SYSMonitor User Manual

A Rainmeter Skin

PlnkY77

Content

User Manual

1. Requirements

1.1 Basic Requirements

- Windows 10, 64bit, release 18.09 or newer
- Rainmeter v4.3.1 or newer
- SYSMonitor skin

1.2 Optional Requirements

- VLC media player
- HWiNFO
- MSI Afterburner with Rivatuner Statistics Server

1.3 Recommended Setup Level

- Office
  Install **Rainmeter**, **SYSMonitor** skin and **VLC** media player
  With this setup you will see basic information about your system provided by windows directly. For example, component stress level, used memory of your RAM/disks and interface usage. VLC will allow you to use the Webradio player. Recycle bin and date/time features will work, too. But you cannot get information about temperatures, FAN speeds, power consumption or clock rates.
  This setup with just a view skins active is recommended for a nice-looking office setup or low to mid-range hardware (Celeron to Core i3 CPU Level).

- Professional
  If you are a professional user and you would like to get as many health information as possible you should additionally install and configure **HWiNFO** utility. It is the most compatible monitoring utility but requires detailed skin configuration, see more details in skin description chapters. This setup is recommended for professional setups (Core i5 CPU Level or higher) or overclocked systems to monitor your hardware.

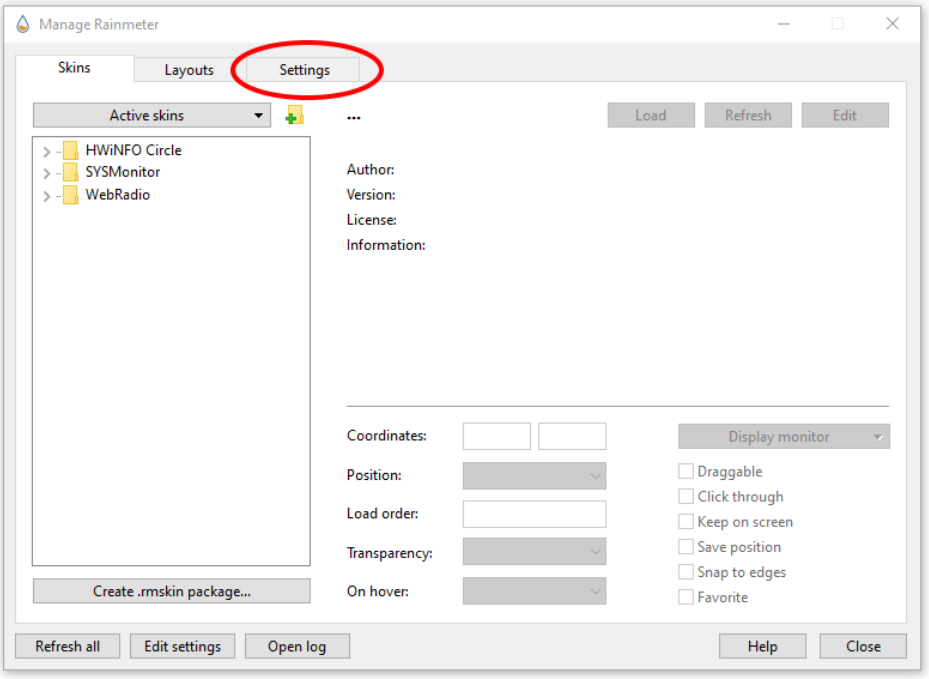
- Gamer
  MSI Afterburner is one of the best utilities for graphics cards. Once installed it provides detailed information about your framerate (Min/Max/Avg/Current) during Gaming and reports the Frametimes when combined with **Rivatuner Statistics Server**.
  RTSS additionally provides an in-game-OS if you are working with a single monitor setup. With HWiNFO and MSIAB/RTSS running simultaneously you will get the best skin experience and all possible information for all skins.

2. Utility Installation and Configuration

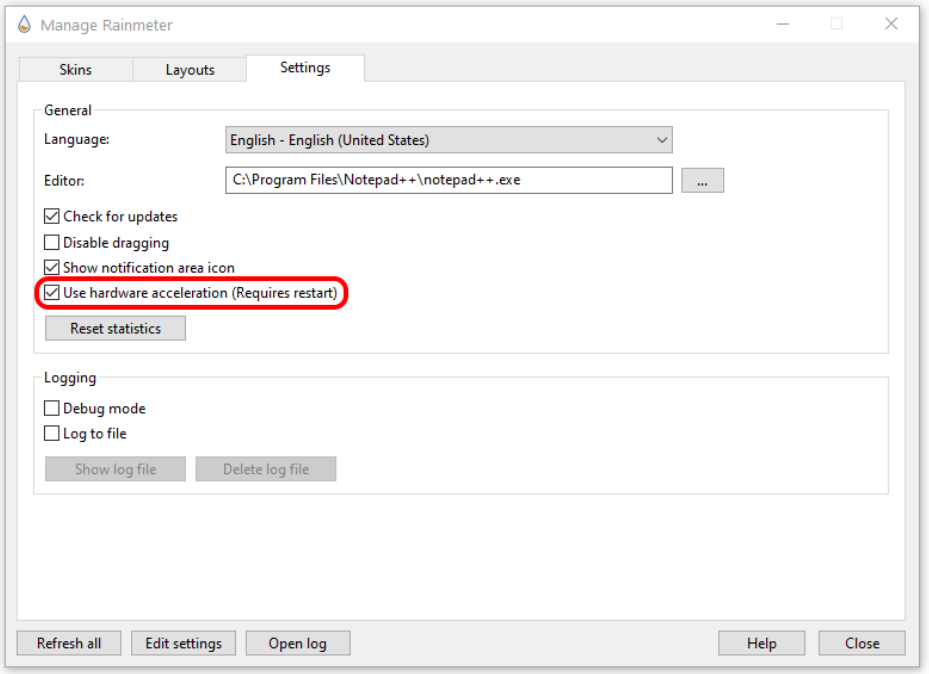
2.1 Rainmeter

SYSMonitor is no stand-alone application. It's only a skin for Rainmeter desktop customization tool, therefore Rainmeter is required if not already installed:

- Download the latest release of Rainmeter from www.rainmeter.net (at least version 4.3.1)
- Run the installation process (AutoStart with Windows should be activated)
- Once installed and running double click on the Rainmeter task icon or right click on the icon and select ‚Manage' to open the configuration interface:



- Now open the Rainmeter settings tab and enable hardware acceleration:



This setting is strongly recommended to reduce CPU load. Restart Rainmeter to activate the new settings.

For more details to Rainmeter options and functions read the manual available on www.rainmeter.net.

2.2 SYSMonitor Skin

The SYSMonitor skin is easy to activate:

- Download SYSMonitor skin from www.deviantart.com.
- Double klick the downloaded *.rmskin file to start installation

- Keep all components checked and press Install
- That's it! Rainmeter should start automatically during windows boot and you are able to prepare your desktop with the Windows skins included in SYSMonitor. See the Skin section for more details.

