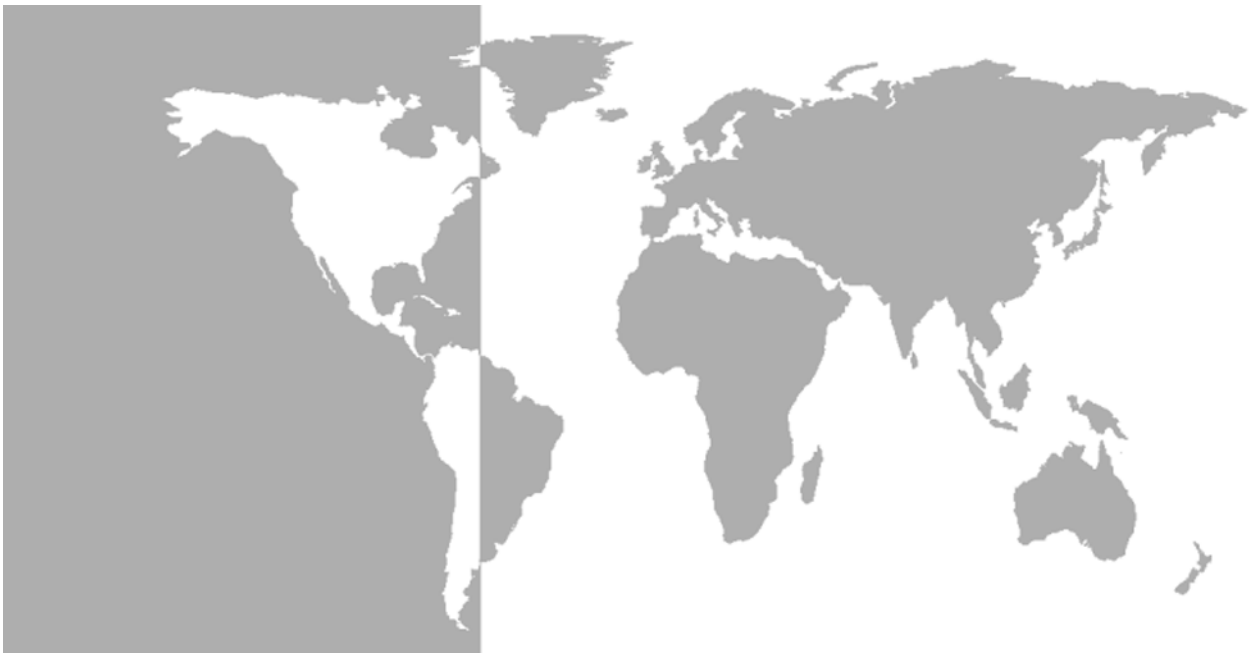
GE Infrastructure
Sensing



PanaView™

for IDM-Compatible Meters

User's Guide

GE Infrastructure
Sensing

PanaView™

for IDM-Compatible Meters

User's Guide
916-086B
October 2004

Table of Contents

Introduction 1

IDM-Compatible Meters 2

Wiring the RS232 Interface 2

Starting Up 2

Setting Up the Communications Port 3

Adding an IDM-Compatible Meter 5

Editing Meter Properties 7

- Setting the Meter Clock 9
- Reading Transducer Signals 10
- Plotting Transducer Signals 11
- Saving Transducer Signals 11
- Clearing Totalizers 11
- Handling Site Files 12

Changing Meter Settings 15

Introduction

The *PanaView*™ graphical user interface offers interactive communications between Windows-based PCs and GE Infrastructure Sensing instruments compatible with the company's IDM protocol. (Compatible 32-bit Windows operating systems include Windows 98SE, NT 4.0 (with Service Pack 6), 2000, XP and ME). With *PanaView*™, you can:

- load and save site file data
- create and save graph and log files
- display text output and graphs of live measurement data
- create custom templates for displaying text, graph and log data
- interface with multiple GE Infrastructure Sensing instruments.

This document focuses on particular applications suitable for meters that use the GE Infrastructure Sensing IDM protocol. For general *PanaView*™ applications such as creating graph and log files, displaying live measurement data, and creating custom templates, please refer to the general *PanaView*™ *User's Manual* (910-211).

IDM-Compatible Meters

To determine if your meter uses the IDM protocol, please check the list of compatible meters below. If your meter is not on this list, please consult GE Infrastructure Sensing for appropriate instrument interface software:

- AT868
- DF868
- GC868
- GF868
- GM868
- GN868
- GS868
- PT868
- UPT868-C
- UPT868-P
- XGM868
- XGS868
- XMO2/IDM
- XMT868
- XMTC

IMPORTANT: *PanaView™ does not support any IDM protocol-based meters with multidrop RS485.*

Wiring the RS232 Interface

All IDM-protocol instruments utilize an RS232 interface to communicate with a PC. For details on wiring your RS232 interface, please refer to the *Installation* chapter of your instrument's User's Manual, and to the document *EIA-RS Serial Communications* (916-054).

Starting Up

When the above connections have been made, power up the meter and the PC, then start up *PanaView™*. If a message appears as in Figure 1 below, *PanaView™* is not able to communicate with the meter. Select Don't Load Meter (this session only), click OK and then proceed to *Setting Up the Communications Port* on page 3.

