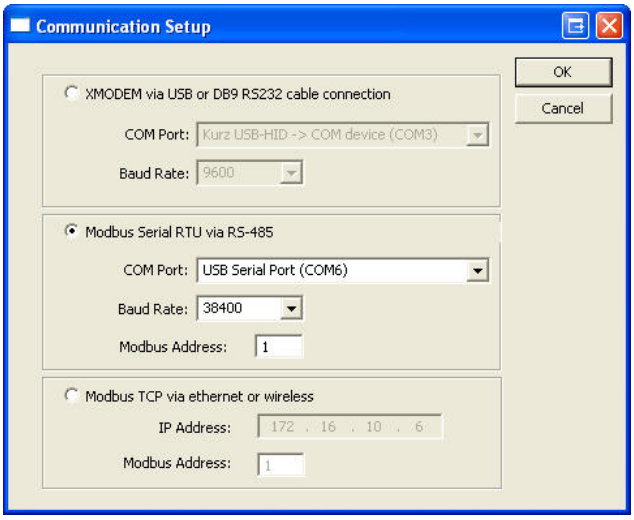
The Wizard is used to configure a MFT-B device with 2.00 or newer firmware only. The wizard will not work with a MFT\PTA device or a MFT-B device with 1.XX firmware. It will prompt the user with an error message stating that the "User Selected File is Invalid!".

First choose whether you are currently connected to the MFT-B device (Online) or whether the configuration file to be used is already on your PC (Offline).



Online

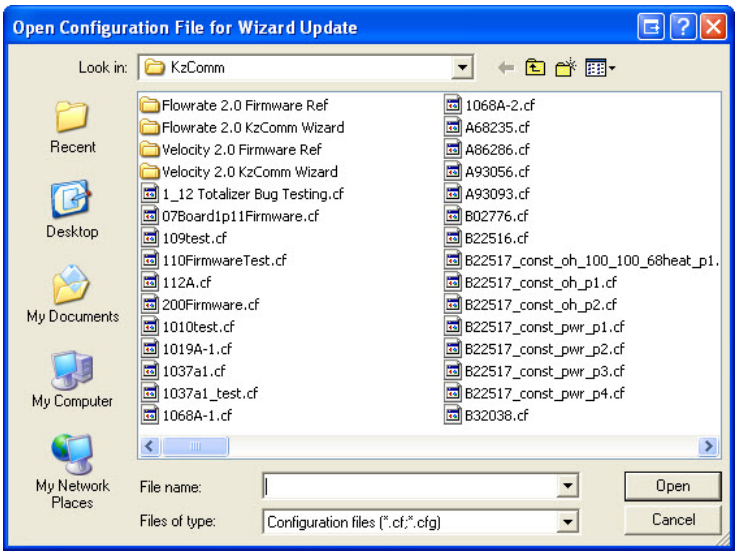
If **Online** is selected, the Communications Setup window will prompt the user for a connection type.



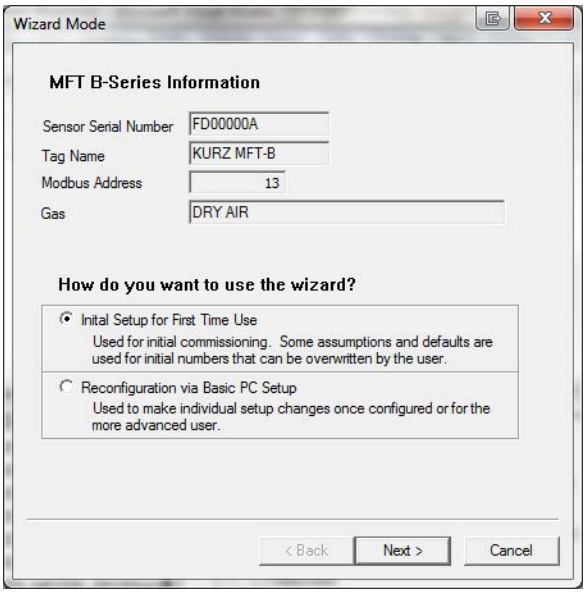
Until the connection has been established, the **Next** button on the Connection Type window will be disabled.

