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Manufacturer: Sensus Metering Systems, Inc. Model: 100A

Users Manual



OMNI

Owner and User Manual: UniPro/OMNI Communicator Model 100A

Revision 1

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Sensus 1501 Ardmore Boulevard, Suite 601 Pittsburgh, PA 15221 USA 1-800-METER-IT (638-3748) 1-800-888-2403 (fax) www.sensus.com Document: UniPro/OMNI Communicator Model 100A Document Number: WRMTM-40000 **Warning:** Changes or modifications to this device not expressly approved by Sensus Metering Systems could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off an on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment is in direct contact with the body of the user under normal operating conditions. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

The term "IC:" before the radio certification number only signifies that Industry Canada technical specifications were met.

This Class B digital apparatus meets all requirements of the Canadian Interference Causing Equipment Regulations. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Cet appareillage numérique de la classe B répond à toutes les exigences de l'interférence canadienne causant des règlements d'équipement. L'opération est sujette aux deux conditions suivantes: (1) ce dispositif peut ne pas causer l'interférence nocive, et (2) ce dispositif doit accepter n'importe quelle interférence reçue, y compris l'interférence qui peut causer l'opération peu désirée.

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1 Overview of UniPro

The UniPro application programs, logs data from, and tests $T^2/C^2/F^2$ meters. Versions of the software have been created for both a laptop PC and the Sensus AR5000 Handheld/AutoRead.

A separate hardware interface device (communicator 100A) allows the meter to be read, etc. using the laptop's USB port and the AR5000's serial port.

Figure 1-1shows the basic screen for the UniPro software.

Command Bar	Program Wizard	Defaults Data Log	Accuracy Test	Reports Error Log	Help
		Connect the	e meter and choose e following options:	one of	
Program Area	• •	Perform Programm	ning	ОК	
Meter		Data Transfer Progress:	Progress	Exit Program	E MA
Status	Status		Bar	Button	

Figure 1-1: Screen Layout for UniPro

Command Bar: Contains the commands to open the various program elements.

Program Area: Displays the program elements.

Meter Status: Green indicates the meter is properly linked; red indicates the meter is not properly linked.

Progress Bar: When data is read from the meter, the progress bar indicates the progress of the transfer.

Exit Program Button: Select the Exit button to end the program.

2 Hardware Setup

2.1 Attaching the Hardware

- 1. Attach the USB connector from the OMNI Communicator 100A to any available USB port on your laptop.
- 2. Check your Device Manager to determine the USB port's Com Port designation.
- **3.** Select Start→Control Panel→System→Hardware Tab→Device Manager. The Device Manager window looks similar to the one shown in Figure 2-1.



Figure 2-1: Typical Device Manager Window

4. Select Ports in the list and note the USB Serial Port COM assignment (COM8 in the illustration).

2.2 Setting the COM Port

 Double-click on the UniPro icon on your desktop. The UniPro Program Wizard screen is displayed (see Figure 2-2).



Figure 2-2: Selecting Help

 Click Help in the Menu Bar. The Help/Communications Port screen is displayed as shown in Figure 2-3.

onnection	License	

Figure 2-3: Help/Connection Screen

- **3.** In the lower left corner, in the Connection partition, select the proper COM port from Step 4 of Section 2.2.
- 4. Click **Program Wizard** to return to the Program Wizard screen.

3 Programming an OMNI T²/C²/F² Register

Program Wizard	Defaults	Data Log	Accuracy Test	Reports	Error Log	Help
		Connect the r the fo	neter and choos Ilowing options:	e one of		
	Perfo	orm Programmin	g	ОК		
	View	All Parameters		ОК		

1. From the Program Wizard screen, click the ox button to the right of Perform Programming. The system displays the Programming Wizard: Meter Type screen.

Meter Type	TB2E	
Firmware Version	00.94	
Meter Size	1.5" - 3"	
Default Programmable ID	000006260259	
Current Programmable ID	000006260259	
New Programmable ID	000006260259	
Use Default Use Curren	t K to continue.	

The Programmable ID identifies the particular meter to the data retrieval system.

- **2.** Select from three options:
 - Click the Use Default button to select the Default Programmable ID.