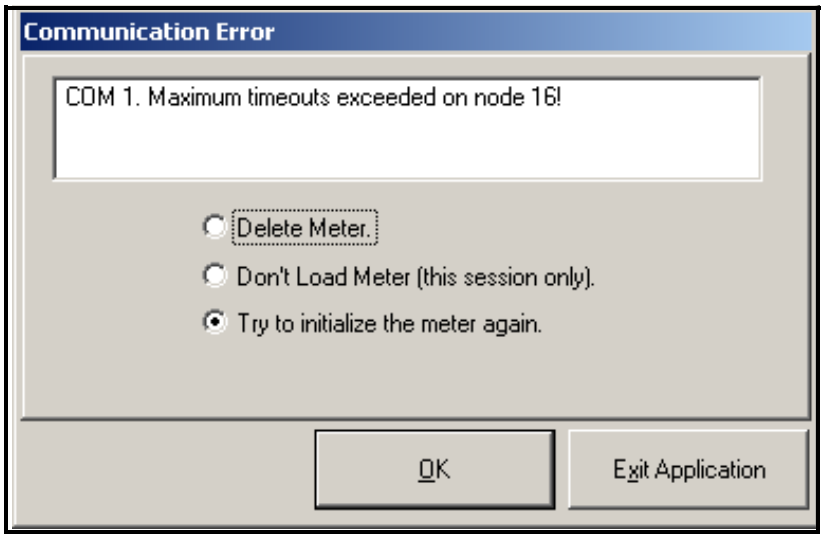


Figure 1: Communication Error Window

Setting Up the Communications Port

Use the steps below to establish communications with an IDM-compatible meter.

1. Open the *"New Meter Browser"* window and expand the network tree. Then, highlight the *My Computer(Name)* branch by clicking on it.
2. Pull down the *"Edit"* menu by clicking on it in the menu bar.
3. Click on the *"New"* menu option to select it, and a submenu opens with two choices on it (see Figure 2 below).

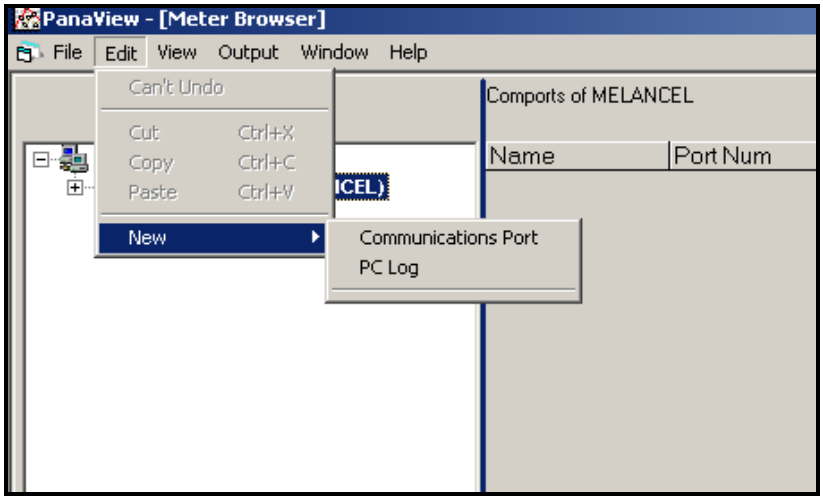


Figure 2: The Edit Menu

Setting Up the Communications Port (cont.)

4. Click on the "*Communications Port"* option to select it. The *Setup Communications* screen appears similar to Figure 3 below.

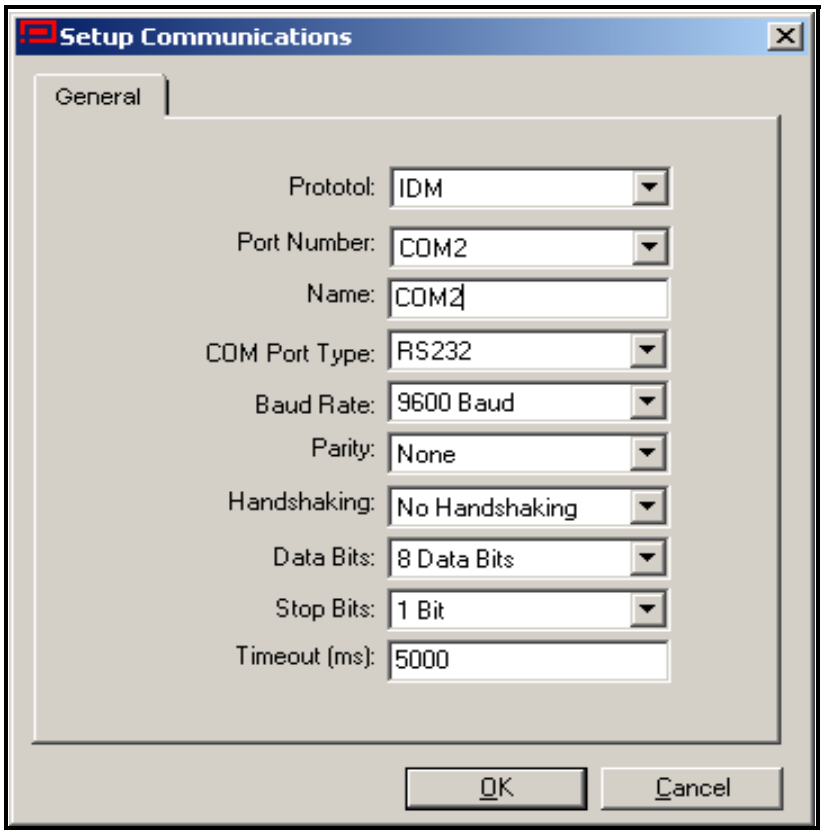


Figure 3: *Setup Communications* Screen

5. Open the Protocol menu (the first of the drop-down menus) and click on *IDM*.

6. Select any suitable available baud rate. A baud rate of 19,200 is appropriate for almost all applications. However, if you experience periodic communication reliability problems, you may wish to consider lowering the baud rate on your instrument and in *PanaView™*.