Offline

If **Offline** is selected, the Wizard will prompt for a configuration file.



The sensor serial number, tag name, modbus address and gas of the device to be configured are displayed for verification purposes. Next choose the mode of configuration. The two options are as follows:



1. Initial Setup for First Time Use

   Used for initial commissioning. Some assumptions and defaults are used for initial numbers that can be overwritten by the user.

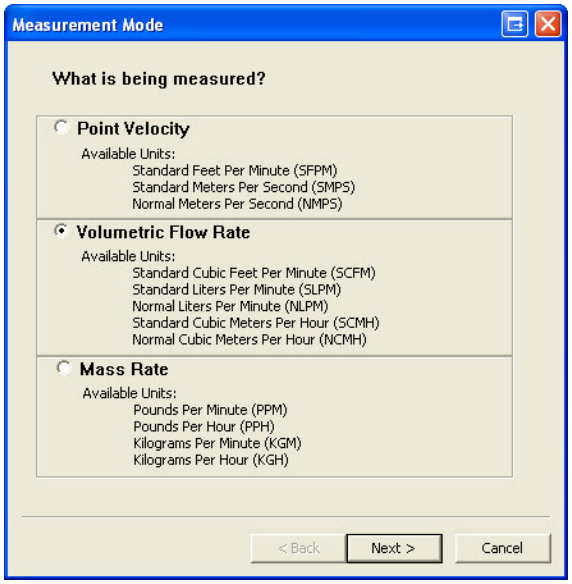
2. Reconfiguration via Basic PC Setup

   Used to make individual setup changes once configured or for the more advanced user.

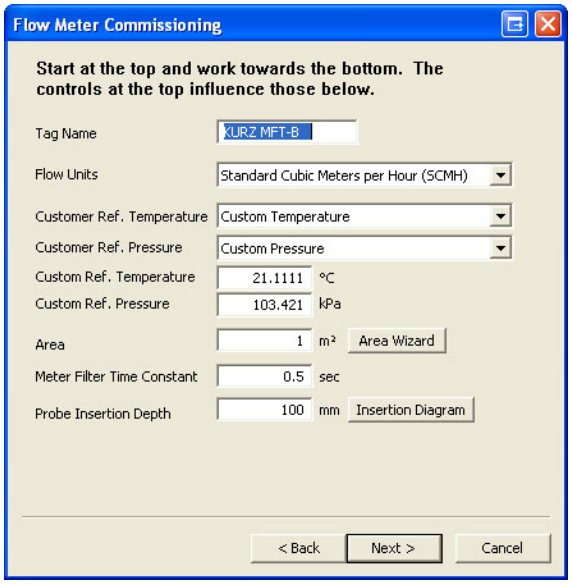
Follow the links to Initial Setup for First Time Use or Reconfiguration via Basic PC Setup for more information.

Initial Setup for First Time Use

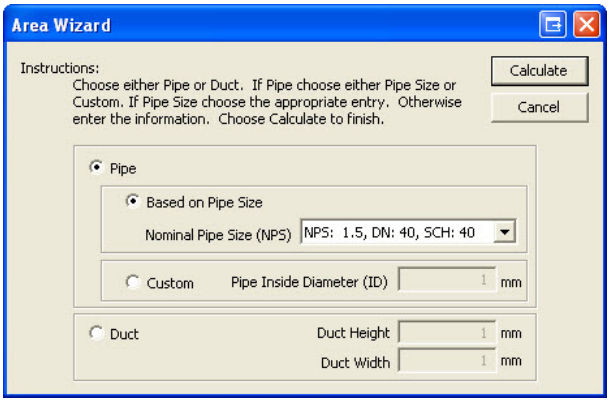
The user is queried for what measurement is required. This choice will limit the units and options available for choice in later steps.