2.3 VLC Media Player

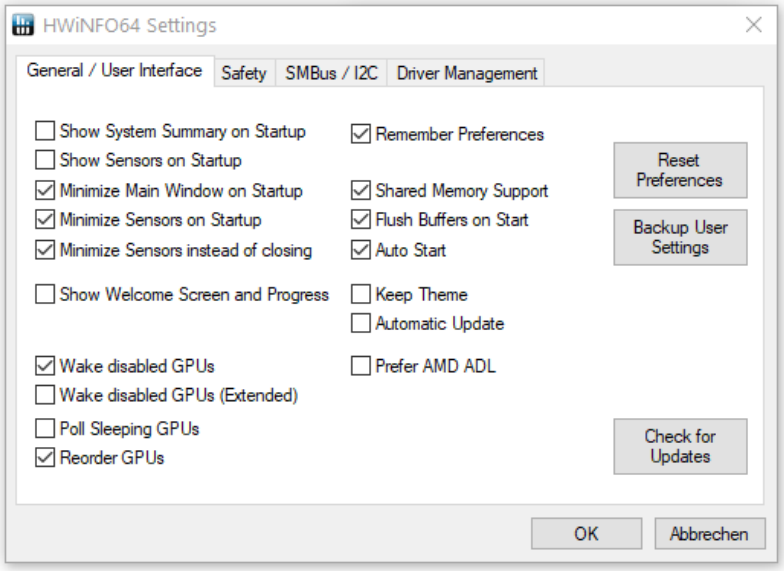
The VideoLAN media player is an alternative to the Windows integrated Media Player. It supports many audio and video codecs and online AAC or MP3 streams. This function is used by the Webradio skin. If you would listen to online music with SYSMonitor download and install VLC from www.videolan.org.

2.4 HWiNFO

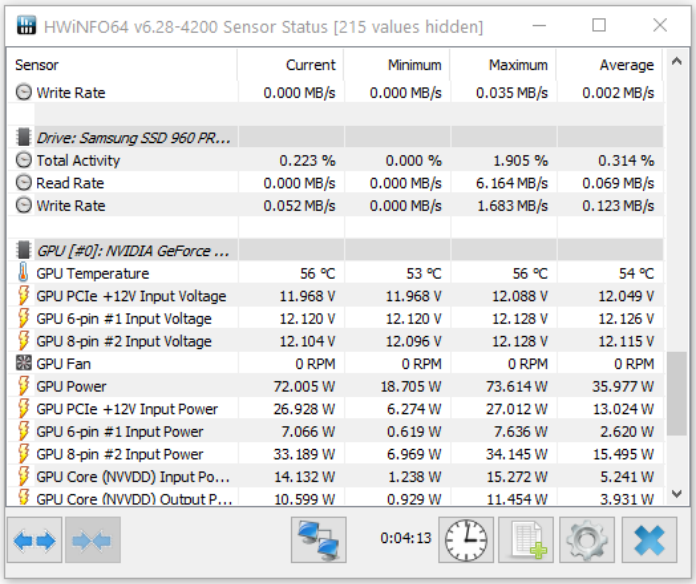
HWiNFO is one of the best utilities monitoring your hardware. It supports nearly all hardware configurations and reports many details about your CPU, GPU, Mainboard and Drives. The most important feature is the plugin support for Rainmeter.

- First of all, download and install HWiNFO from www.hwinfo.com. It doesn't matter if you use the installer or the portable version.
- During first start select ‚Sensors-only' and open the ‚Settings'

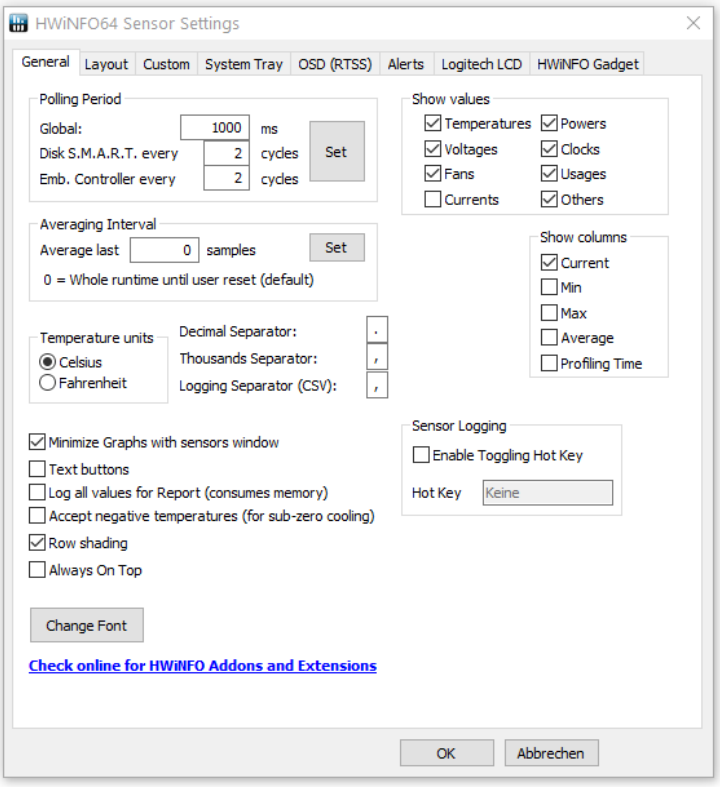
- Personally, I prefer the following general options to enable a „hidden" start during windows boot and avoid an accidental close. See FAQ how to setup Auto run based on Windows Task Scheduler instead of using the integrated option.



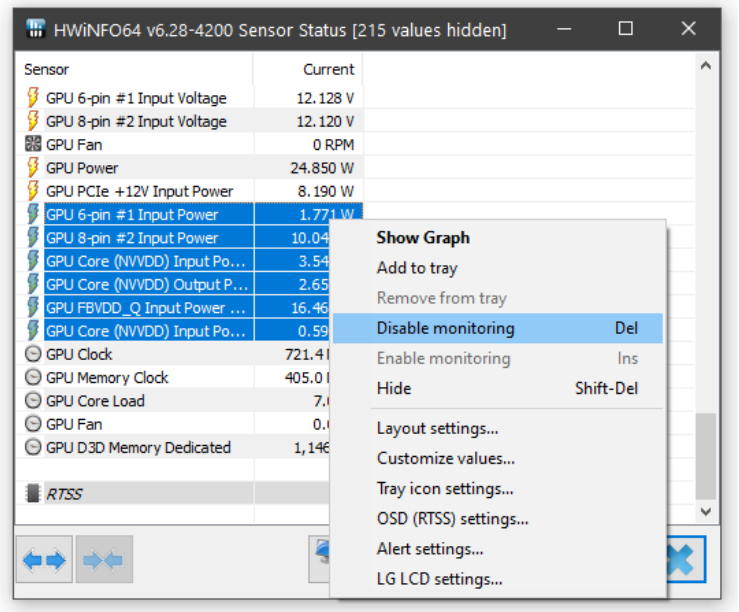
- Exit with ‚OK' and select ‚Run' now to start HWiNFO. You should now the see the HWiNFO task icon .
- Double klick on the icon to open the utility. You will get a heavy list of all detected sensors in your system:



- Now open the utility settings (the gear symbol down right)
- Most of the SYSMonitor Skins are working with a refresh rate of 1s (1000ms), therefore you should adjust the settings accordingly. My favorite settings are 1000ms Polling Period with 2 cycles for SMART and Controller. If your mainboard uses temperature readings from an Embedded Controller, set 1 cycle for that. It you don't need the Min/Max/Average columns shown within the tool, just disable it. Keep it enabled if you use FPSView with HWiNFO layout:



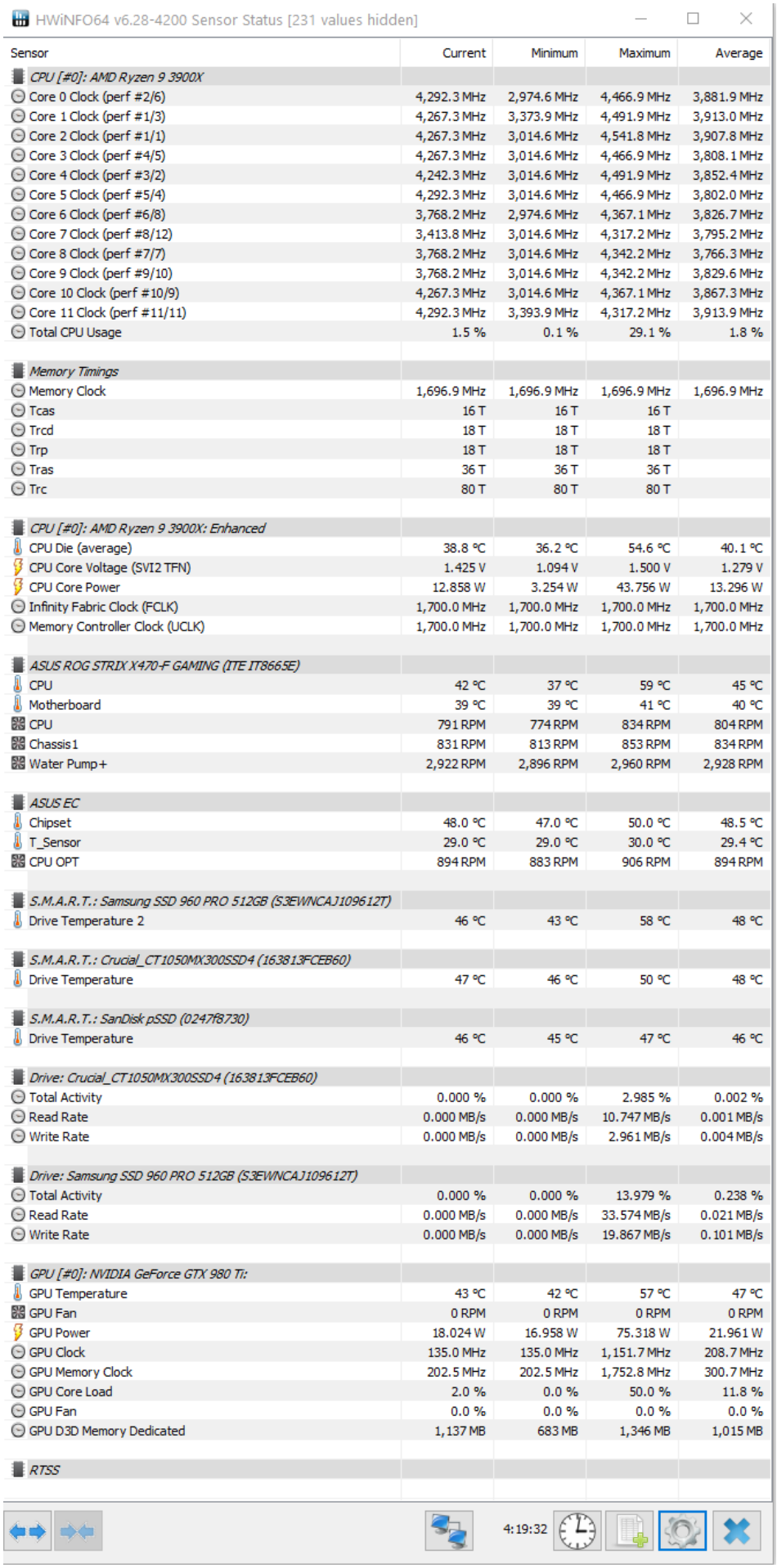
- If you prefer Fahrenheit instead of Celsius switch the Temperature unit here. How to enable „F" instead of „°C" within the Skins is described in the FAQ section.
- Once you have finished all steps and your skins are fully configured go back to HWiNFO utility later and disable all sensor readings not needed. This will save some CPU performance:



Note: You should work a few days with the skin to make sure all sensors are configured correctly before disabling the not used ones in HWiNFO.

If your CPU load caused by HWiNFO is still too high you could additionally increase the polling period (e.g. to 1500 to 2000ms).

Sensors used from HWiNFO



HWiNFO64 v6.28-4200 Sensor Status [231 values hidden]