IMPORTANT: *Be sure all the communications port settings match those made in setting up the meter's serial port.*

7. Click on [OK] to complete data entry.

Adding an IDM-Compatible Meter

To add a meter on the IDM-configured communications port, complete the following steps:

1. Highlight the communication port to which the meter will be added by clicking on it, and then open the *"Edit"* menu on the menu bar (if the communication port is not highlighted first, the *"New Meter"* option is not active in the *"Edit"* menu).
2. Click on the *"New"* option in the *"Edit"* menu (see Figure 4 below).

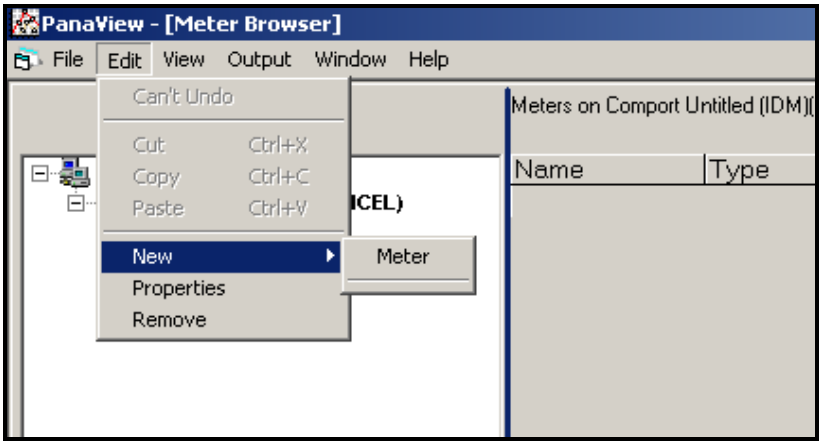


Figure 4: *"New"* Option in the *"Edit"* Menu

3. After clicking on the *"New"* option, the *"Meter"* menu option appears. Click on this option to select it.
4. The *"New IDM Meter"* screen (shown in Figure 5 below) opens. Enter the Network ID number for the meter, and click [OK].

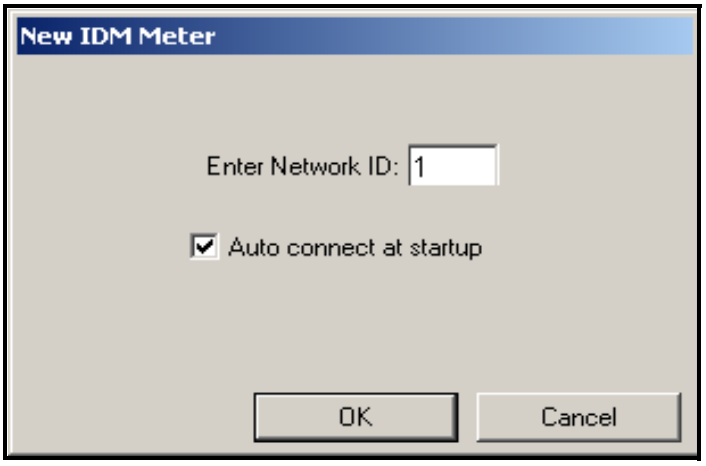


Figure 5: New IDM Meter Screen

Adding an IDM-Compatible Meter (cont.)

IMPORTANT: *The Network ID number must match the Network ID programmed in the meter's Communications menu.*

If the initialization is successful, the Meter Browser shows a listing similar to Figure 6 below.

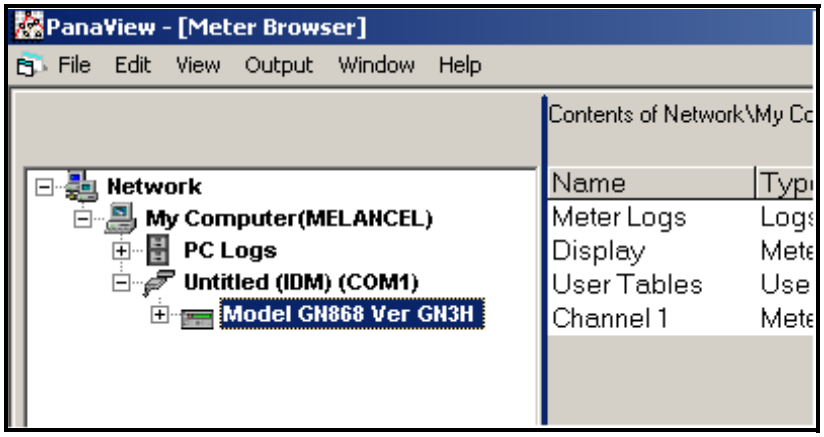


Figure 6: The Updated Network Tree

However, if the settings do not match, or there is some other difficulty, a screen appears similar to Figure 7 below.