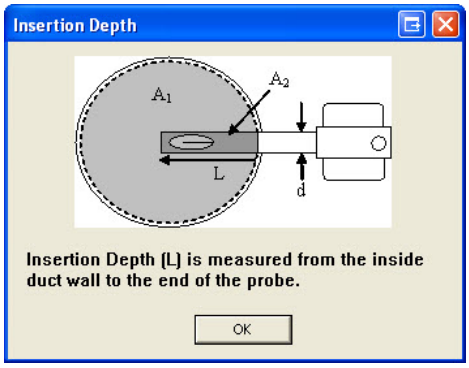
Flow Meter Commissioning



The Area Wizard simplifies the entry of the Area, by allowing the circular dimensions, rectangular dimensions, or NPS pipe sizes to be entered.

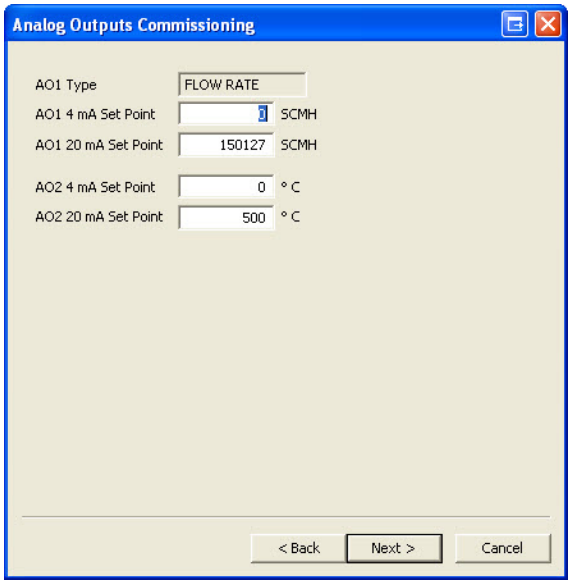


The Insertion Diagram shows how to measure the Probe Insertion Depth.

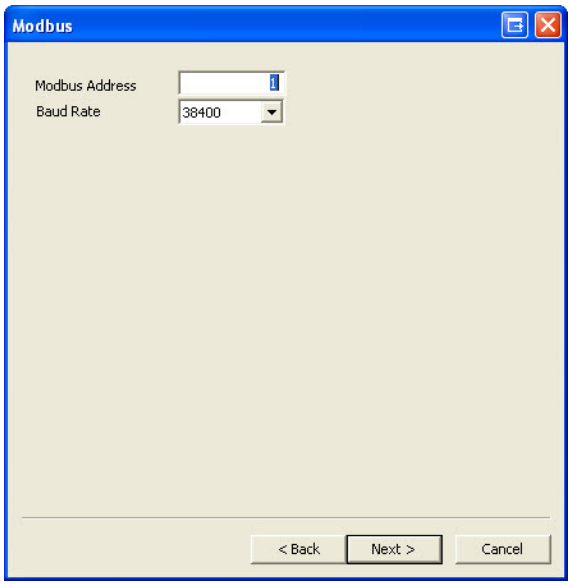


Analog Outputs Commissioning

The Analog Output 1 Type is defined by the Measurement Mode Step.