- Click the Use Current button to select the Current Programmable ID.
- Type in a new ID in the New Programmable ID field.
- 3. Click the ox button to display the Programmable Text screen.

Programming	Wizard : Programmable Text	Step 2 of 10
	Enter Programmable Text: Default: Meter 1234 Current: Meter 1234 New: Meter 1234 <i>Use Default Use Current</i>	
Back		OK Cancel

- **4.** Select from three options:
 - Click the Use Default button to select the Default Programmable Text.
 - Click the Use Current button to select the Current Programmable Text.
 - Type in new text in the **New** field.
- 5. Click:
- Back to return to the Programmable ID screen.
- Cancel to stop programming and return to the Program Wizard screen.
- OK to accept the Programmable Text and display the Reading Digits screen.

Default Reading Digits: ****4321 Units of Measure: Gallons	Resolution AMR: 1s Total: 1s	Current Reading Digits: ****4321 Units of Measure: Cubic Meters	AMR: 0.01s Total: 0.01s
Reading Digits	5 4	321.	
Units of Measure Gallons Cubic Meters	ResolutionAMR:1sTotal:1s		

The Reading Digits screen allows you to set the number of digits that are displayed on the register and the units of measure for the reading.

The window lists the Default settings and the Current settings; the Resolution sections automatically calculate the resulting AMR and Total display resolutions for the settings.

- **6.** Select from three options:
 - Click the Use Default button to select the Default Reading Digits.
 - Click the Use Current button to select the Current Reading Digits.
 - Select a New set of reading digits by clicking the first and last digits of the range you wish to display. For example to display the least significant four digits click the 4 box, then the 2 box. The selected digits will display a white background and the unselected digits will display a gray background.
- 7. Select a Units of Measure from the drop-down list.



If you do not make one of the above selections, the system will automatically use the Default settings.

- 8. Click:
- Back to return to the Programmable Text screen.
- Cancel to stop programming and return to the Program Wizard screen.
- OK to accept the Reading Digits and display the Reading Mode screen.

Programm	ing Wizard : Reading Mode	Step 4 of 10
	Enter Reading Mode:	
	Default: Normal Reading String	
	Current: Normal Reading String	
	New: Normal Reading String ~	
	Use Default	
Back		OK Cancel

With a Normal Reading String, the data stream from the register contains the meter reading and the Meter ID only. With an Extended Reading string, the data stream includes information such as the manufacturer fields and meter/ register specific data.

- **9.** Select from three options:
 - Click the Use Default button to select the Default Reading Mode.
 - Click the Use Current button to select the Current Reading Mode.
 - Use the drop-down list in the **New** field to select either the Normal or Extend Reading String.

10. Click:

- Back to return to the Reading Digits screen.
- Cancel to stop programming and return to the Program Wizard screen.
- ox to accept the Reading String and display the Pulse Output screen.

Pulse Output: ******* Units of Measure: Gallons	Pulse Output: ******* Units of Measure: Cubic Meters
New	
8 7 6 5	4 , 3 2 1
Units of Measure: Gallons	Resolution: 0.01s
Ise Default Use Current	

The Pulse Output determines the decimal place that a pulse represents in the pulse output. The screen displays the Default and Current settings with the Units of Measure and Resolution for each.

- **11.** Select from three options:
 - Click the Use Default button to select the Default Pulse Output.
 - Click the Use Current button to select the Current Pulse Output.
 - Select a New Pulse Output by clicking on the decimal place that you want a pulse to represent.
- 12. Click:
- Back to return to the Reading Mode screen.
- Cancel to stop programming and return to the Program Wizard screen.
- ox to accept the Pulse Output and display the Display Mode screen.

Programming	y Wizard : Display Mode	Step 6 of 10
	Enter Display Mode: Default: AMR Current: Total New: AMR Use Default Use Default	
Back		OK Cancel

The Display Mode screen determines whether the display will show the Total or AMR output. The Total display will always show the full eight digits of the reading. The AMR output will display the output of the AMR register, selected in the Reading Digits screen.

13. Select from three options:

- Click the Use Default button to select the Default Display Mode.
- Click the Use Current button to select the Current Display Mode.
- Use the drop-down list in the **New** field to select either the Total or AMR Display Mode.

