

HomeSeer Plugwise PRO plug-in version 4.0

1. Description

This plugin is created to monitor and operate Plugwise devices from HomeSeer HS3. It runs both on Windows and Linux. The plugin aims to support all Plugwise devices/modules available. Currently, there is full support for an unlimited number of the following Plugwise controllers: Stick (original), Stretch 2.0, Stretch 3.0, Adam, Anna and Smile P1.

When compatible with the above gateways, the following modules are fully supported by the plugin: Circle(+), Stealth(+), Stealth M(+), Switch, Scan, Sense and Lisa.

Because I had to buy most of the above devices and modules, specifically to create this plugin, development of new devices will be strongly dependent on the sales of this plugin. Hopefully, in the future addition modules will be added, like the Floor, Tom, Koen, Plug and Sting. There is currently no plan to support the CoolDing.

2. Installation

This plugin works completely independent to the Plugwise (Cloud) services, the Internet, Plugwise software and Plugwise Apps, except for the initial setup. This means it can run on Windows and Linux, does not need the Source program when using the Stick and as such runs completely within your own control. In case of the Stretch, Anna, Adam and Smile P1, the plugin needs to be able to connect to the device by a network connection.

The plugin required that the basic configuration has been completed. For the Stick, make sure the Plugwise network is configured and all devices have been added. For the Stretch and Adam, you can complete the initial configuration by using the Plugwise apps or the web interface of the device.

Schema's (Stick) or Groups (Stretch, Adam) are not supported, but when configured they continue to work independently of the plugin.

3. Setup

For network connected gateways, make sure you have the Device ID at hand before continuing. Also, before you start, make sure HomeSeer HS3 is setup correctly and please have a full backup available in case anything is going wrong. This is especially important when upgrading from a previous version, as a lot of things will change (see change log below).

From the main HomeSeer HS3 web interface, select "PLUG-INS" and then "Manage". If this is a first installation, expand the "Additional Interfaces" section and then expand the "Lighting & Primary Technology" section. Select the "Plugwise Pro" plugin and click "Download and Install". When upgrading, go to the next section. Otherwise, advance to section "5. Configuration".

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4. Upgrade

If a previous version has been used, an additional step is required after the upgrade. Go to the plugin configuration page “Setup”, and read this carefully before clicking “Yes, I want to upgrade to this version of the plugin”. See example below.

This version of Plugwise Pro is a paid version, with a 30 day trail.
By enabling this version, devices will be modified and you cannot go back to the previous free version with restoring a backup.
Devices will be modified to support this new version without a downgrade path. Devices will be upgraded as much as possible but device addresses, properties, values and references might change.

Focus for this release is to fix bugs and simplify the plugin, add support for the Stretch 3.0 and start working on supporting the Adam and Anna. More Plugwise devices could be added in the future. The following functionality will be affected:

- The script functions "GetCurrentPower" And "GetTotalPower" are no longer supported. As there are separate devices holding those values, you should modify those scripts to utilize the standard HS3 functions Like `hs.DeviceValue()`. Affected scripts:
 - None
- The event trigger "Current Power Usage Is..." Is no longer available. As there are separate devices holding power usage, you should modify those events to utilize the normal event capabilities Like "A Device's Value Is...". Affected events:
 - None
- The "Plugwise Grand Total" device is no longer supported and will be deleted.
 - You currently do not use this feature

Note that the above list is not exhaustive, it only lists the major changes. For instance, device addresses in scripts might need to be updated and/or "immediate script commands" that are used in events are not checked. Be prepared to check you system and make changes where necessary.

If you want to go back the the latest free version (3.0.2.2), please download `HSPI_Plugwise.exe` [here](#).
Stop the plugin and copy (overwrite) the downloaded file in your HomeSeer HS3 root directory.

5. Configuration

Now configure your devices. Start with the main configuration page “Setup” and select for each gateway the number of gateways you like to support. Default will be zero for each gateway, which will completely disable that part of the plugin. When ready, click “Activate” which will restart the plugin and will create a separate configuration page for each gateway selected.

SetupDebug

General plugin setup. Please restart the plugin after making changes.

Number of Plugwise Sticks	-	1	+
Number of Plugwise Stretch gateways	-	2	+
Number of Plugwise Adam gateways	-	2	+
Number of Plugwise Anna thermostats	-	1	+
Number of Smile P1 meters	-	2	+
Activate and restart the plugin	<input type="button" value="Activate"/>		

6. Plugwise Stick configuration

Make sure to have all your devices configured and working in the Plugwise Source program. Don't bother naming your devices as they won't be transferred to the plugin. When all your devices operate correctly, close the Source program. If you run HomeSeer HS3 on another machine, move the Stick to your HomeSeer HS3 machine. Navigate to the “PLUG-INS”, “Plugwise Pro”, “Stick” configuration page.

