

# UltraFlowMeter3 HSPI User's Guide

---

A HomeSeer HS3 plug-in for the  
FortrezZ Water Flow Meters.

Copyright © 2017

**ultrajones@hotmail.com**

**Revised 11/18/2017**

This document contains proprietary and copyrighted information and may not be copied, reproduced, translated, or reduced to any electronic medium without prior consent, in writing, from ultrajones@hotmail.com.

## Table of Contents

Introduction .....	3
Intended Audience.....	3
UltraFlowMeter3 HSPI Overview .....	3
How It Works .....	3
Features .....	4
Requirements.....	4
UltraFlowMeter3 HSPI Installation .....	4
Downloading and Installing the HomeSeer Plug-in .....	4
UltraFlowMeter3 HSPI Setup .....	4
Initial Setup Checklist.....	4
UltraFlowMeter3 HSPI Configuration .....	5
Web Page Layout .....	5
Screenshot .....	6
Options.....	6
Devices.....	6
Modifying an Existing Flow Meter Device.....	7
Deleting an Existing Flow Meter Device .....	7
UltraFlowMeter3 Consumption Charts.....	7
Screenshot .....	7
UltraFlowMeter3 HomeSeer Devices .....	8
Flow Meter State .....	8
Flow Meter Cost Devices .....	8
Flow Meter Rate Devices .....	8
Flow Meter Usage Devices.....	9
UltraFlowMeter3 HSPI Triggers .....	9
UltraFlowMeter3 HSPI Trigger Actions .....	9
UltraFlowMeter3 HSPI Trigger Conditions.....	9

## Introduction

UltraFlowMeter3 is a new HomeSeer Plug-in (HSPI) that supports any number of FortrezZ Water Flow Meters installed within your home or building. The plug-in automatically detects your Z-Wave connected Flow Meters and adds the following HomeSeer devices to track water flow and consumption:

- Water Flow Rate Duration [Current]
- Water Flow Rate Duration peak [Today]
- Water Flow Rate [Current] in gallons per minute
- Water Flow Rate peak [Today] in gallons per minute
- Water Flow Status (none/low/medium/high)
- Consumption Cost So Far Today
- Consumption Cost Yesterday
- Consumption Cost Last 7 Days
- Consumption Cost Last 30 Days
- Consumption So Far Today
- Consumption Yesterday
- Consumption Last 7 Days
- Consumption Last 30 Days

When used with the FortrezZ Flow Meter, you have the power to automate, manage and monitor water consumption, and detect leaks in your home or building. This is an integral part to a complete water management solution.

## Intended Audience

This document is intended for the HomeSeer user that has chosen to install and configure the UltraFlowMeter3 HomeSeer Plug-in.

## UltraFlowMeter3 HSPI Overview

The FortrezZ Flow Meters are plumbed onto the water main and connected to your HomeSeer system using Z-Wave. UltraFlowMeter3 was designed to allow additional water flow status and consumption monitoring and is sure to be a valuable part of your total home automation and leak detection system.

## How It Works

The UltraFlowMeter3 HSPI programmatically detects and connects to the HomeSeer devices created when you connect the FortrezZ Flow meter to your HomeSeer system. All HomeSeer devices used to track and monitor water consumption are automatically created. The only manual configuration needed is to review your water bill, then configure your water consumption units (in gallons) and define the cost per consumption unit.

## Features

- Supports an unlimited number of FortrezZ Flow meters
- Automatically creates the HomeSeer devices needed to track water consumption in your home or building
- A Loads web page provides access to the real-time energy usage
- Trigger a HomeSeer event based on water consumption rate, cost or status
- Error Try/Catch logic to ensure plug-in doesn't fail with an unhandled exception