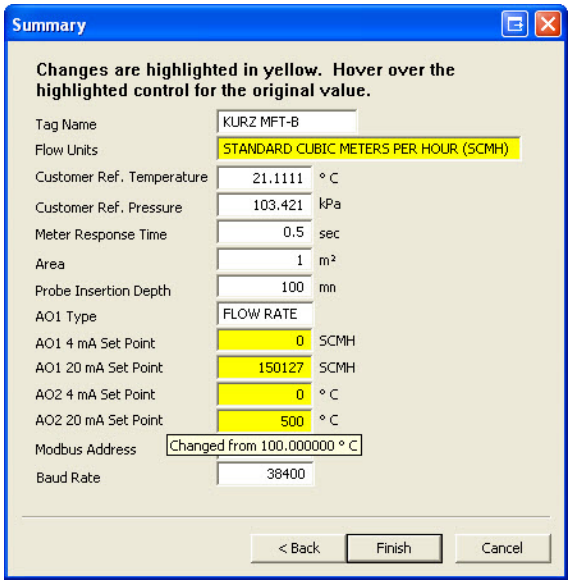


Modbus

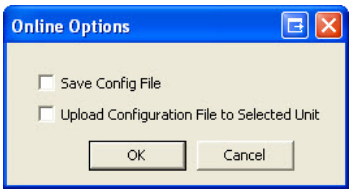


Summary

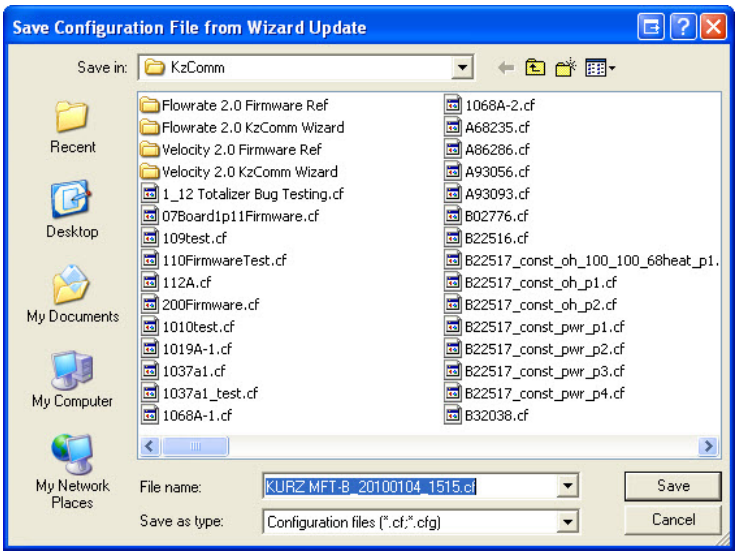
All changes are highlighted in yellow and when the cursor is hovering over a changed field, a pop up text will display the original value. The **Finish** button will be disabled if no changed have been made.



If the Wizard is in Online Mode, then the user is prompted to save the configuration file and/or upload the changed configuration to the attached MFT-B device.

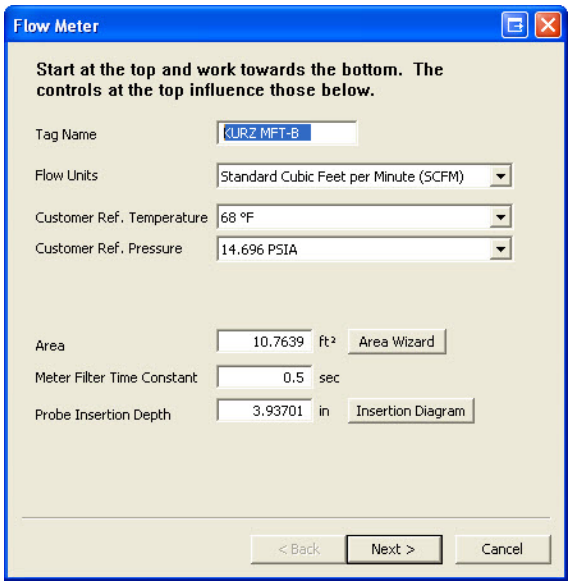


Otherwise the user is prompted to save the configuration file. Note that the tag name, date, and time are used as a default that can be overwritten by the user.

