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Getting Started

1. Getting Started

1.1. System Overview

The Badger ORION Data Profile Viewer is a tool to view and analyze meter usage data accumulated by the ORION Data Profiler.

The ORION Data Profiler is available in two versions.

- Integral: The Integral Profiler is part of the ORION Transmitter.
- Remote: The Remote Profiler is a separate box that is programmed with the serial # of an ORION transmitter and a built-in ORION receiver to capture and store reading data. It can be used with any ORION water or gas narrow band transmitter.

Both the Remote and Integral Profiler are programmed with the time interval to measure consumption. Once programmed and installed in the field, they store transmitter data for later retrieval by the Radix® Handheld Data Collector, ORION Mobile Reading System or Trimble® Ranger™.

1.2. System Components/Configurations

Transmission Components

- ORION Transmitter with Integral Data Profiler
- ORION Water or Gas Narrow Band Transmitter and a Remote Data Profiler

Collection and Viewing Components

- Radix®
 - Radix Handheld Data Collector with ORION Profiling Software
 - Radix Docking Station and Data Cable attached to a PC.
 - PC with the Profile Viewer Software Installed
- Badger ORION Laptop
 - ORION Laptop with ORION Profiler, Profile Extraction Software Installed
 - ORION Laptop with the Profile Viewer Software Installed
- Trimble Ranger
 - Trimble® Ranger™ Handheld with ORION Profiling Software
 - Memory Stick
 - PC with Profile Viewer Software Installed

Getting Started

1.3. Starting the ORION Profile Viewer

Start the ORION Profile Viewer using the shortcut located on your Windows® Desktop.



The application has one main screen with three tabs. The first tab shows a brief introduction and overview of the operations that can be performed. The other two tabs are for the functions transferring profiles and viewing profiles.



Transfer Profiles

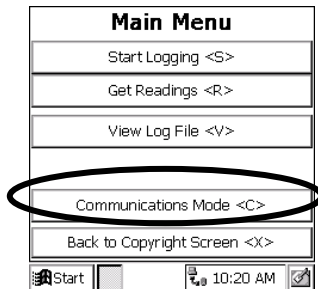
2. Transfer Profiles

2.1. Get Stored Profiles (Radix)

After using the Radix® Data Collector to get information from the ORION Remote or Integral Data Profiler, attach the Radix to the PC through the docking station.

Follow steps shown on the Transfer Profiles tab to transfer profiles from the Radix to the PC. Each profile transferred is removed from the Radix. The profiles are stored on the PC for later viewing and reporting.

Note: To activate Communications Mode **on the Radix**, select the Communications Mode function from the ORION Profiling software Main Menu, by entering the letter **C**.



Follow instructions on the screen on the PC. Click **Continue** to open the ftp connection set up previously for communicating with the Radix. Instructions for setting up this connection, specific to the operating system being used, are provided in a separate document.



Transfer Data Profiles

A message displays while the connection opens. There is a 14-second delay to complete the process.



Note: A message in the status bar at the bottom of the screen displays the connection status. Once a connection is made to the Radix®, be sure to click **Close Radix Connection** before removing the Radix from the dock. This is required so that the Radix receives the command to restart the ORION Profiling software and display the Copyright screen.

Transfer Data Profiles

2.2. Get Stored Profiles (Laptop)

If the Badger ORION Profile Viewer is running on an ORION Laptop, it can activate the ORION Profiler extraction software and then process the profile data received from Integral or Remote Data Profilers.

To control whether the Profile Viewer uses the Radix or Laptop, click **Run on Laptop** under the File menu.

A check mark in front of the item indicates that the Profile Viewer will use the ORION Profiler extraction software rather than attempt to connect to the Radix.



Follow steps shown on the **Transfer Profiles** tab to access profile data and store it for later viewing and reporting.



Transfer Data Profiles

2.3. Get Stored Profiles (Trimble® Ranger™)

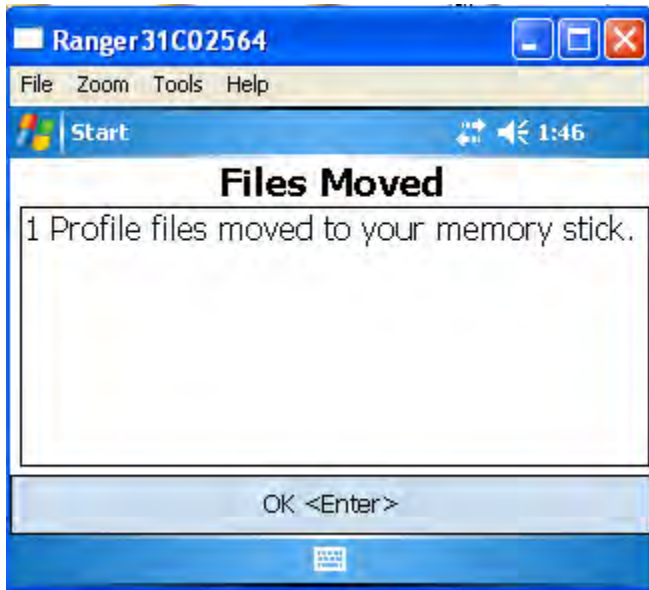
After using the Trimble to get information from the ORION Remote or Integral Data Profiler, insert the memory stick into the Trimble to unload the profile(s).