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Plugwise Stick (1)

Config Detect Info Debug

Stick settings. All changes will take effect immediately.

Enable Stick Device	<input checked="" type="checkbox"/>	status: started
COM port	COM4	
Enable energy logging and charting	<input checked="" type="checkbox"/>	
Number of seconds the plugin will retry commands	60	
Number of minutes before the plugin will mark a device as unresponsive	30	
Write delay to Plugwise Stick (ms)	1000	Only change if you have problems!
Reset total usage counters	Reset	Use with caution!
Reload the historical usage history from the plugs	Reload	Use with caution!
Download Plugwise Source	Plugwise Source download	

After communication with the Stick has been successfully established, the information on the “Info” tab will be populated with network info.

Plugwise Stick (1)

Config Detect Info Debug

Plugwise network information

MAC address Stick	000D6F0000235F36
MAC address Circle+	000D6F000037B47B
Network address	1A0D6F000037B47B
Short network address	651A

After that, a network scan can be initiated. It will take a few minutes to complete, and when you have any battery devices (or ranges issues), you might be prompted to wake-up the device by pressing a button on the device. When a device has been completely discovered, the option is presented to “Create” the device in HomeSeer. In case of an existing device, the option is given to “Delete” the device.

Plugwise Stick (1)

Config Detect Info Debug

[Cancel](#) Finding devices...

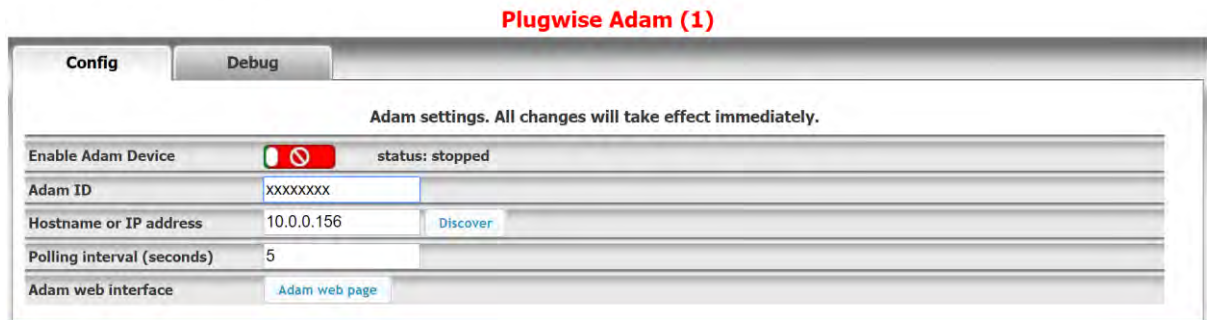
Initializing	<div style="background-color: green; height: 10px; width: 100%;"></div>	100%
Finding devices	<div style="background-color: green; height: 10px; width: 9%;"></div>	9%
Getting properties	<div style="background-color: gray; height: 10px; width: 0%;"></div>	0%

Node	Address	Device type	Hardware revision	Firmware	Name	Device clock	Action
0	037B47B	Circle+	0000-0473-0007	13-5-2011	Circle+ 037B47B	4-6-2019 16:37	Delete
1	0384725	Circle	0000-0440-0107	13-5-2011	Circle 0384725	4-6-2019 16:37	Delete
3	013A48D	Circle	0000-0440-0107	13-5-2011	Circle 013A48D	4-6-2019 16:37	Delete

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7. Stretch, Adam, Anna and Smile P1 configuration

Make sure to have all your devices configured and working in the Plugwise App or Web interface of the Stretch, Adam and/or Anna. If you name any of your devices, the plugin will attempt to transfer the names to the plugin. When all your devices operate correctly, navigate to the “PLUG-INS”, “Plugwise Pro” and then “Stretch”, “Adam”, “Anna” or “Smile P1” configuration page. The setup of those devices is nearly identical.



- Enable [Stretch/Adam/Anna/Smile P1] device: Enable the device in the plugin. The current status is also displayed.
- [Stretch/Adam/Anna/Smile P1] ID: The eight-character ID found on the device.
- Hostname or IP address: Click “Discover” to automatically populate this field. It can also be manually entered, and should be a valid hostname or IPv4 or IPv6 address. For advanced users, a port can be used by adding a colon and then the port number. When combining this with an IPv6 address, enclose the address with brackets. For instance: [2001:db8::1]:8080
- Polling interval: the interval the device will be polled for status changes in seconds. You can set this as low as 0 for continuous polling. Note that after a device change initiated from HomeSeer, a poll will always be initiated to reflect the update as soon as possible.
- Enable energy logging and charting (Smile P1 only): This will enable the energy logging of the Smile P1 into the HomeSeer HS3 energy database.
- [Stretch/Adam/Anna/Smile P1] web interface: click this button to open a new browser window or tab with the web interface of the device. Only works when the “Hostname/IP address” field has been entered correctly.