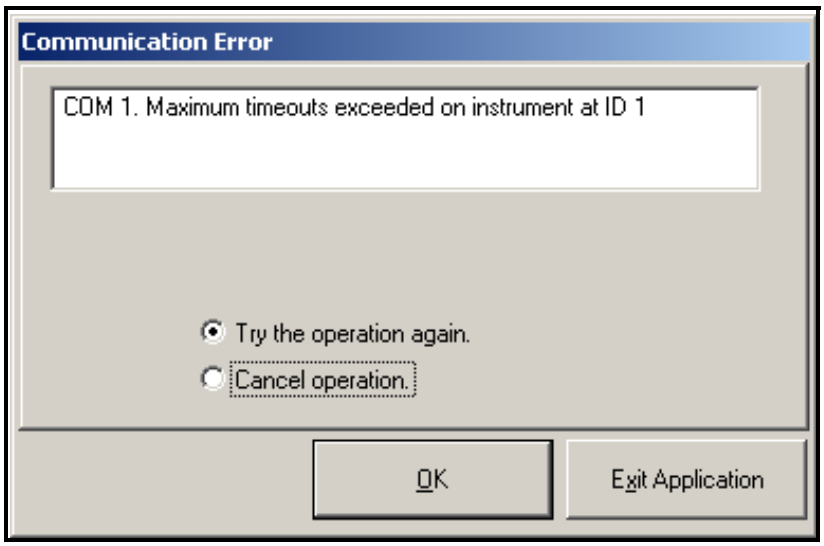


Figure 7: Communication Error Screen

The screen offers the options of trying again or of canceling the operation. Click on the desired choice, and then on [OK] to confirm the choice or on [Exit Application] to close *PanaView*™.

Editing Meter Properties

Through *PanaView*™, you can edit the properties of your IDM-compatible meter. You can:

- Set the meter clock, or synchronize it with the PC clock
- Read, plot and save transducer signals
- Clear totalizers
- Save site files to the meter or PC
- Clear sites from the meter
- Print site files to the PC

To edit the properties of your IDM-compatible meter:

1. Highlight the meter (as shown in Figure 6 on page 6).
2. Open the *"Edit"* menu and select the *"Properties"* option, as shown in Figure 8 below.

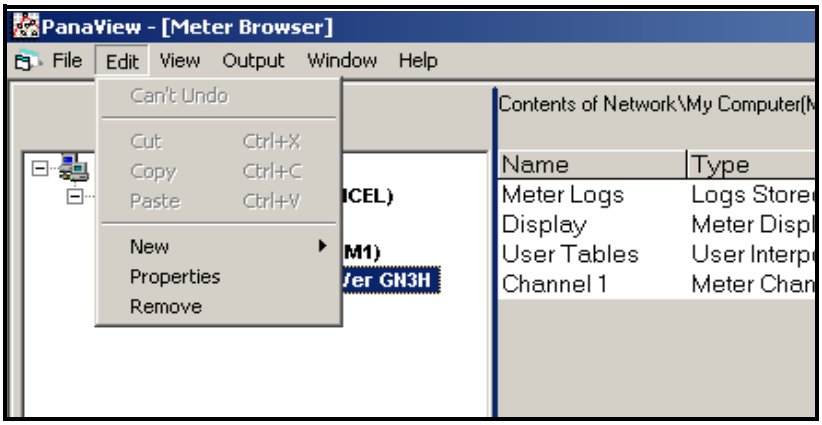


Figure 8: The *Properties* Option in the *Edit* Menu

Editing Meter Properties (cont.)

The window appears similar to Figure 9 below. To perform a specific task, refer to the appropriate section on the following pages.

- Setting the Meter Clock (page 9)
- Reading Transducer Signals (page 10)
- Plotting Transducer Signals (page 10)
- Saving Transducer Signals (page 11)
- Clearing Totalizers (page 11)
- Handling Site Files (page 12)

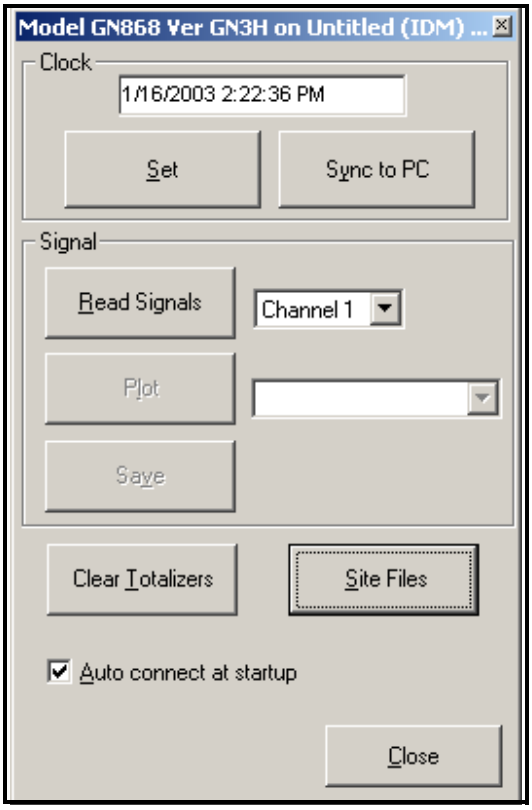


Figure 9: Properties Window for IDM-Based Meter

Note: *For illustration purposes, the meter shown here is a one-channel GN868 flowmeter. Specific parameters will vary with your particular meter.*

Setting the Meter Clock

The meter's *Time* may be reset in three different ways:

- manually enter the time and date in the text box, or
- click on the [Sync to PC] option button to have *PanaView*™ set the time and date to the current PC setting, or
- click on the [Set] option button to open the dialog box shown in Figure 10 below. Set the desired date and time as indicated, and click on the [OK] option button.