Sensor	Current	Minimum	Maximum	Average
CPU [#0]: AMD Ryzen 9 3900X				
Core 0 Clock (perf #2/6)	4,292.3 MHz	2,974.6 MHz	4,466.9 MHz	3,881.9 MHz
Core 1 Clock (perf #1/3)	4,267.3 MHz	3,373.9 MHz	4,491.9 MHz	3,913.0 MHz
Core 2 Clock (perf #1/1)	4,267.3 MHz	3,014.6 MHz	4,541.8 MHz	3,907.8 MHz
Core 3 Clock (perf #4/5)	4,267.3 MHz	3,014.6 MHz	4,466.9 MHz	3,808.1 MHz
Core 4 Clock (perf #3/2)	4,242.3 MHz	3,014.6 MHz	4,491.9 MHz	3,852.4 MHz
Core 5 Clock (perf #5/4)	4,292.3 MHz	3,014.6 MHz	4,466.9 MHz	3,802.0 MHz
Core 6 Clock (perf #6/8)	3,768.2 MHz	2,974.6 MHz	4,367.1 MHz	3,826.7 MHz
Core 7 Clock (perf #8/12)	3,413.8 MHz	3,014.6 MHz	4,317.2 MHz	3,795.2 MHz
Core 8 Clock (perf #7/7)	3,768.2 MHz	3,014.6 MHz	4,342.2 MHz	3,766.3 MHz
Core 9 Clock (perf #9/10)	3,768.2 MHz	3,014.6 MHz	4,342.2 MHz	3,829.6 MHz
Core 10 Clock (perf #10/9)	4,267.3 MHz	3,014.6 MHz	4,367.1 MHz	3,867.3 MHz
Core 11 Clock (perf #11/11)	4,292.3 MHz	3,393.9 MHz	4,317.2 MHz	3,913.9 MHz
Total CPU Usage	1.5 %	0.1 %	29.1 %	1.8 %
Memory Timings				
Memory Clock	1,696.9 MHz	1,696.9 MHz	1,696.9 MHz	1,696.9 MHz
Tcas	16 T	16 T	16 T	
Trcd	18 T	18 T	18 T	
Trp	18 T	18 T	18 T	
Tras	36 T	36 T	36 T	
Trc	80 T	80 T	80 T	
CPU [#0]: AMD Ryzen 9 3900X: Enhanced				
CPU Die (average)	38.8 °C	36.2 °C	54.6 °C	40.1 °C
CPU Core Voltage (SVI2 TFN)	1.425 V	1.094 V	1.500 V	1.279 V
CPU Core Power	12.858 W	3.254 W	43.756 W	13.296 W
Infinity Fabric Clock (FCLK)	1,700.0 MHz	1,700.0 MHz	1,700.0 MHz	1,700.0 MHz
Memory Controller Clock (UCLK)	1,700.0 MHz	1,700.0 MHz	1,700.0 MHz	1,700.0 MHz
ASUS ROG STRIX X470-F GAMING (ITE IT8665E)				
CPU	42 °C	37 °C	59 °C	45 °C
Motherboard	39 °C	39 °C	41 °C	40 °C
CPU	791 RPM	774 RPM	834 RPM	804 RPM
Chassis1	831 RPM	813 RPM	853 RPM	834 RPM
Water Pump+	2,922 RPM	2,896 RPM	2,960 RPM	2,928 RPM
ASUS EC				
Chipset	48.0 °C	47.0 °C	50.0 °C	48.5 °C
T_Sensor	29.0 °C	29.0 °C	30.0 °C	29.4 °C
CPU OPT	894 RPM	883 RPM	906 RPM	894 RPM
S.M.A.R.T.: Samsung SSD 960 PRO 512GB (S3EWNCAJ109612T)				
Drive Temperature 2	46 °C	43 °C	58 °C	48 °C
S.M.A.R.T.: Crucial_CT1050MX300SSD4 (163813FCEB60)				
Drive Temperature	47 °C	46 °C	50 °C	48 °C
S.M.A.R.T.: SanDisk pSSD (0247f8730)				
Drive Temperature	46 °C	45 °C	47 °C	46 °C
Drive: Crucial_CT1050MX300SSD4 (163813FCEB60)				
Total Activity	0.000 %	0.000 %	2.985 %	0.002 %
Read Rate	0.000 MB/s	0.000 MB/s	10.747 MB/s	0.001 MB/s
Write Rate	0.000 MB/s	0.000 MB/s	2.961 MB/s	0.004 MB/s
Drive: Samsung SSD 960 PRO 512GB (S3EWNCAJ109612T)				
Total Activity	0.000 %	0.000 %	13.979 %	0.238 %
Read Rate	0.000 MB/s	0.000 MB/s	33.574 MB/s	0.021 MB/s
Write Rate	0.000 MB/s	0.000 MB/s	19.867 MB/s	0.101 MB/s
GPU [#0]: NVIDIA GeForce GTX 980 Ti:				
GPU Temperature	43 °C	42 °C	57 °C	47 °C
GPU Fan	0 RPM	0 RPM	0 RPM	0 RPM
GPU Power	18.024 W	16.958 W	75.318 W	21.961 W
GPU Clock	135.0 MHz	135.0 MHz	1,151.7 MHz	208.7 MHz
GPU Memory Clock	202.5 MHz	202.5 MHz	1,752.8 MHz	300.7 MHz
GPU Core Load	2.0 %	0.0 %	50.0 %	11.8 %
GPU Fan	0.0 %	0.0 %	0.0 %	0.0 %
GPU D3D Memory Dedicated	1,137 MB	683 MB	1,346 MB	1,015 MB
RTSS				

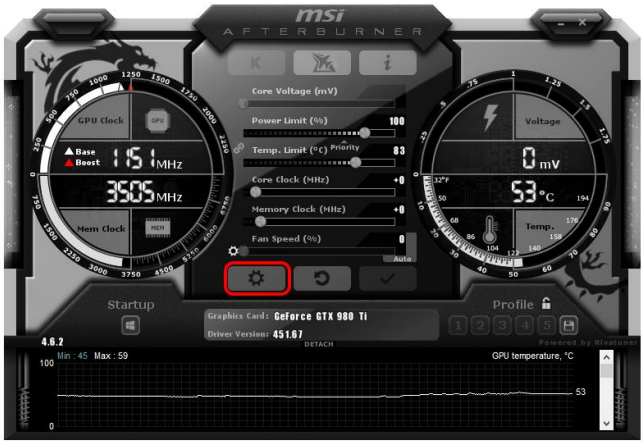
4:19:32

2.5 MSI Afterburner

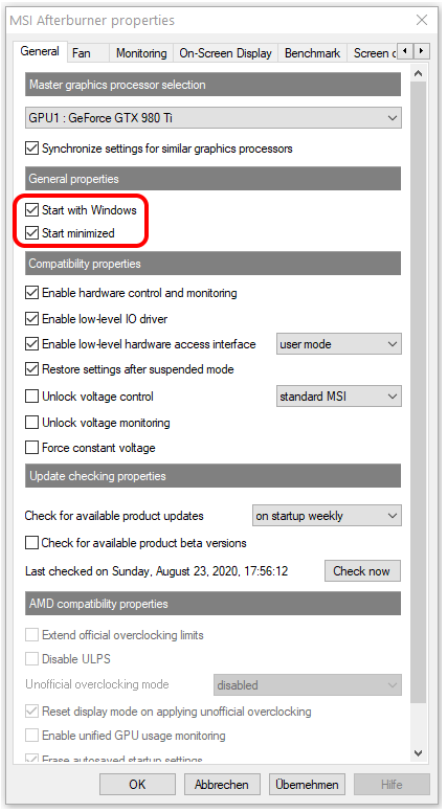
If you don't want to spend some time to fully configure the HWiNFO Skins you should use MSI Afterburner instead of HWiNFO Utility. MSIAB does not need any skin configuration to work.

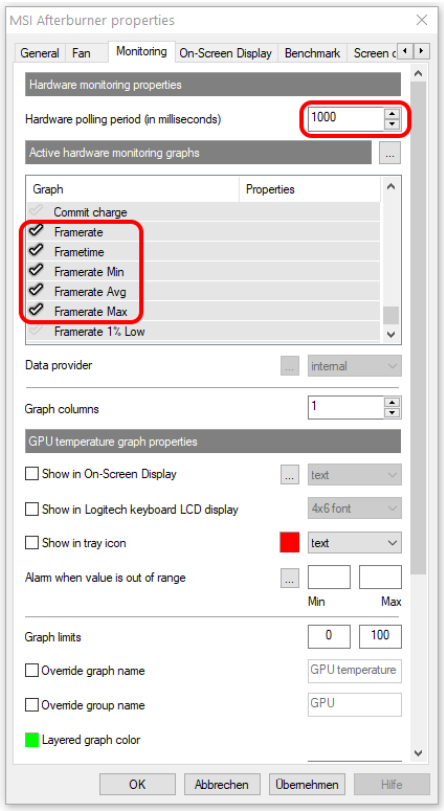
The big disadvantage: MSIAB supports much less hardware and sensors regarding Mainboard, DRAM and CPU. But on the other hand, it's the best utility for GPU control. Don't worry, you could run both utilities simultaneously, especially MSIAB should be installed for GPU Framerate and Frametimes recording combined with Rivatuner Statistics Server (RTSS).