8. Specific device configuration

Some HomeSeer devices hold additional configuration items. Those items can always be found at the root device. Edit the device and select the fourth tab, “Plugwise Pro”:



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8.1. Stick devices

8.1.1. Circle(+), Stealth(+) and Stealth M(+) devices

- Appliance type: used for energy monitoring functions in HomeSeer
- Consumed/Produces: So we know if we need to add or subtract the power usage
- Manual On/Off: Enables/disabled the On/Off buttons on the device (to prevent accidental switching of the device in case you are only interested in energy monitoring)
- Energy rate: Override the rate for this device. Left 0 or blank to use the HomeSeer default.

The screenshot shows the 'Plugwise properties' configuration page for a 'Circle' device. The page has tabs for 'Configuration', 'Advanced', 'Status Graphics', and 'Plugwise Pro'. The configuration table is as follows:

Plugwise properties	
Device Type	Circle
Appliance Type	Light_Large
Consumed/Produced	Consumed
Manual On/Off	<input checked="" type="checkbox"/>
Device Address	0C3CE3B
Energy rate	0,2355
GainA	0,9892573
GainB	-1,568818E-06
OffNoise	0,07083686
OffTotal	0
LogAddress	3864
LogAddress (processed)	3865
LogAddress hour (processed)	0
Last energy log date/time	5-6-2019 09:00:00
CurrentUsage	0,266559463246038
TotalUsage	3,99894816946257
TotalUsageStart	29-8-2017 22:00:00
LastContact	5-6-2019 09:03:35

8.1.2. Switch, Scan, Sense

The Switch, Scan en Sense do not have any configurable properties.

8.2. Stretch devices

8.2.1. Switch

- Use independent buttons: Instead of the regular On/Off devices, this allows you to use all four positions of the Switch to be operated independently.
- Switching delay (seconds): How long after pressing a button on, it should be switched off again. Only valid when using independent buttons.

The screenshot shows the 'Plugwise properties' configuration page for a 'Switch' device. The page has tabs for 'Configuration', 'Advanced', 'Status Graphics', and 'Plugwise Pro'. The configuration table is as follows:

Plugwise properties	
Device Type	Switch
Use independent buttons	<input type="checkbox"/>
Switching delay (seconds)	60 only valid with independent buttons

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8.2.2. Scan

- **Switching delay (seconds):** How long after pressing a button on, it should be switched off again.

The screenshot shows the 'Plugwise Pro' configuration tab. Under 'Plugwise properties', the 'Device Type' is set to 'Scan'. The 'Switching delay (seconds)' is set to 60 in a text input field.

Plugwise properties	
Device Type	Scan
Switching delay (seconds)	60

8.2.3. Circle(+), Stealth(+), Stealth M(+), Sense

The Circle(+), Stealth(+), Stealth M(+) and Sense do not have any configurable properties.

8.3. Adam and Anna devices

8.3.1. Devices with buttons or proximity sensor

Most Adam and Anna devices have no separate device properties that can be configured. Exception are devices that contains touch buttons (like the main Anna device) and/or a proximity sensor.

- **Switching delay (seconds):** How long after touching a button, or detection from the proximity sensor, the device should be switched off again.

The screenshot shows the 'Plugwise Pro' configuration tab. Under 'Plugwise properties', the 'Device Type' is set to 'Scan'. The 'Switching delay (seconds)' is set to 60 in a text input field.

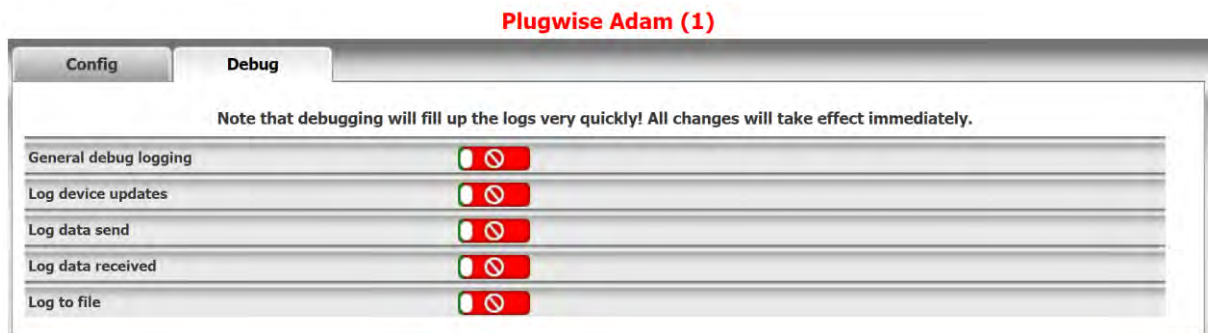
Plugwise properties	
Device Type	Scan
Switching delay (seconds)	60