Figure 10: Time and Date Selection Window

Reading Transducer Signals

To read a *Signal* from the meter:

1. Click on the *Read Signals* button. (If the meter is a multi-channel instrument, open the Channel drop-down menu and click on the desired channel.) After a moment, the *Properties* window appears similar to Figure 11 below.

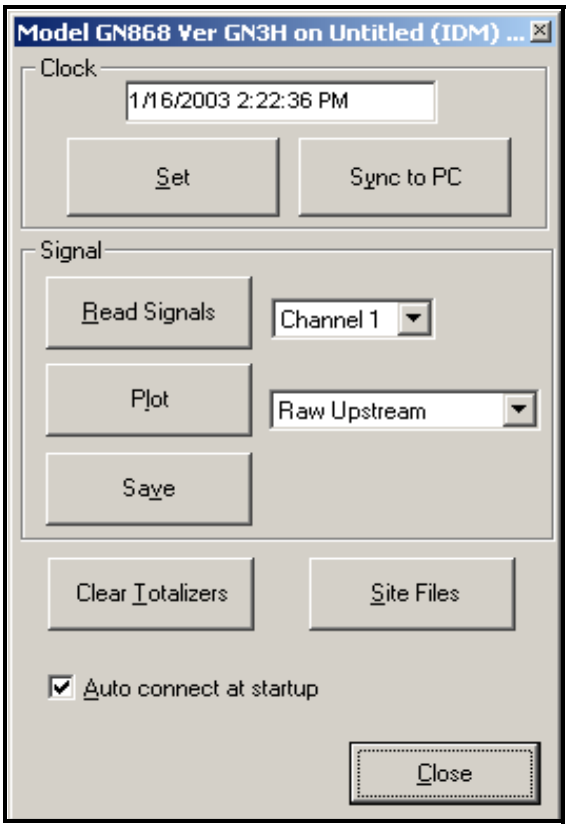


Figure 11: Active Signal Options in Properties Window

2. To select a different signal type, open the signal menu at the right (shown here with *Raw Upstream* highlighted) and click on the desired signal.

Plotting Transducer Signals

To *plot* the selected signal, click on *Plot*. A graphical window opens, as shown in Figure 12 below.

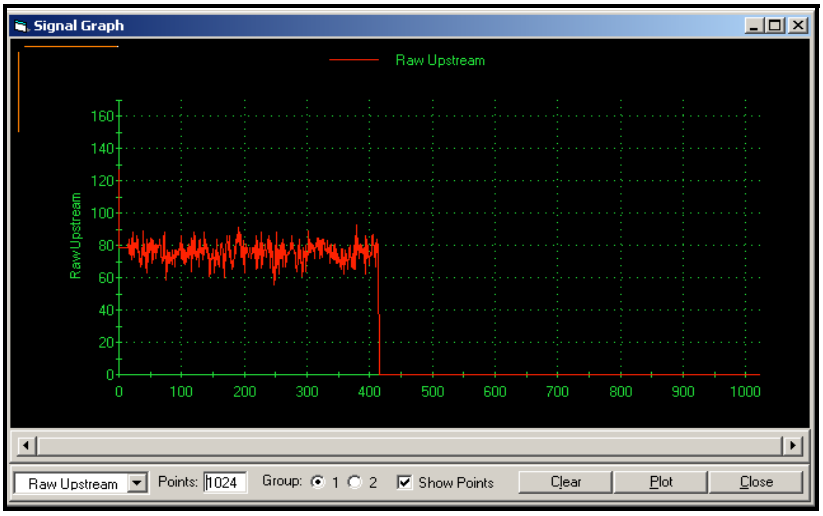


Figure 12: *Signal Graph* Window

Saving Transducer Signals

To *save* the raw signal, click *Save*. A window opens similar to Figure 13 below. Enter the desired name, and click *Save* to save the signal as a text file.

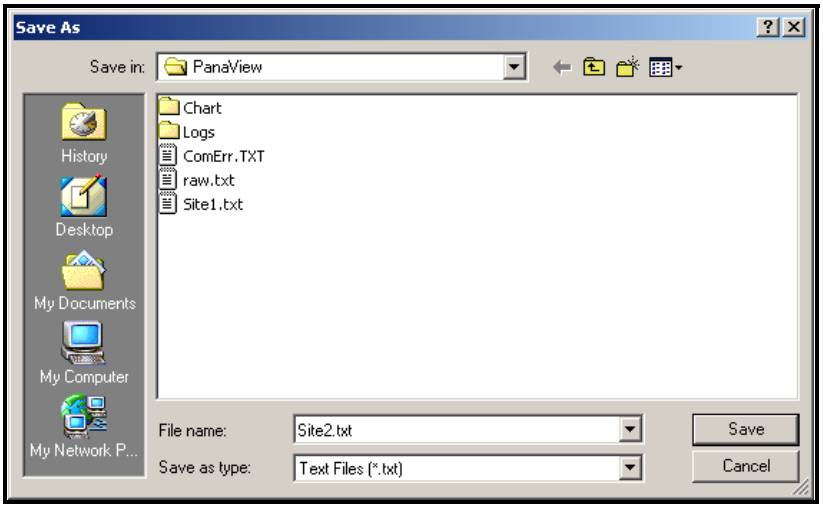


Figure 13: *Save As* Window

Clearing Totalizers

To clear the meter totalizers, click on the *Clear Totalizers* button in the *Properties* window. The meter totalizers are reset to 0.