- Download and Install MSI Afterburner from www.msi.com or from www.guru3d.com
- During installation you should select both, MSIAB and Rivatuner Statistics Server
- Once Running, open the MSIAB utility configuration (gear symbol)



- On general settings tab activate „Start with Windows" and „Start minimized"
- On monitoring tab configure again a polling period of 1000ms
- Activate the Framerate/Frametime graphs if disabled. If FPS graphs are not available setup RTSS first (see next chapter).
- Optional: disable all graphs not used





Used graphs in the skin

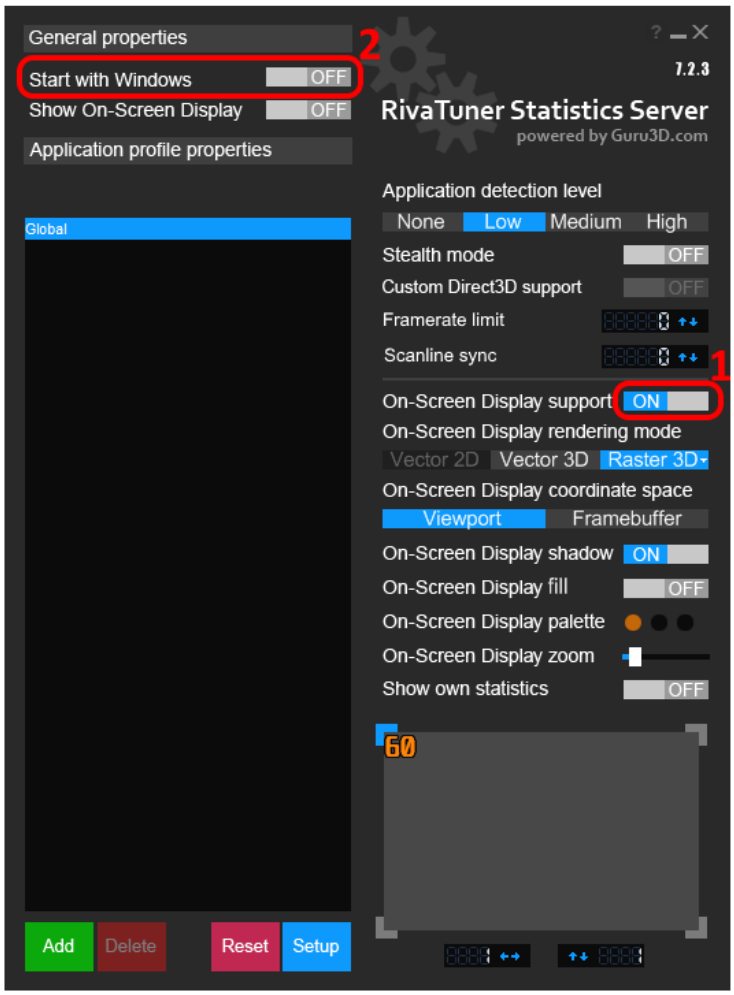
- ✓ GPU temperature
- ✓ GPU usage
- ✓ Memory usage
- ✓ Core clock
- ✓ Power
- ✓ Fan speeds
- ✓ CPU Temperature
- ✓ CPU Usage
- ✓ CPU Clock
- ✓ CPU Power
- ✓ Framerate
- ✓ Frametime
- ✓ Framerate Min
- ✓ Framerate Avg
- ✓ Framerate Max

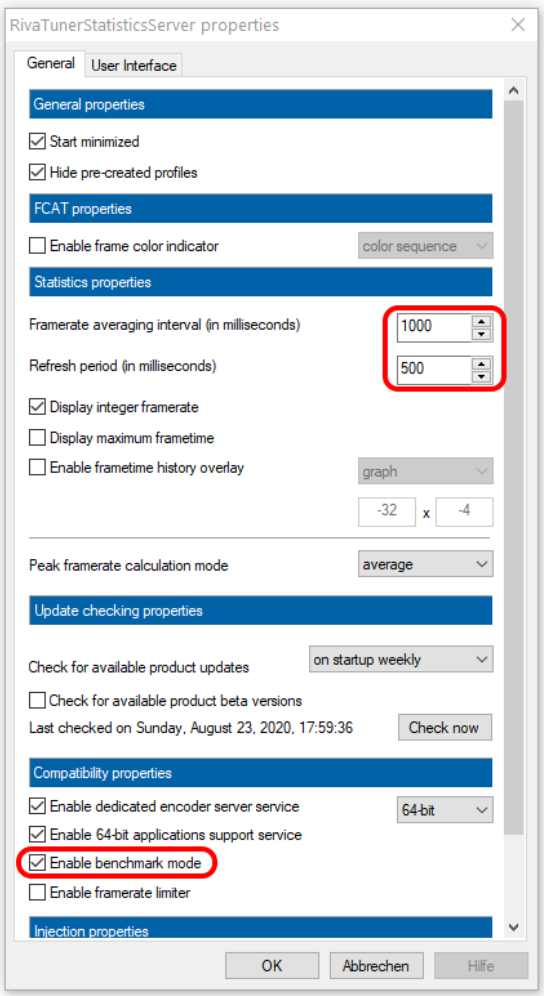
Warning: do not change any GPU settings in MSI AB utility interface unless you know what you are doing! Any change here could damage your graphics card.

2.6 Rivatuner Statistics Server

If you don't want to use MSI Afterburner, Rivatuner Statistics Server is available as stand-alone utility reporting the current Framerate to HWiNFO. RTSS additionally provides an in-game OSD showing important information from MSI Afterburner directly within your 3D application, therefore using the MSIAB & RTSS combination is recommended.

- If you did not install RTSS together with MSI Afterburner download and install it from www.guru3d.com
- Once installed and running open the utility with double klick on the task icon 
- Turn OFF the „OSD" if you would like to work with the SYSMonitor Skin only (1)
- If you're running RTSS without MSI Afterburner you should activate „Start with Windows" (2)
  In this case make sure RTSS is running before HWiNFO starts, otherwise the „RTSS" sensor is not detected by HWiNFO and the FPSView skin won't work.
- If you're running MSIAB only or MSIAB + HWiNFO keep it disabled. MSIAB will automatically start RTSS if needed.