Touch **Transfer Profiles <T>**.



Choose **Yes <Y>** to complete the transfer of the profile(s) to the memory stick.



Touch **OK <Enter>** and remove memory stick.

Now insert the memory stick into the USB port on your computer.

Open Profile Viewer Software



Select **View Profiles**.

Click on **Import**.

Navigate to and click on the **Trimble** folder on the appropriate drive.

Click on the **CONNECT** folder.  CONNECT

Click on the **PROFILES** folder.  PROFILES

Choose the profile you want to view.  71003169 20081201 1335.csv

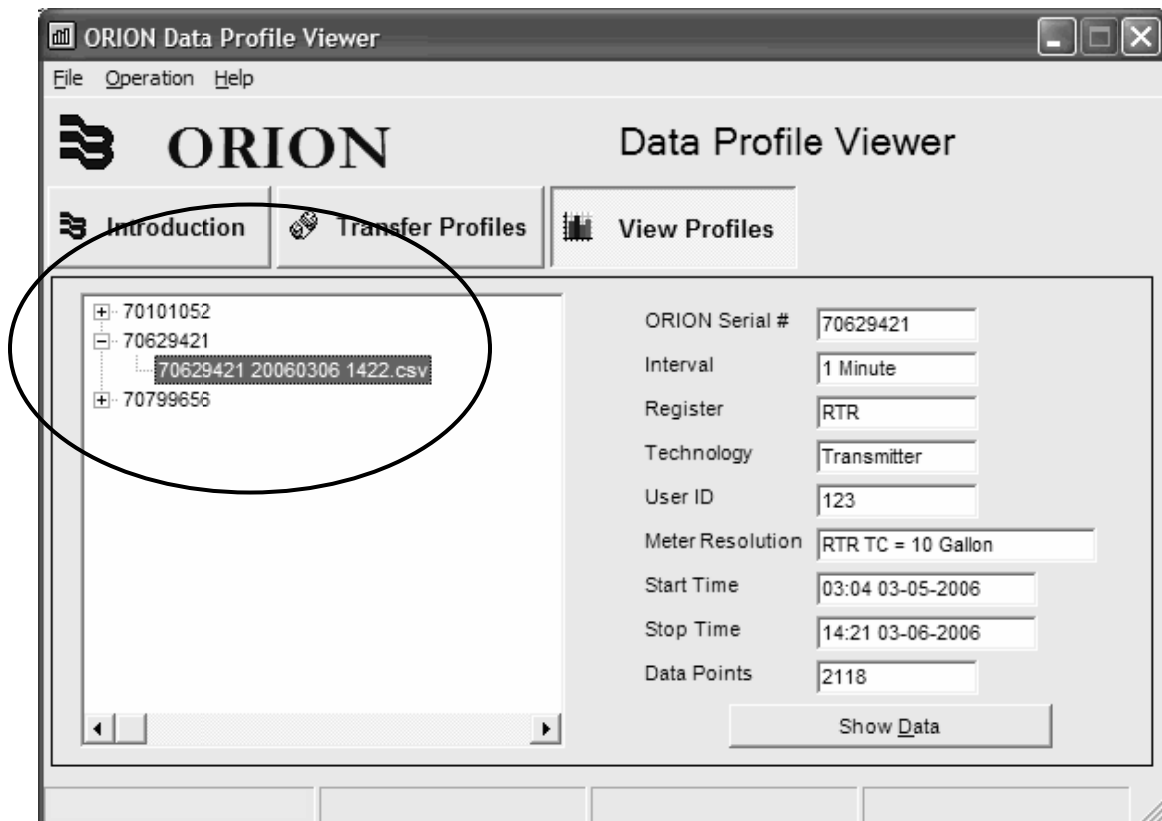
Click **OPEN**.

VIEWING THE PROFILES

Now that the profiles have been extracted and copied to the View folder, you will be able to use the Data Profile Viewer software to view, print graphs and reports of the extracted data.

Selecting the Profile to View

1. A list of the Badger ORION module serial numbers which have extracted profiles will appear on the left. Each module serial number has + symbol next to it. Click the + symbol to expand the list and view the individual extraction file(s) available for that ORION module.



2. Single click the individual extraction file you wish to view. *Unless you changed the filename during the extraction process, the name will be the module serial number, extraction date (year, month, date format) and extraction time.* Once a file has been selected the fields on the right will display the basic extraction information.
3. Click the **Show Data** button to continue.