Handling Site Files

To access site files, click on the *Site Files* button in the *Properties* window. The *Site File Operations* window (shown in Figure 14 below) opens.

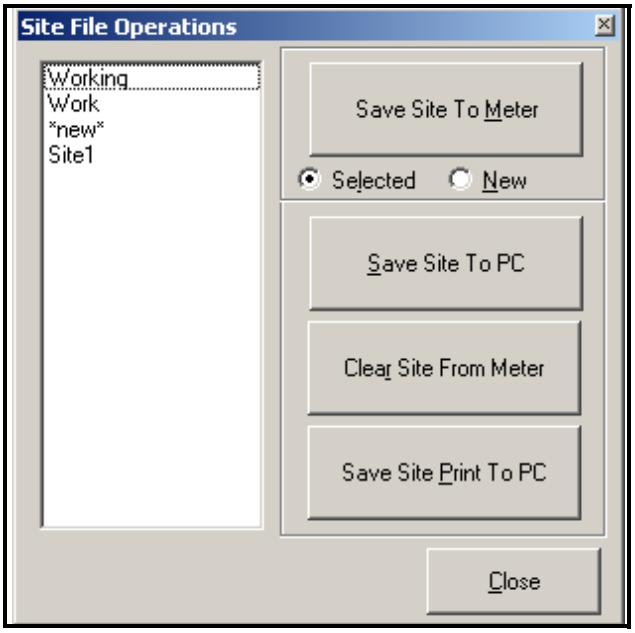


Figure 14: The *Site File Operations* Window

Saving an Existing Site to the Meter

To save an existing site to the meter:

1. Select the radio button for *Selected* and highlight an existing site in the left pane.
2. Then click on the *Save Site to Meter* button. A screen opens similar to Figure 15 below.

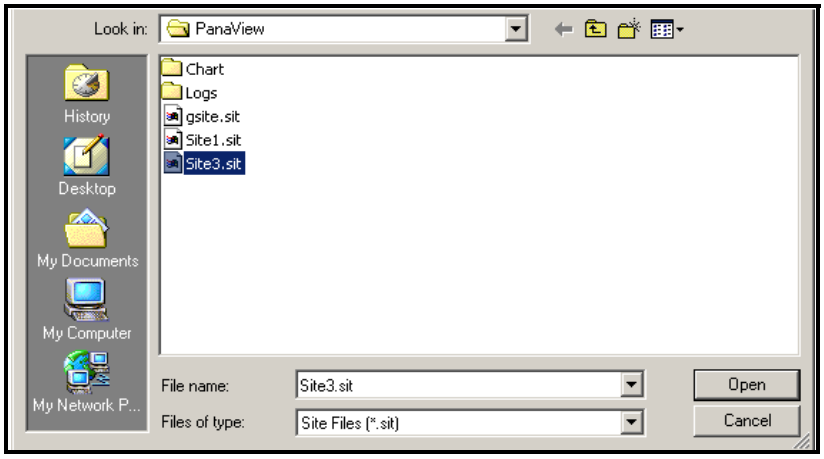


Figure 15: Site File Selection

3. Highlight the desired site and click *Open*. *PanaView*™ sends the site to the meter.

Saving a New Site to the Meter

To save a new site to the meter:

1. Select the radio button for *New* and click on the *Save Site to Meter* button.
2. A window opens similar to Figure 16 below. Enter the desired name, and click [OK].

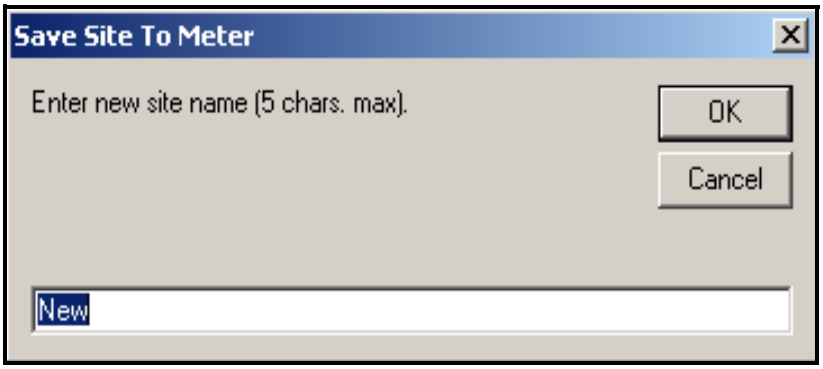


Figure 16: Site Name Entry Window

3. The *Site File Selection* window (Figure 15 on page 12) opens. Highlight a site with the desired settings, and click [Open]. *PanaView*™ saves the site in the meter with the new name and the desired settings.

Saving a Site to the PC

To save a site to the PC:

1. Highlight the desired site in the left pane (see Figure 14 on page 12)
2. Click *Save Site to PC.* A window opens similar to Figure 13 on page 11.
3. Enter the desired site name and click [Save]. *PanaView*™ saves the site in the *PanaView*™ folder unless otherwise specified.