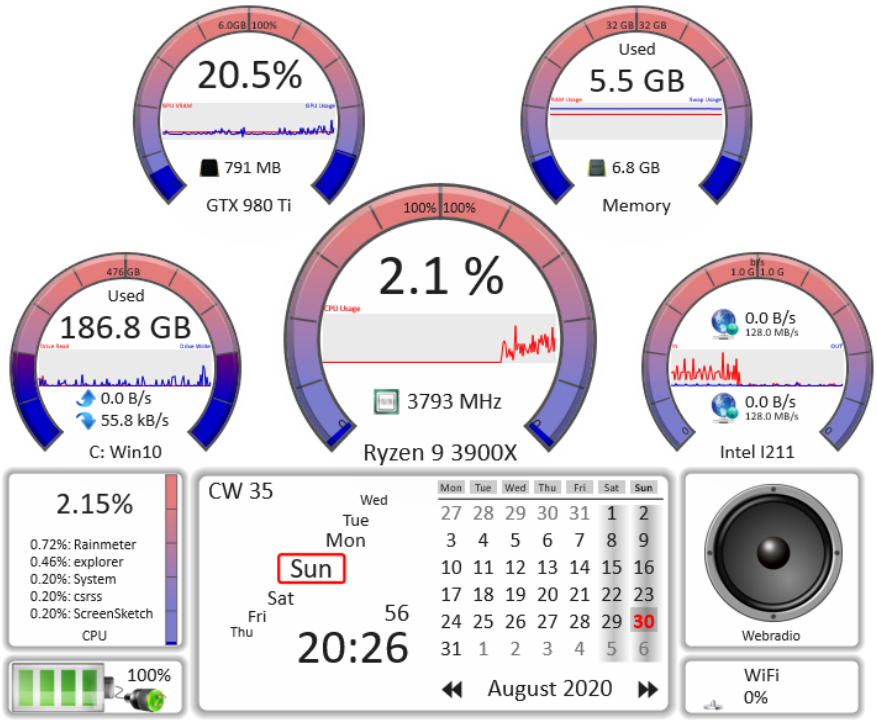


- Open the RTSS Settings (Setup Button)
- Select again 1000ms polling interval for the Framerate
- Configure 500ms Refresh Period. Reason for the lower rate: The FPSView Skin includes a Frametime diagram with 0.5s refresh rate. Text values like FPS are measured once per second.
- **Important**: enable the benchmark mode to allow Frametime recording and activating the graphs in MSI Afterburner

3. SYSMonitor – General Options

3.1 First Start

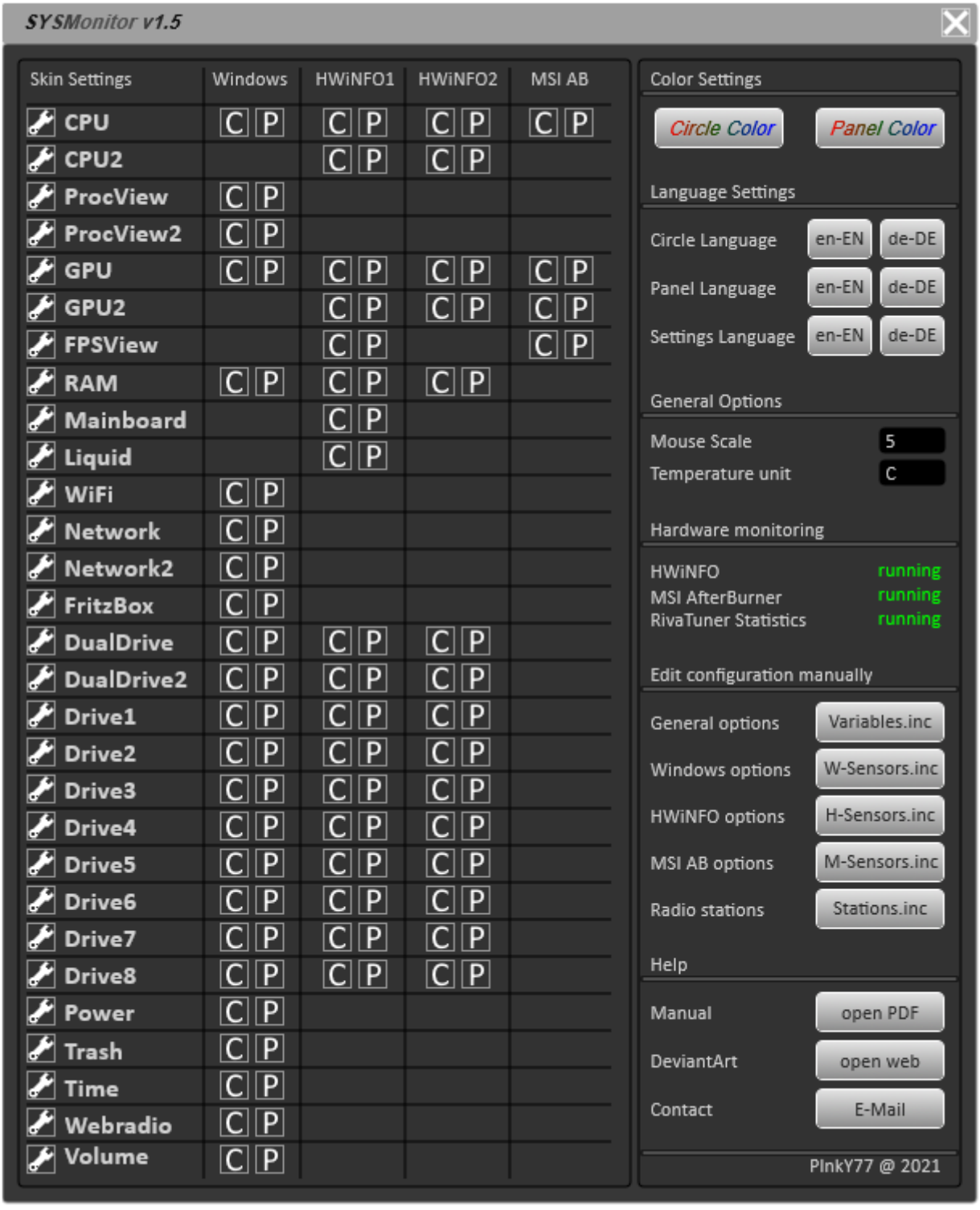
Once you have installed Rainmeter and the SYSMonitor skin the default Layout „SYSMonitor“ will be activated and you will see some basic skins with Windows layout:



Right click on any skin and select “SYSMonitor Settings” to open the configuration page.

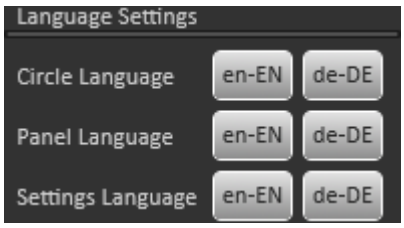
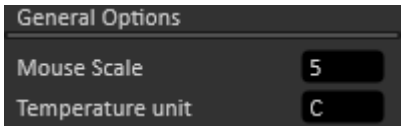
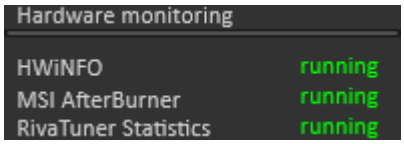
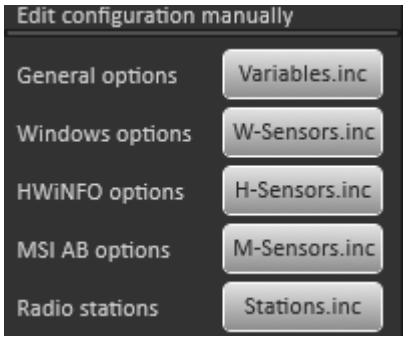
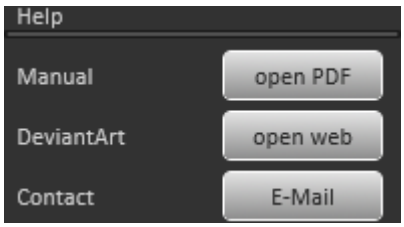
3.2 SYSMonitor Configuration

Right click on any skin and select “SYSMonitor Settings” to open the configuration options for SYSMonitor. Alternatively right click the Rainmeter Tray Icon and select ‘Skins -> SYSMonitor -> #Settings -> SYSMonitor.ini’.



The skin table shows all available skins and supported technology options. Pressing “C” will toggle (enable/disable) the according Circle skin, the “P” button toggles the appropriate Panel skin.