14. Click:

- Back to return to the Pulse Output screen.
- Cancel to stop programming and return to the Program Wizard screen.
- OK to accept the Display Mode and display the Summary screen.

Fac	tory ID	000006260259	_
Pro	grammable ID	000006260259	_
Pro	grammable Text	Meter 1234	
Rea	iding Digits	****4321	
Res	olution	AMR 1s Total 1s	
Uni	s of Measure	Gallons	
Rea	iding Mode	Normal Reading String	
Pul	se Output	*****	
Dis	olay Mode	AMR	

The Summary screen shows the selections made in Steps 2 to 13.

- 15. Click:
- Back to return to the Display Mode screen.
- Cancel to stop programming and return to the Program Wizard screen.
- OK to accept the data as shown and program the register.

If you accept the data in Step 14, the system displays the Additional Meter Programming screen.



16. Click:

• Yes to program another meter with the same settings.

• No to discontinue programming and go the end screen (skip to Step 17).



17. Click:

- Back to return to the Additional Meter Programming screen.
- Cancel to stop programming and return to the Program Wizard screen.
- OK to program another meter with the same settings.

Programming Wizard : Finished	Step 10 of 10
Programming finished.	
	DK

The Finished screen indicates that the register programming is complete.

18. Click ox to acknowledge the screen and return to the Program Wizard screen.



4.1 Defaults Screen

From the Program Wizard screen:

Program Wizard	Defaults	Data Log	Accuracy Tes	t Rep	orts	Error Log	1	Help
		Connect the	Defaults e meter and cho	ose one o ns:	f			
	Perform	n Programn	ning		ОК			
	View A	II Paramete	ers		ОК			

Click **Defaults** in the command bar to open the Default Options list.

Help

4.2 Setting Turbo2e/OMNI Defaults

From the Defaults screen:

1. Click **Turbo2e** in the option list, then click **OK**. The system displays the Programmable ID screen.



- **2.** Check the box to use the Factory ID as the default Programmable ID. Uncheck the box to enter your own Programmable ID.
- 3. Click:
- Cancel to stop programming and return to the Default Options screen.
- **ox** to display the Programmable Text default screen.

TB2E Defaults Wizard : Programmable Text	Step 2 of 8
Enter Programmable Text	:
Meter 1234	
Back	OK Cancel

- 4. Enter the text you wish to serve as the default Programmable Text.
- 5. Click:
- Back to return to the Programmable ID screen.
- Cancel to stop programming and return to the Default Options screen.
- ox to display the Reading Digits default screen.

F	TB2E Defaults Wizard : Reading Digits Step 3 of 8
	Reading Digits 8 7 6 5 4 3 2 1
	Gallons
	Back OK Cancel

The Reading Digits sets the number of digits that are displayed on the register and the units of measure for the reading.

- 6. Select a default set of reading digits by clicking the first and last digits of the range you wish to display. For example, to display the least significant four digits, click the 4 box then the 2 box. The selected digits will display a white background and the unselected digits will display a gray background.
- 7. Select the Units of Measure from the drop-down list.
- 8. Click:
- Back to return to the Programmable Text screen.
- **Cancel** to stop programming and return to the Default Options screen.
- ox to display the Reading Mode default screen.

TB2E Defaults Wizard : Reading Mode	Step 4 of 8
Enter Reading Mode:	
Normal Reading String	
Back	OK Cancel

9. From the drop-down list, select Normal or Extended Reading String as the default Reading Mode.

10. Click:

- Back to return to the Reading Digits screen.
- **Cancel** to stop programming and return to the Default Options screen.
- ox to display the Pulse Output default screen.

TB2E Defaults Wizard : Pulse Output	Step 5 of 8
Enter Pulse Output: 8 7 6 5 4 3 2 Units of Measure: Gallons	1
Back	Cancel

The Pulse Output determines the decimal place that a pulse represents in the pulse output.

- 11. Select the decimal place for the default Pulse Output.
- 12. Click:
- Back to return to the Reading Mode screen.
- Cancel to stop programming and return to the Default Options screen.
- ox to display the Display Mode default screen.

1	TB2E Defaults Wizard : Display Mode	Step 6 of 8
	Enter Display Mode:	OK Cancel

The Display Mode determines whether the display will show the Total or AMR output. The Total display will always show the full eight digits of the reading. The AMR output will display the output of the AMR register, selected in the Reading Digits screen.