GRAPHING THE PROFILE DATA

The extracted readings for the Badger ORION module you have chosen will appear on the left in a spreadsheet/grid format. The left section of the grid will display the following items listed below:

- Dates and times for intervals chosen
- Usage that was logged since last data profile interval
- Totalized meter readings at each chosen interval
- Tamper status
- Potential leak status (0 = no leak; 1 = potential leak)
- Communication status (If communications failed, the entry is marked as a bad read) (0 = good communication; 1 = failed communication)

The screenshot shows the 'Profile Data' window. On the left is a data grid with columns: Date & Time, Use, Reading, Tamper, Leak, and Bad. The grid contains 24 rows of data for the date 03/05, with times ranging from 03:04 A to 03:28 A. The 'Use' column is mostly 0, 'Leak' is mostly 0, and 'Tamper' is mostly 1. At the bottom of the grid is a summary table:

Tamper	Leak	Bad	Points	Selected Use
1524	0	594	2118	0 Gal

On the right is the 'Graph Settings' panel. It includes a 'Heading' field with 'Serial # 70629421', 'Show By' set to '1 Minute', and 'Graph Type' set to 'Line'. There are sections for 'Begin Point' (set to 03/05 03:04 A) and 'End Point' (set to 03/06 02:21 P). At the bottom of the settings panel is a table:

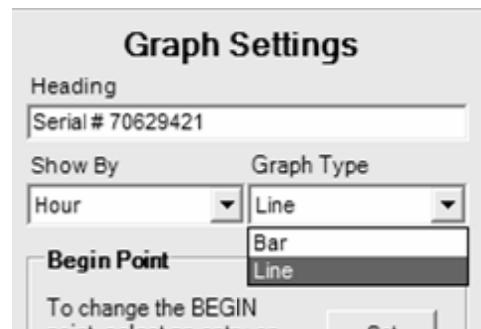
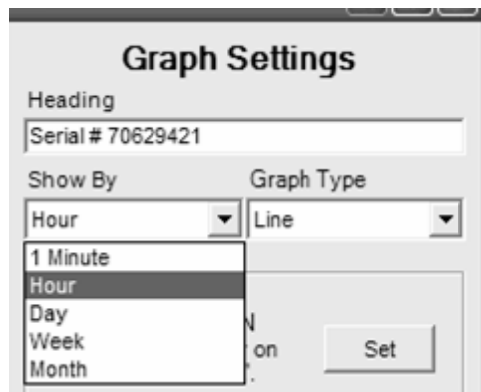
Begin	End	Selected	Graph
1	2118	2118	2118

Buttons for 'Show Graph' and 'Close' are located at the bottom of the settings panel.

Graph Settings

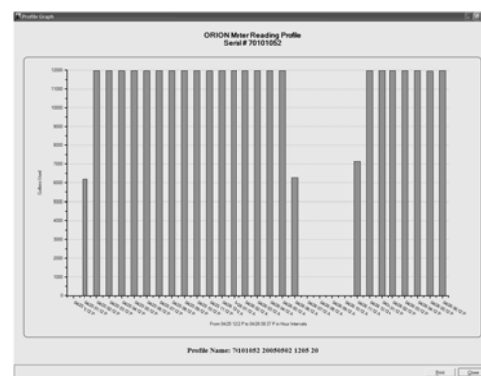
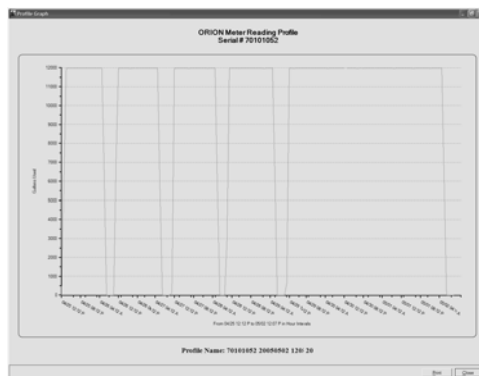
The right side of the window allows you to choose your **Graph Settings**.

- **Heading:** Type in the title for your graph. It will default to the ORION module serial number.
- **Show By:** Select the time interval between graphed readings. If the data had been logged at 1-hour intervals you will be able to view the graph in hourly, daily, weekly, or monthly increments.
- **Graph Type:** Choose from either a Line or Bar graph type.



- **Begin Point:** You can change the starting graph point by selecting a line of data from the grid on the right then clicking the Set button under Begin Point.
- **End Point:** You can change the ending graph point by selecting a line of data from the grid on the right then clicking the Set button under End Point.

When you have finished selecting your Graph Settings, click the **Show Graph** button. A new window will appear displaying the graph with the options you have chosen.



Printing the Graph

If you are connected to a printer you can print the graph by clicking the Print button.

EXITING THE DATA PROFILE VIEWER SOFTWARE

When finished viewing the graph, click the **Close** button. The graph window will close and you will be returned to the Graph Settings screen. Click the **Close** button again to return to the main **Data Profile Viewer** software screen. To exit the software, click the red X (**Close** button) in the upper right corner of the window.

Profiles that have been extracted and saved to the View folder will be available for viewing at any time by following the steps for **Viewing Profiles**.

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Please see our website at
www.badgermeter.com
for specific contacts.

Due to continuous research, product improvements and enhancements, Badger Meter reserves the right to change product or system specifications without notice, except to the extent an outstanding contractual obligation exists.



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