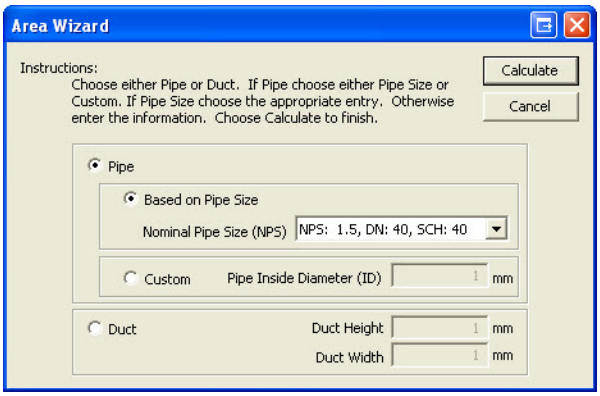


Reconfiguration via Basic PC Setup

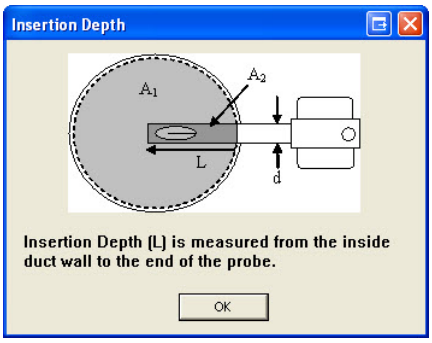
Flow Meter



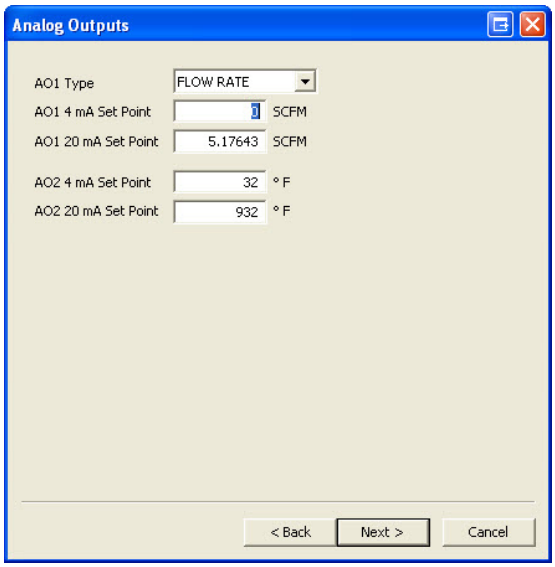
The Area Wizard simplifies the entry of the Area, by allowing the circular dimensions, rectangular dimensions, or NPS pipe sizes to be entered.



The Insertion Diagram shows how to measure the Probe Insertion Depth.