13. From the drop-down list, select AMR or Total as the default Display Mode.

14. Click:

- Back to return to the Pulse Output screen.
- Cancel to stop programming and return to the Default Options screen.
- or to display the Summary screen.

Programmable ID	Use Factory ID	
Programmable Text	Meter 1234	
Reading Digits	****4321	
Units of Measure	Gallons	
Reading Mode	Normal Reading String	
Pulse Output	*****	
Display Mode	AMR	
Click OK to save defa	Ults or click Back to modify any values	

15. Click:

- Back to return to the Display Mode screen.
- Cancel to reject all defaults and return to the Default Options screen.
- OK to accept the data as shown and save the defaults.

If click or in Step 14, the system displays the Defaults Finished screen.



16. Click ox to return to the Default Options screen.

4.3 Setting ICE Defaults

From the Defaults screen:

 Click ICE in the option list, then click OK. The system displays the Programmable ID screen.



2. Check the box to use the Factory ID as the default Programmable ID. Uncheck the box to enter your own Programmable ID.

- 3. Click:
- Cancel to stop programming and return to the Default Options screen.
- oκ to display the Programmable Text default screen.



- 4. Enter the text you wish to serve as the default Programmable Text.
- 5. Click:
- Back to return to the Programmable ID screen.
- Cancel to stop programming and return to the Default Options screen.
- or to display the Reading Digits default screen.

ICE Defaults Wizard : Reading Digits	Step 3 of 7
Enter Reading Digits: 8 7 6 5 4 3 2 Back	1 Cancel

The Reading Digits sets the number of digits that are displayed on the register and the units of measure for the reading.

- 6. Select a default set of reading digits by clicking the first and last digits of the range you wish to display. For example, to display the least significant four digits, click the 4 box then the 2 box. The selected digits will display a white background and the unselected digits will display a gray background.
- 7. Click:
- Back to return to the Programmable Text screen.
- Cancel to stop programming and return to the Default Options screen.
- ox to display the Reading Parameters default screen.

ICE Defaults Wizard : Reading Pau	rameters	Step 4 of 7
Enter Reading Parameters: Reading Multiplier Choose a Multiplier from -99 to 99:	Reading Unit Cubic Meters Cubic Meters	~
□ Disabled Back	Cubic Feet Cubic Inches Cubic Yards Gallons Imperial Gallons Acre Feet Kiloliters	Cancel

- 8. In the Reading Multiplier box, enter a default multiplier from -99 to 99.
- 9. In the Reading Unit drop-down, select a default unit.
- 10. Click:
- Back to return to the Reading Digits screen.
- Cancel to stop programming and return to the Default Options screen.
- ox to display the Reading Mode default screen.



- **11.** From the drop-down list, select Normal, Extended, or Fixed Reading String as the default Reading Mode.
- 12. Click:
- Back to return to the Reading Parameters screen.
- Cancel to stop programming and return to the Default Options screen.
- or to display the Summary screen.

Programmable ID	Do NOT use Factory ID	
Programmable Text Reading Digits	Meter 23456	
Reading Parameters: Reading Multiplier Reading Unit Disabled	0 Cubic Meters No	
Reading Mode	Normal Reading String	
Click OK to save defaults	or click Back to modify any values.	

13. Click:

• Back to return to the Reading Mode screen.

4-10

- Cancel to reject all defaults and return to the Default Options screen.
- OK to accept the data as shown, save the defaults.

If click ox in Step 13, the system displays the Defaults Finished screen.

ICE Defaults Wizard : Einished	Step 7 of 7
Defaults saved	
Bolduits Saved.	
	ОК

14. Click ox to return to the Default Options screen.

4.4 Setting Miscellaneous Defaults

From the Defaults screen:

1. Click Miscellaneous in the option list, then click OK. The system displays the Programmable ID screen.



- 2. Enter your company name in the Company Name box.
- 3. Click:
- Back to return to the Default Options screen.
- **Cancel** to stop programming and return to the Default Options screen.
- ok to display the Finished screen.