## Requirements

- HomeSeer 3 or greater
- One or more of the FortrezZ Flow Meters

## UltraFlowMeter3 HSPI Installation

### Downloading and Installing the HomeSeer Plug-in

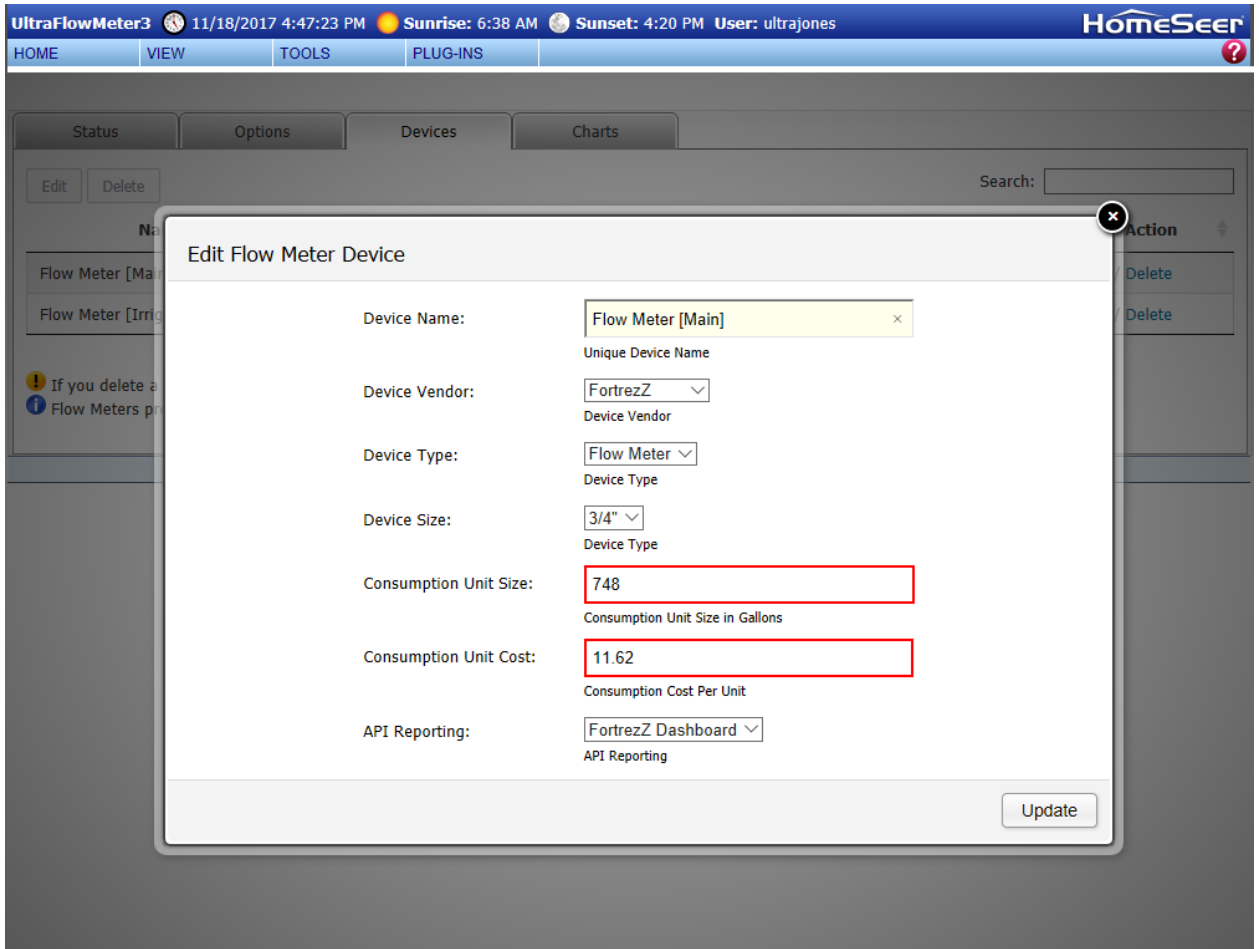
1. From your HomeSeer web page, select PLUG-INS > Manage.
2. Click the + icon next to Additional Interfaces to expand the list of available HomeSeer3 plug-ins.
3. Click the + icon next to the “**Water Management**” category, then click the checkbox next to the UltraFlowMeter3 plug-in package to mark the plug-in for installation.
4. Under “Pending Updates/Installs”, click the Download and Install button.
5. Once the installer finishes, find the UltraFlowMeter3 plug-in under Installed Plug-Ins, then enable it.

### UltraFlowMeter3 HSPI Setup

Before you begin to configure the UltraFlowMeter3 plug-in, you'll need to make sure you have completed the steps to add your FortrezZ Flow Meter to HomeSeer. Please refer to the FortrezZ documentation on how to add the Z-Wave device.

### Initial Setup Checklist

1. **FortrezZ Installation** – Refer to the FortrezZ Install Guide and User Manual on how to install and configure the water flow meters.
2. **Identify Water Consumption Costs** – Locate your water bill and identify the consumption units and consumption unit costs. The default settings are 1 unit = 748 gallons and 1 unit costs \$5.81. If water consumption includes a sewer charge per unit, then add this to the total unit cost.
3. Navigate to the Devices tab within the plug-in and update the water consumption unit size in gallons per unit and the consumption unit cost.