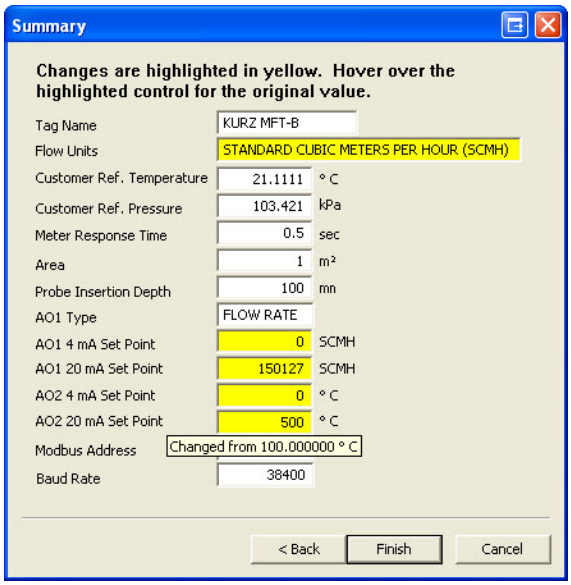
Analog Outputs



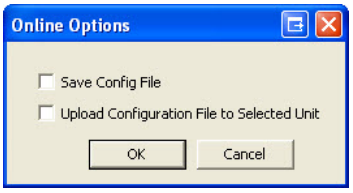
Modbus

Summary

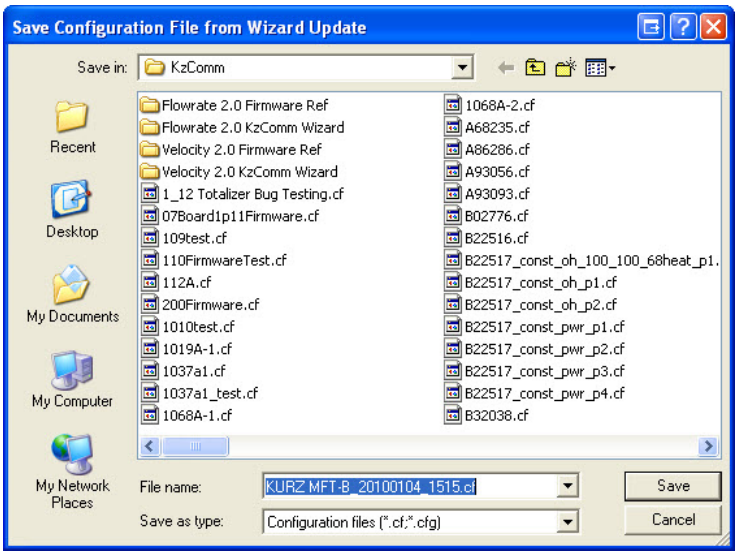
All changes are highlighted in yellow and when the cursor is hovering over a changed field, a pop up text will display the original value. The **Finish** button will be disabled if no changes have been made.



If the Wizard is in Online Mode then the user is prompted to save the configuration file and/or upload the changed configuration to the attached MFT-B device.

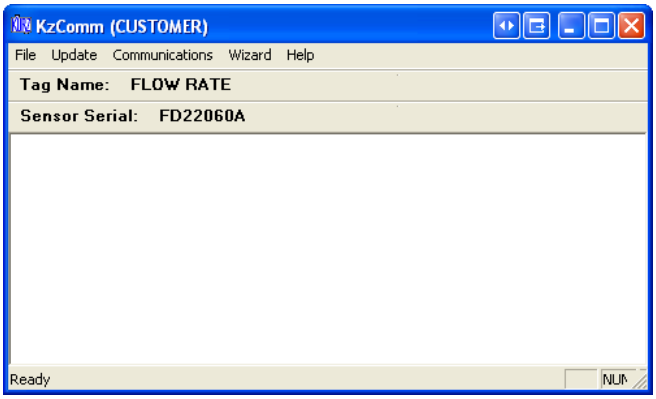


Otherwise the user is prompted to save the configuration file. Note that the tag name, date, and time are used as a default that can be overwritten by the user.



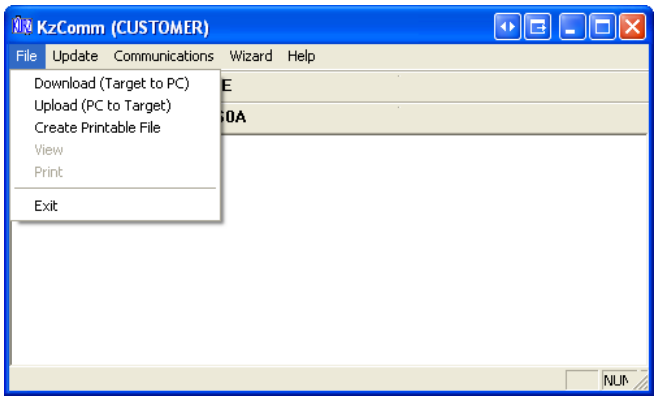
Program Menus

The KzComm program is shown below. The menu options are File, Update, Communications, and Help.



File Menu Options

The File Menu options are shown below. The options are Download, Upload, Create Printable File, View, Print, and Exit.