Note: *If you have created a site on the meter after opening the* Site File Operations *window, you must close and reopen the window to click on the new site.*

Clearing a Site from the Meter

To clear a site from the meter:

1. Highlight the site in the left pane (see Figure 14 on page 12).
2. Click *Clear Site From Meter.*
3. The program asks for confirmation. Click [OK]. The meter deletes the designated file.

Saving a Site in Text Form

To store the data from a site file as a text file for display or printout:

1. Highlight the site in the left pane (see Figure 14 on page 12).
2. Click *Save Site Print to PC.*
3. The *Site File Selection* window (Figure 15 on page 12) opens. Enter the desired site name (now with a .prt suffix) and click [Save]. *PanaView™* displays a text version of the site, as shown in Figure 17 below.

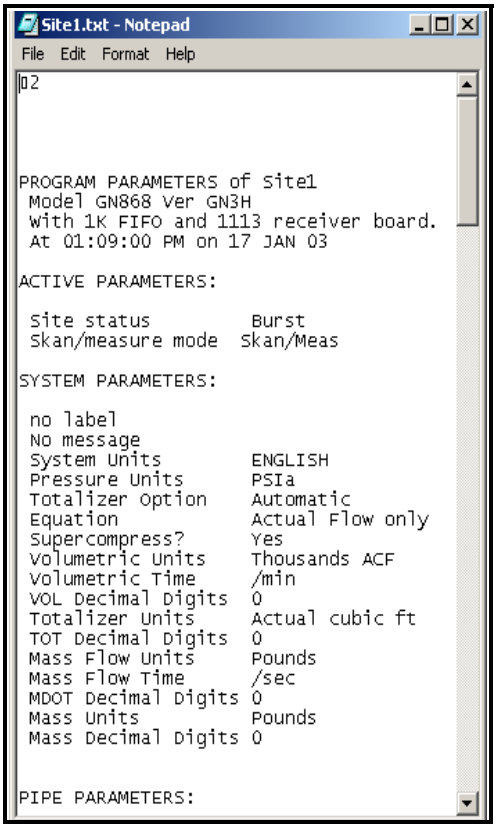


Figure 17: Printout of Site File

4. Click [Close] once to close the *Site File Operations* window, and a second time to close the *Properties* window and return to the *Meter Browser.*

Changing Meter Settings

Through *PanaView*™, users of IDM-compatible meters can handle remote programming of the meter. They can:

- Program and change a meter's operating parameters;
- Set up, start, and stop logs;
- Calibrate and test inputs and outputs;
- Clear various files.

To access meter programming:

1. Enter the *New Meter Browser* option from the "File" menu.
2. Expand the network tree until you reach the desired meter.
3. Then expand the meter tree as shown in Figure 18 below.

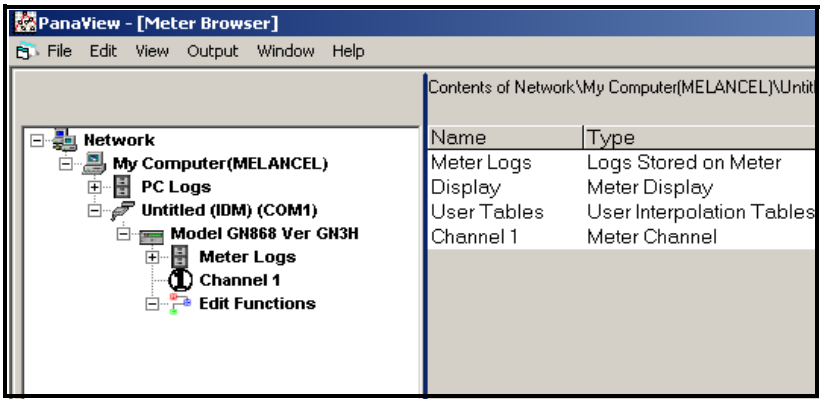


Figure 18: *New Meter Browser* with Meter Branch

Changing Meter Settings (cont.)

4. From the meter tree, expand the *Edit Functions* option. The window now appears similar to Figure 19 below, with a list of available menus. The menus listed are those available on the meter. (For illustration purposes, the specific menus shown are those for a one-channel GN868 flowmeter.)

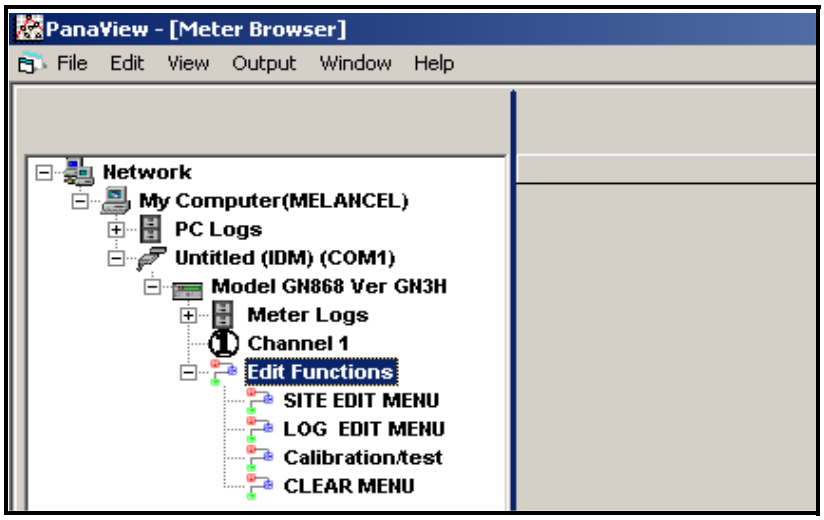


Figure 19: Meter Tree with *Edit Functions* Option

5. To open a particular menu, double-click on that menu on the tree. For example, if you double-click on the Site Edit Menu, a window opens similar to Figure 20 below.