4.

## UltraFlowMeter3 HSPI Configuration

### Web Page Layout

The UltraFlowMeter3 plug-in has 4 web pages that provide access to the available features of the plug-in.

## Screenshot

The screenshot displays the HomeSeer interface for the UltraFlowMeter3 plug-in. The top navigation bar includes 'HOME', 'VIEW', 'TOOLS', and 'PLUG-INS'. The main content area is divided into four tabs: 'Status', 'Options', 'Devices', and 'Charts'. The 'Status' tab is active, showing three sections: 'Plug-In Status', 'Database Statistics', and 'Flow Meter Web Service'. The 'Plug-In Status' section shows 'Name: UltraFlowMeter3', 'Status: OK', and 'Version: 3.0.6531.28618'. The 'Database Statistics' section shows 'Inserts: 5', 'Failures: 0', 'In Queue: 0', and 'Size: 43 KB'. The 'Flow Meter Web Service' section shows 'Success: 0' and 'Failure: 0'. The bottom navigation bar includes links for 'Home', 'Device Status', 'Device Management', 'Events', 'Log', 'Setup', 'Global Elements', 'Control Panel', 'Manage Plug-ins', and 'About'.

The available web pages are as follows:

1. **Status** – Displays the UltraFlowMeter3 HSPI plug-in status, database statistics, and the FortrezZ Flow Meter Dashboard connection status.
2. **Options** – Displays and allows you to change the options associated with the plug-in.
3. **Devices** – Displays and allows you to modify settings associated with a flow meter.
4. **Consumption Charts** – A web page that allows you to chart water consumption.

## Options

All options are set from the Options web page. The following options are supported:

1. **Unit Type** – The format used to display temperatures from the 1-wire sensors. The default format is U.S customary units.
2. **Authorized User Roles** – Specify the HomeSeer users authorized to access the UltraFlowMeter3 web page.
3. **Logging Level** – Select either Informational for normal logging or Debug for verbose logging.

## Devices

The Devices web page allows you to modify the settings associated with the water flow meters you have installed in your home or building.

UltraFlowMeter3 11/18/2017 5:03:21 PM Sunrise: 6:38 AM Sunset: 4:20 PM User: ultrajones HomeSeer

HOME VIEW TOOLS PLUG-INS

Status Options Devices Charts

Edit Delete Search:

Name	Vendor	Type	Size	Units	Cost	API	Action
Flow Meter [Main]	FortrezZ	Flow Meter	0.75	748	\$11.62	FortrezZ	Edit / Delete
Flow Meter [Irrigation]	FortrezZ	Flow Meter	1	748	\$5.81	FortrezZ	Edit / Delete

! If you delete a Flow Meter, it will automatically be readded if the Flow Meter is still connected to your HomeSeer system.  
 i Flow Meters properly connected to the HomeSeer Z-Wave Controller will be listed above.

Home | Device Status | Device Management | Events | Log | Setup | Global Elements | Control Panel | Manage Plug-ins | About

### Modifying an Existing Flow Meter Device

1. Navigate to PLUG-INS > UltraFlowMeter3 > UltraFlowMeter3 > Devices
2. Highlight the Flow Meter Device you want to edit, and then click the Edit button or link
3. Edit the values as needed, then press the Update button to save the changes
4. To cancel, simply press the X icon in the upper right corner of the dialog window