File -> Download (Target to PC)

Click the **File,** then **Download (Target to PC)** to download the configuration file, Min/Max, Event, or Trend logs from the Kurz Instruments Devices with MFT, PTA or MFT-B firmware to the PC.

> **Note 1:** Kurz Instruments Devices with MFT or PTA firmware, or MFT-B firmware 1.04 or earlier do not support the Min/Max, Event or Trend log files.
> **Note 2:** The Min/Max, Event and Trend log files cannot be downloaded while the MFT-B is in boot-up.

The act of downloading of a file will automatically open the file with the default editor/viewer for that given file type. All log files are in Comma Separated Variable (*.csv) format and the configuration file in viewable format is in Text (*.txt) format.

See Downloading the Configuration File, Downloading the Min/Max and Event Logs, and Downloading the Volatile Trend Log for more information.

File -> Upload (PC to Target)

Click **File** then **Upload (PC to Target)** to upload the configuration file of the Kurz Instruments device with MFT, PTA or MFT-B firmware from the PC.

See Uploading the Configuration File for more information.

File -> Create Printable File

Click the **File** then **Create Printable File** to convert the binary configuration file to a human readable text file.

See Converting Configuration File from Binary to Text for more information.

File -> View

Click the **File** then click **View** to view the text version of the configuration file.

See Viewing the Configuration File for more information.

File -> Print

Click **File** then **Print** to print a hard copy of the text version of the configuration file to the default printer.

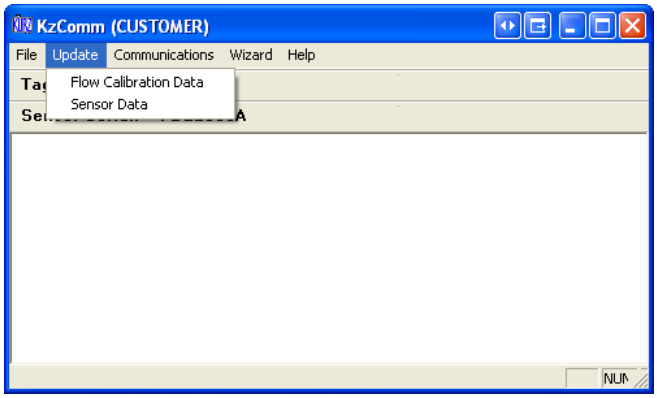
See Print the Configuration File for more information.

File -> Exit

Click the **File** then **Exit** to terminate the program.

Update Menu Options

The Update Menu options are shown below. The options are Flow Calibration Data and Sensor Data.



Update -> Flow Calibration Data

Click **Update** then **Flow Calibration Data** to update the calibration data of the Kurz Instruments device with MFT, PTA or MFT-B firmware with a valid calibration file.

This menu permits you to load in calibration files for different gases (one at a time) or change VTM data etc.

See Updating the Flow Calibration Data for more information.

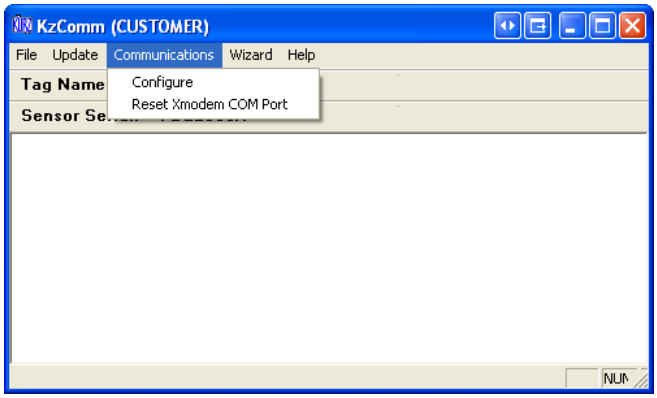
Update -> Sensor Data

Click **Update** then **Sensor Data** to update the Kurz Instruments Models with MFT-B firmware with a valid sensor file.