4. Click ox to return to the Default Options screen.

5 Data Log

1. Open UniPro or navigate to the Program Wizard screen:



2. Select Data Log in the command bar to open the Data Log Controls screen:

November, 2007	5		
Sun Mon Tue Wed Thu Fri	Sat 3		
4 5 6 7 8 9	10		
11 12 13 14 15 16	17		
18 19 20 21 22 23	24		
25 26 27 28 29 30	1		
2 3 4 5 6 7	8		
Today: 11/26/2007			

3. Use the drop down list calendars to select a Start Date and End Date for the data read from the register.

The register retains up to 30 days of data. The default dates are the current date for the End Date and 30 days before the end date for the Start Date. The software will only accept a start date if it contains data. If the register contains less than 30 days, a popup window will appear to suggest the start date.

4. Click the Read Meter button.

The Data Transfer Progress bar shows the data transfer progress.

5. When the data transfer bar clears, select the Graph tab to view the data graph.



The graph charts Consumption, Minimum Flow, and Maximum Flow for the period defined in Step 3. The default time scale is Month. You can zoom in to a time scale of Week or Day by left-clicking on the graph or by selecting from the Time Scale drop down list. You can zoom out the time scale by right-clicking on the graph.

You can also click on Flow or Consumption on the left of the Graph Controls to view or not view the respective graph data.

6. Click the Tabular tab to view the data in table form.

Date	Time	Min Flow	Max Flow	Consumption	Statistics.	
1/26/2007	5:00 PM	0.410	50.955	50133	Max Flow:	72 333
1/26/2007	6:00 PM	1.625	58.325	51340	Max. How.	72.000
1/26/2007	7:00 PM	3.342	53.069	52782	Min. Flow:	0.000
1/26/2007	8:00 PM	3.342	51.370	54203		
1/26/2007	9:00 PM	3.191	51.843	55608	Average Flow:	0.438
1/26/2007	10:00 PM	3.240	57.750	57024		
1/26/2007	11:00 PM	1.638	52.654	57887	Average Consumption:	451
1/27/2007	12:00 AM	1.625	54.352	58799	Total Concumption:	7/270
1/27/2007	1:00 AM	1.645	54.352	59693	Total Consumption.	/43/8
1/27/2007	2:00 AM	1.632	52.245	60582		
1/27/2007	3:00 AM	1.087	53.069	61503		
1/27/2007	4:00 AM	1.091	48.233	62571		
1/27/2007	5:00 AM	1.619	42.123	63650		
1/27/2007	6:00 AM	3.214	41.801	64753		
1/27/2007	7:00 AM	3.240	48.233	65893		
1/27/2007	8.00 AM	3 166	51 843	67235		

The Tabular view lists the Date, Time, Minimum Flow, Maximum Flow, and Consumption by hour for the period defined in Step 3. The Statistics box to the right of the table lists the Maximum Flow, Minimum Flow, and Total Consumption, and calculates the Average Flow and Average Consumption for the period.

6 Reports

Three report types are available: Meter Programming, Data Logging, and Accuracy Testing. You can view the reports on your screen and you can print them.

6.1 Opening a Report

1. Click Reports in the command bar.

Program Wizard	Defaults Data Log	Accuracy Test	Reports	Error Log	Help
	(Connect t	Reports the meter and choose he following options:	one of		
	Perform Program View All Parame	nming ters	ОК ОК		

The system shows the Reports screen.

leter Programming	• Open File	Page Setup	Print Preview	Print
Programming 11/20/2	007			
Meter Type:	TB2E			
Firmware Version:	00.94			
Meter Size:	1.5" - 3"			
Factory ID:	000006260259			
Programmable ID:	000006260259			
Programmable Text:	Meter 1234			
Reading Digits:	****4321			
Resolution AMR: Total:	1s 1s			
Units of Measure:	Gallons			
AMR Output Mode:	Normal Reading String			
Pulse Output:	*******			
Pulse Resolution:	0.1s			
Display Mode:	AMR			

- 2. In the Available Reports section, select the type of report you want from the drop down list.
- **3.** Click the Open File button. A standard Windows Open dialog box opens.
- 4. Select the appropriate register type, ICE or Turbo and click the Open button. The window presents the directory of stored reports. The reports are listed by the Programmable ID and the date and time that the report was stored. For example, a data log listed as 06230138_2007112680834 opens a report for meter ID 06230138 stored on 11/26/2007 at 8:08:34 a.m.
- 5. Select the date of the report you wish to view and click the Open button. The screen shows the report you selected.