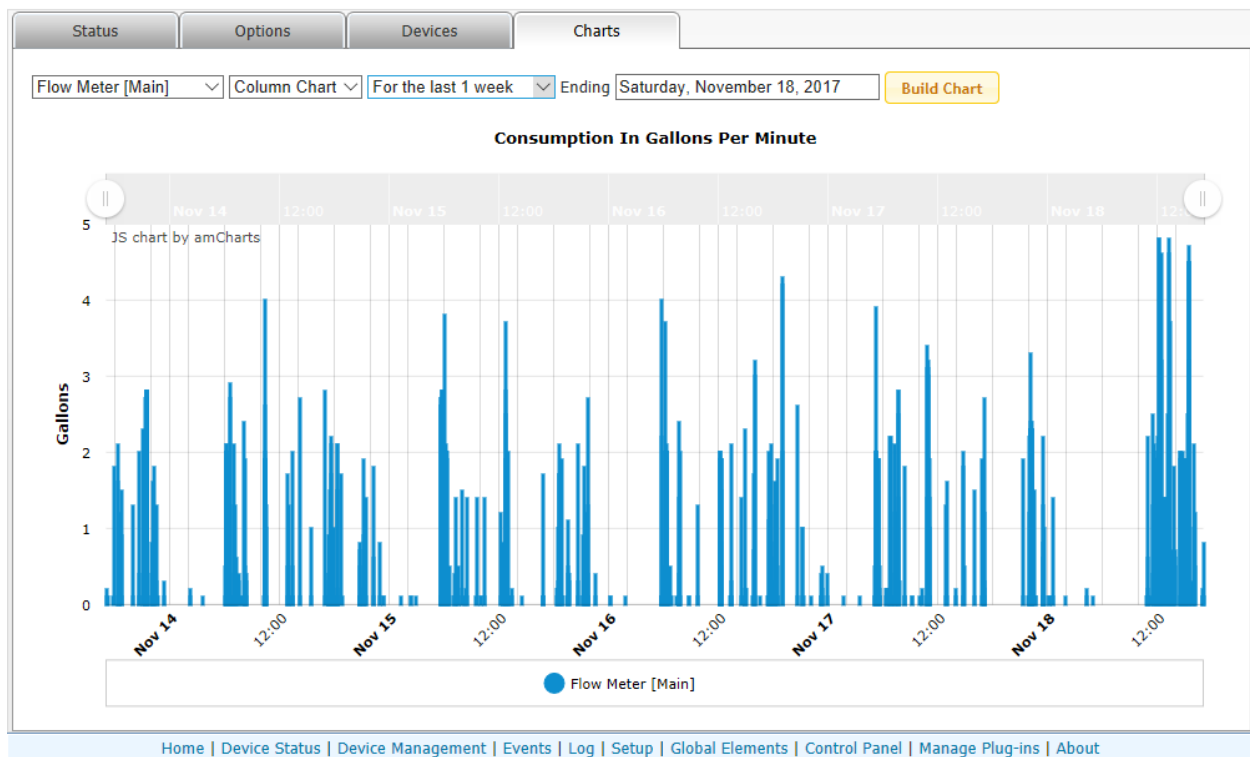
### Deleting an Existing Flow Meter Device

1. Navigate to PLUG-INS > UltraFlowMeter3 > UltraFlowMeter3 > Devices
2. Highlight the Flow Meter Device you want to delete, and then click the Delete button or link
3. Confirm you want to delete the Flow Meter Device by clicking the Delete button
4. To cancel, simply press the X icon in the upper right corner of the dialog window

### UltraFlowMeter3 Consumption Charts

You can chart the water consumption usage over time from the Consumptions Charts web page. Simply select the Flow Meter Device, the chart type, duration, the ending date and time, and then click the Build Chart button.

### Screenshot



## UltraFlowMeter3 HomeSeer Devices

### Flow Meter State

This HomeSeer device is automatically created and allows you to either enable to disable the plug-in directly from the device. To enable flow meter processing, select Enable from the Control dropdown. To disable flow meter processing, select Disable from the Control dropdown.

### Flow Meter Cost Devices

These HomeSeer devices are created automatically and allows you to track consumption costs for the current day, yesterday, last week and the last 30 days.

- Consumption Cost So Far Today
- Consumption Cost Yesterday
- Consumption Cost Last 7 Days
- Consumption Cost Last 30 Days

### Flow Meter Rate Devices

These HomeSeer devices are created automatically and allows you to monitor the current and peak daily water flow rate, status and duration.

- Water Flow Rate Duration [Current]
- Water Flow Rate Duration peak [Today]



- Water Flow Rate [Current] in gallons per minute
- Water Flow Rate Peak [Today] in gallons per minute
- Water Flow Status (none/low/medium/high)

### **Flow Meter Usage Devices**

These HomeSeer devices are created automatically and allows you to track consumption in gallons for the current day, yesterday, last week and the last 30 days.

- Consumption So Far Today
- Consumption Yesterday
- Consumption Last 7 Days
- Consumption Last 30 Days

### **UltraFlowMeter3 HSPI Triggers**

This plug-in does not have any HomeSeer triggers defined.

### **UltraFlowMeter3 HSPI Trigger Actions**

This plug-in does not have any HomeSeer trigger actions defined.

### **UltraFlowMeter3 HSPI Trigger Conditions**

This plug-in does not have any HomeSeer trigger conditions defined.