See Updating the Sensor Data for more information.

Communications Menu Options

The Communications Menu options are shown below. The options are Configuring the Communications Port and Reset Xmodem COM Port.



Communication -> Configure

Click **Communication** then **Configure** to setup the communication port, protocol, and Modbus address to be used.

See Configuring the Communications Port for more information.

Communication -> Reset Xmodem COM Port

Click **Communication** then **Reset Xmodem COM Port** to reset the XMODEM communication port.

This feature will be disabled if the chosen communications protocol is not XMODEM. This option should be used when a terminal emulator program is receiving garbage characters on its display or when KzComm is unable to communicate to the MFT B-Series unit using the XMODEM protocol and the setup and connections have been proven to be valid. This feature will reset the communications port in a manner that will correct the communications problems with the PC and its COM port.

Usage 1: Terminal Emulator displaying garbage and the emulator does not provide the Reset Port option. Note Tera Term provides this option and is the recommended terminal emulator.

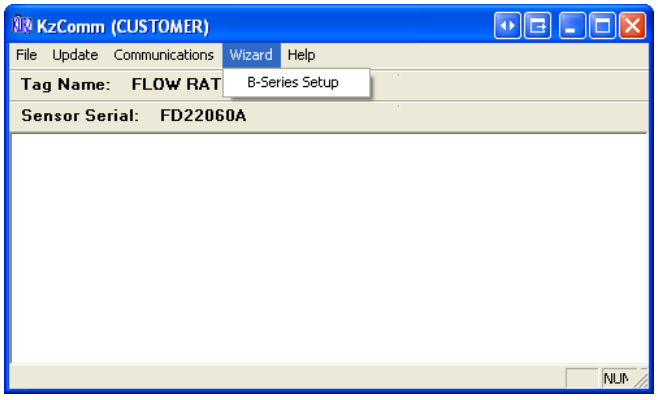
1. Disconnect or close the terminal emulator program from the COM port.
2. Open KzComm if not already open.
3. Choose **Communication -> Reset Xmodem COM Port**. If the option is disabled change the configuration to the XMODEM protocol.
4. Open or connect the terminal emulator program and it should now display valid data.

Usage 2: KzComm throws warning or displays communications invalid with valid setup to MFT-B unit.

1. Verify connection between PC and MFT-B with proper USB cable, COM port enumerated, power supplied to unit and communications configuration are valid.
2. Choose **Communication -> Reset Xmodem COM Port**. If the option is disabled change the configuration to the XMODEM protocol.
3. Try the previously requested command again.

Wizard Menu Options

The Wizard Menu options are shown below. The only option is B-Series Setup.

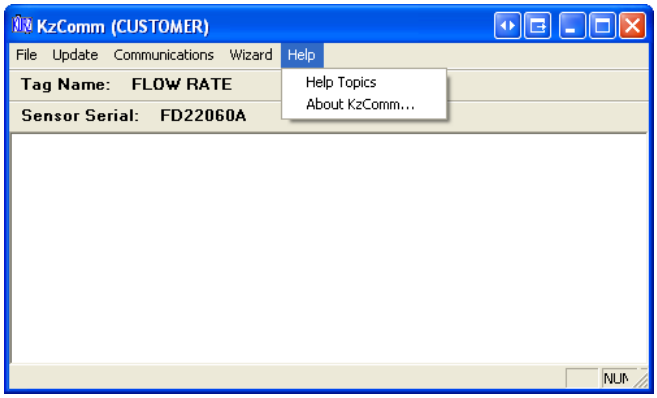


Wizard -> B-Series Setup

See B-Series Setup for how to use the wizard.

Help Menu Options

The Help Menu options are shown below. The options are Help Topics and About KzComm.



Help -> Help Topics

Click **Help** then **Help Topics** to learn more about the program.

Help -> About KzComm

Click **Help** then **About KzComm** to know the version of the program