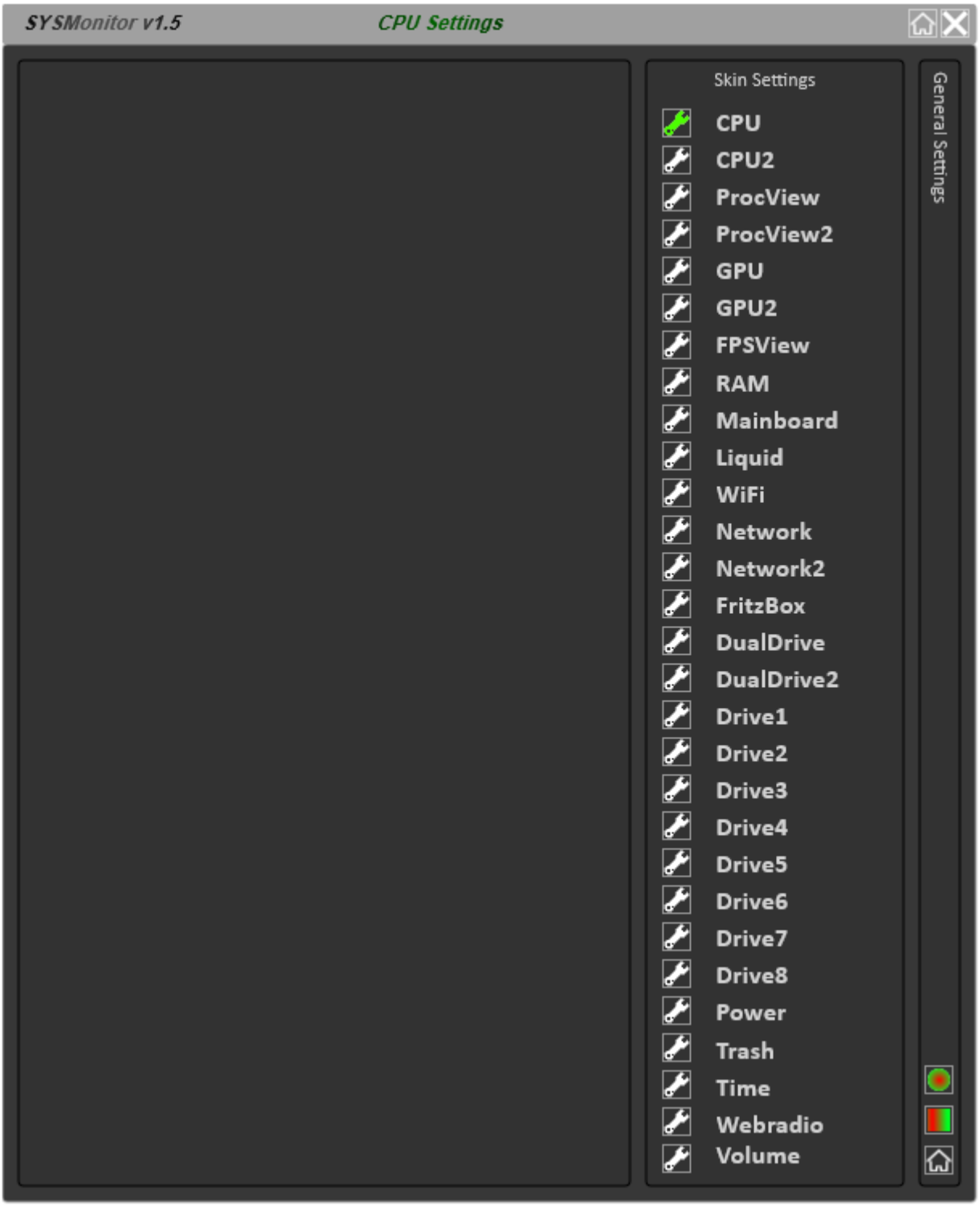
The spanner symbol on the left opens the individual skin settings page.

	**Color Settings** Switch to color configuration options so setup Circle and Panel skins individually
	**Language Settings** Enable german or english skin language
	**General Options** Configure the mouse scale mode for skin size changing. When entering the Scale Mode (middle mouse button on any skin) the mouse wheel up/down will increase/decrease the skin size. This value represents the number of pixels each wheel step will change the size HWiNFO can show Fahrenheit (°F) instead of Celsius (°C). Change the unit to be display in the SYSMonitor skins here according your HWiNFO setup.
	**Hardware monitoring** Shows the current working status of HWiNFO, MSI Afterburner and RivaTuner Statistics Server detected directly from the Windows Task Manager
	**Manual configuration** If you would like to setup SYSMonitor faster and you're sure how to deal with Rainmeter variables open the variable files directly here to edit most of the configuration options directly with any text editor.
	**Help** Open the SYSMonitor manual, the DeviantArt SYSMonitor page or directly write an E-Mail to plnky77@shared-files.de if you need any support.

3.3 Skin Configuration

The spanner symbol or the color buttons will open the individual configuration page for each skin. The empty area on the left will show the skin settings, on the right you will still find the Skins list to switch to other configurations and on the lower right the buttons to open the Circle Color Settings, the Panel Color Settings or switch back to the SYSMonitor settings main page.

The active configuration page is marked with a green spanner symbol and shown on the title bar:



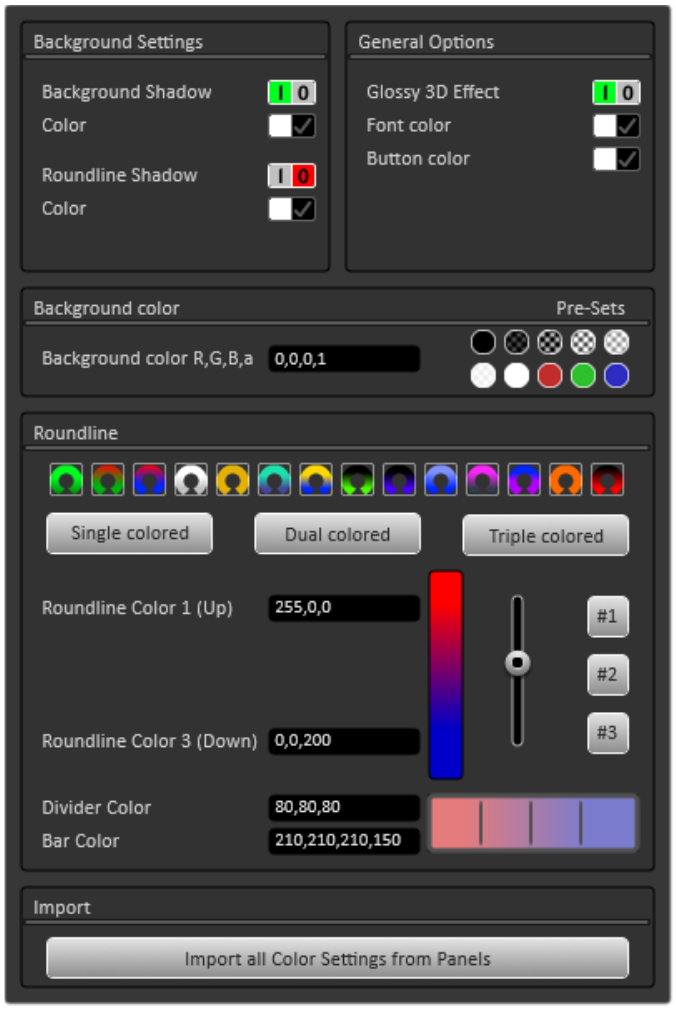
3.4 Color Settings (Circle)

The color settings allow full skin color customization. For a basic setup some pre-sets are integrated. With the input fields you will be able to specify any RGB Color for the background and the bars / Roundline. Just klick on a field to enter a new value and safe with 'Enter/Return'. Exit an activated Input Field without saving by pressing the 'ESC' button on your keyboard.