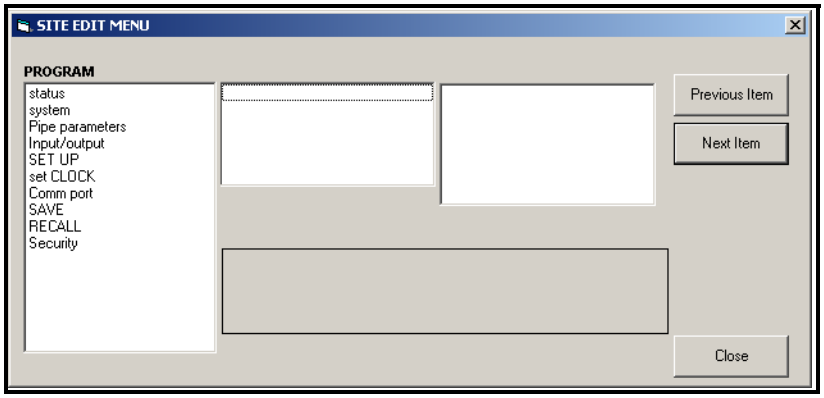


Figure 20: The *Site Edit Menu* Window

Note: *The options listed in the left pane correspond to the options available in the GN868 PROGRAM menu. For more information about the options in your instrument program and about appropriate parameters, consult the user's manual for your particular instrument.*

Changing Meter Settings (cont.)

6. To enter a particular option:

   a. Highlight and double-click on the desired option in the left pane. Figure 21 below shows the first entry (Transducer Number) in the Pipe parameters option. The title above the center pane lists the current entry, while the center pane displays the available selections for that entry.

   b. Click on the desired choice; if the entry requires a numeric value, change the value displayed in the right pane.

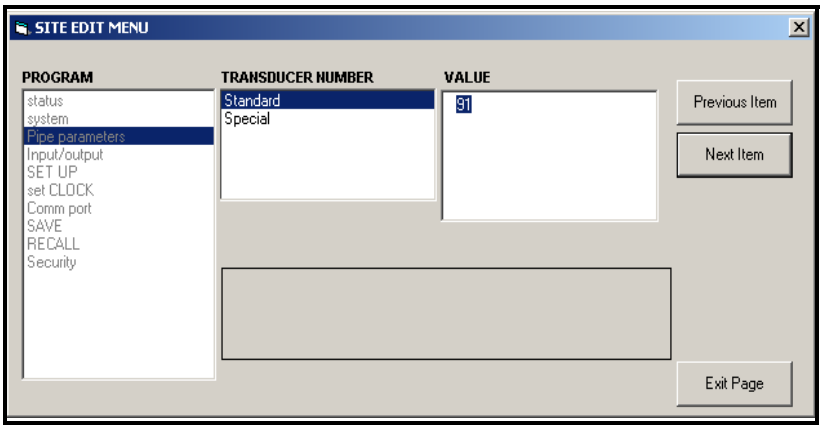


Figure 21: The Pipe Parameters Option in the Site Edit Menu

   c. Do one of the following:

      Click on [Next Item] to proceed to the next menu item,

      or

      Click on [Previous Item] to return back through the menu to a previous item.

Note: *If you click on either [Next Item] or [Previous Item] without changing the settings, the current settings remain unchanged.*

As you step through the menu, the bottom panel lists the current settings you have modified or left unchanged, as shown in Figure 22 on page 18. If you modify or step through more than five items, a scroll bar at the right of the panel lets you review the earlier settings.

Changing Meter Settings (cont.)

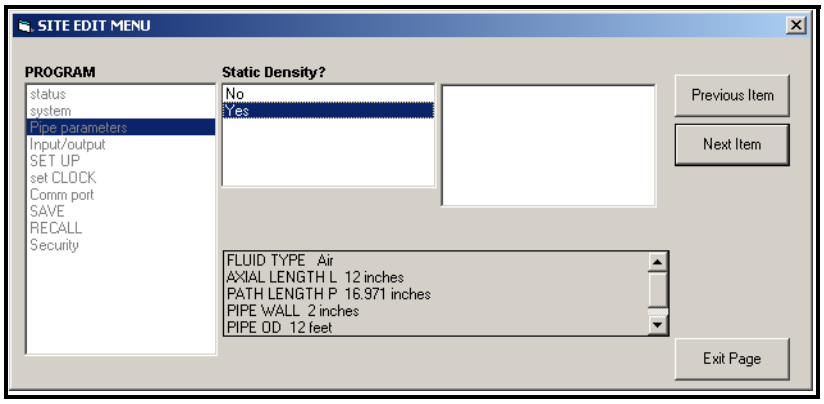


Figure 22: Site Edit Menu with Current Settings

7. When you have completed entering parameters in a given option, click [Exit Page] to close the option. You can then double-click on another option, or click [Close] to close the window.

You can double-click on another menu to modify its settings, or return to the *New Meter Browser.* For additional *PanaView™* functions, refer to the *PanaView™ User's Manual.*

USA

1100 Technology Park Drive
Billerica, MA 01821-4111
Web: www.gesensing.com

Ireland

Shannon Industrial Estate
Shannon, County Clare
Ireland