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9. Logging

Every setup page contains a “Debug” tab with additional logging options. Not all options are available on every page, but most of them have the following options:

- General debug logging: Enables additional logging for troubleshooting purposes
- Log device updates: Logs information received about devices, used to update the HomeSeer devices.
- Log data send: Log all data send to the device
- Log data received: Log all data received by the device
- Log to file: Log everything about this device to a file. It is strongly recommended to enable this option when enabling “device updates, “data send” and/or “data received”, otherwise the regular HomeSeer log will be flooded with log entries from the plugin. This file can be found in your <HomeSeer>\Logs directory, and is named “HSPI_Plugwise_Pro_<device>_<instance>.log”.



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10. Change log

Version 4.0.0.0, released 06-06-2019

- Changed: Version 4 and higher are no longer free
- Removed: Script functions (use hs.DeviceValue etc instead)
- Removed: Plugwise specific events (use regular event triggers instead)
- Removed: Total usage device (use a Smile P1 for real total usage)
- Stick:
 - New: Unlimited number of Sticks supported
 - Setup improved
 - New: Status indication if the accompanying process is started
 - Improved: More logging options
 - Improved: Communication with the stick
 - Removed: Offline check for Scan and Switch devices (they do not report their status on a regular interval)
 - Improved: Detection of devices (especially battery powered devices)
 - Removed: Manual adding of devices
 - Changed: HomeSeer devices are "Z-Wave" style with a root device and all device values are stored in separate child devices.
 - Changed: Online/Offline status is moved to the root device
- Stretch:
 - New: Unlimited number of Stretch gateways supported
 - Setup improved
 - New: Network address discovery added
 - New: Status indication if the accompanying process is started
 - Improved: More logging options
 - New: Stretch 3.0 support added.
 - Improved: Stealth (M) modules are now working as expected
 - New: Scan, Sense and Switch modules support added
 - New: Switch can be configured to use all four buttons independently
- Adam:
 - New: Support for the Adam gateway
 - New: Unlimited number of Adam gateways supported
 - New: All information from the Adam is available, with specific functions for thermostat values, offsets, relays, presets and buttons.
 - New: Lisa support
 - Koen, Tom, Floor and Plug have not been tested and most likely not (completely) work as expected, if at all.
- Anna:
 - New: Support for the Anna thermostat
 - New: Unlimited number of Anna thermostats supported
 - New: All information from the Anna is available, with specific functions for thermostat values, offsets, relays, presets and buttons.
- Smile P1:
 - New: Unlimited number of Smile P1 meters supported
 - Setup improved
 - New: Network address discovery added
 - New: Status indication if the accompanying process is started
 - Improved: More logging options

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11. Older versions history

Version 3.0.3.0, released 14-11-2015

- Various stability improvements

Version 3.0.2.3, released 08-08-2015

- Fixed: Crashes when using Windows 10

Version 3.0.2.2, released 20-07-2015

- Fixed: Interval setting
- Fixed: Crashes when Smile P1 fails to retrieve data
- New: Retries for non-responsive devices (configurable, stick devices only)
- New: "Unknown" status for non-responsive devices (configurable, stick devices only)
- Improved: "Last Change" date/time behavior (required HS3 build 194 or higher, WARNING: this might impact events that trigger on the last update field):
 - If "Do not update device last change time if device value does not change" is disabled, it will update on both status change and power usage update
 - If "Do not update device last change time if device value does not change" is enabled, it will only update on status change, not on power usage update

Version 3.0.2.1, released 17-05-2015

- Fixed: Debug logging to file on Linux

Version 3.0.2.0, released 02-01-2015

- Improved: Removed unnecessary polling (usage data twice as fast!)
- Fixed: Event not triggering when a condition is set

Version 3.0.1.1, released 20-12-2014

- Fix: Crash on corrupt XML received (again)

Version 3.0.1.0, released 15-11-2014

- New: Exclude from total device added
- Fixed: Crash on corrupt XML received

Version 3.0.0.0, released 10-11-2014

- Initial features
 - Runs without Plugwise Source
 - Support for Plugwise Circle
 - Support for Plugwise Stealth
 - Support for Plugwise Sense
 - Support for Plugwise Scan
 - Support for Plugwise Switch
 - Support for Plugwise Smile P1
 - Support for Plugwise Stretch
 - Support for Energy charting
 - Support for HS3 Windows and Linux
 - Support Multi instances
 - Support Remote instances