The following illustration shows a typical Data Log report.

ailable Reports								
ata Logging		• Oper	n File		Page Setup	Print Preview) (Print
stics								
x. Flow:	72.3	33						
ı. Flow:	0.0	00						
erage Flow:	0.5	9						
erage Consumption:	3	41						
al Concumption:	494	57						
a Log								
a Log Date	Time	Min Flow	Max Flow	Consumption				
a Log Date 11/20/2007	Time 5:00 PM	Min Flow 0.001	Max Flow 22.405	Consumption 14				
a Log Date 11/20/2007 11/20/2007	Time 5:00 PM 6:00 PM 7:00 PM	Min Flow 0.001 0.001	Max Flow 22 406 27 556 27 57	Consumption 14 24				
a Log Date 11/20/2007 11/20/2007 11/20/2007	Time 5:00 PM 6:00 PM 7:00 PM 8:00 PM	Min Flow 0.001 0.001 0.001	Max Flow 22.406 27.556 20.547 20.719	Consumption 14 24 27 29				
a Log Date 11/20/2007 11/20/2007 11/20/2007 11/20/2007	Time 5:00 PM 6:00 PM 7:00 PM 8:00 PM 9:00 PM	Min Flow 0.001 0.001 0.003 0.003 0.002	Max Flow 22.406 27.556 20.547 20.218 69.678	Consumption 14 24 27 32 45				
Date 11/20/2007 11/20/2007 11/20/2007 11/20/2007 11/20/2007 11/20/2007	Time 5:00 PM 6:00 PM 7:00 PM 8:00 PM 9:00 PM 10:00 PM	Min Flow 0.001 0.001 0.003 0.003 0.002 0.003	Max Flow 22.406 27.556 20.547 20.218 68.678 67.526	Consumption 14 24 27 32 45 56				
a Log 11/20/2007 11/20/2007 11/20/2007 11/20/2007 11/20/2007 11/20/2007	Time 5:00 PM 6:00 PM 7:00 PM 9:00 PM 10:00 PM 11:00 PM	Min Flow 0.001 0.001 0.003 0.003 0.002 0.003 0.002	Max Flow 22.406 27.556 20.547 20.218 69.678 67.526 0.003	Consumption 14 24 27 32 45 66 66 66				
a Log Date 11/20/2007 11/20/2007 11/20/2007 11/20/2007 11/20/2007 11/20/2007 11/21/2007	Time 5:00 PM 6:00 PM 7:00 PM 9:00 PM 10:00 PM 11:00 PM 12:00 AM	Min Flow 0.001 0.001 0.003 0.002 0.003 0.000 0.000	Max Flow 22 405 27 556 20 547 20 218 63 678 67 526 0 003 3 3316	Consumption 14 24 27 32 455 66 66 66 66 66				

6. Use the scroll bars to view the remainder of the Data Log.

6.2 Printing a Report

To print the report you are viewing:

- 1. Click the Page Setup... button to review the default printer's page settings, such as orientation, margins, etc.
- 2. Click the Print Preview... button to review the appearance of the report.
- 3. Click the Print... button to open the Print dialog for your default printer.

7

Error Log

The Error Log displays UniPro operational errors and faults, and Omni register error codes.

7.1 Viewing and Acknowledging Errors

To view the Error Log screen, select Error Log in the command bar.

The top section of the Error Log screen displays the operational errors that have occurred. These include

ErrorIDShortDescriptionLongDescriptionCategory

1Exception occurredA fatal error has occurred. Please contact 2
factory or service personnel.
2License Expiration WarningThe license is about to expire. Please obtain a 1
new license file.
3Communication TimeoutFailed to connect or communicate with the meter.1
4License ErrorInvalid license. Please obtain a new license file.2
5A non-fatal error has occurredA non-fatal error has occurred1
6There is no data to retrieve from the data log.There is no data to retrieve from the data log.1
7The connected meter does not support the Data The connected meter does not support the Data 1
Log featureLog feature.
8The connected meter does not support this The connected meter does not support this 1
feature.feature.

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