To define your favorite color refer to any RGB table (e.g. at www.rapidtables.com) to get the RGB codes. Basically, a RGB color code includes 3 values, the Red, the Green and the Blue color (R,G,B). The range is from 0 (dark/disabled) to 255 (full on). The 4th (R,B,G,a) value is the optional alpha code. If used, 0 is fully transparent while 255 or not used means transparency disabled. Some examples:

255,255,255	white	*0,0,0*	black	r,g,b,125	any color 50% transparent
255,0,0	red	*0,255,0*	green	0,0,255	Blue

3.4.1 Background Settings and General Options

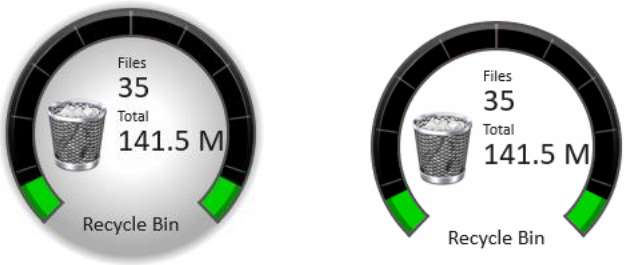


Background Shadow
Enable/Disable a black or white shadow in the middle of the circle

Black BG shadow on *BG shadow off*

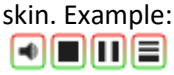
Roundline Shadow
Enable/Disable a black or white shadow behind the Roundline

Black RL shadow on *RL shadow off*



Font Color
Select a black or white font color for the skin

Button Color
Select black or white colored Buttons e.g. in Webradio skin. Example: black buttons with colored frame:



The selected option is also valid for non-colored icons.

Glossy 3D Effect
Enable/Disable the glossy effect to switch between 3D and flat Roundline design

Glossy 3D on *Glossy 3D off*

3.4.2 Background Color

Select any preset or configure your preferred background color for the circle skins

Dard Red Background and Black RL shadow on

Translucent Black Background on and RL shadow off

3.4.3 Roundline Color

The gauge itself includes several color options. First of all, the colored gauge background which could be single, dual or triple colored: Roundline Color 1 (the upper one), Roundline Color 2 (in the middle) and Roundline Color 3 (the lower color). Setting a Roundline color to transparent will make your wallpaper visible within the Roundline but may cause some other information to disappear, see below where the Roundline colors are used.

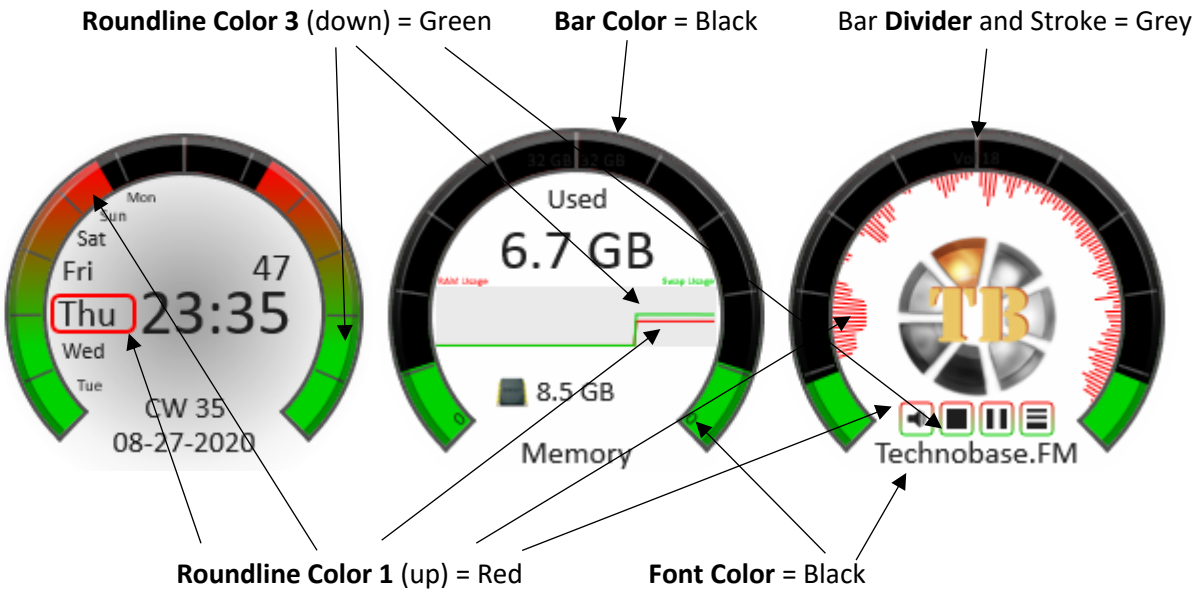
The gauge will be covered by a single colored Bar, you should not use high transparency settings here to keep the gauge effect enabled. Take care of your combination of Bar and Font Color to keep the Roundline labels readable.

For better gauge reading the bar is covered by a 0/20/40/60/80/100% or 0/10/20/30/40/50/60 minutes scale. The color for the scale could be changed using the Divider Color Option.

The general layout of the skin is:

- Layer 0 = Your desktop / wallpaper
- Layer 1 = Circle Background
- Layer 2 = Background Shadow & Roundline Shadow
- Layer 3 = Roundline (Roundline Color 1 – 3)
- Layer 4 = Bar (Bar Color)
- Layer 5 = Divider (Divider Color)
- Layer 6 = Roundline Label and Content (Font Color)

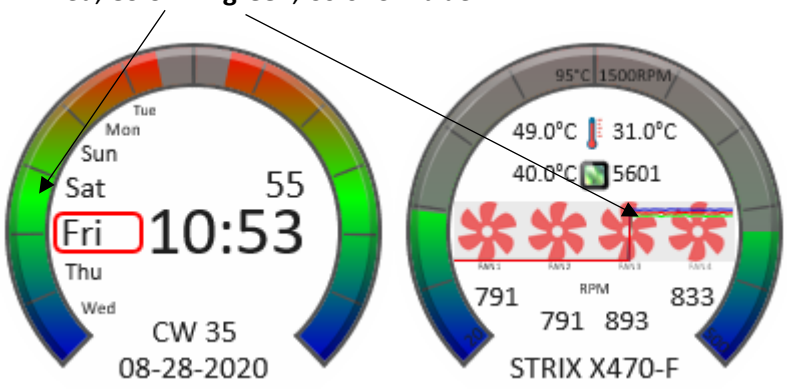
As an example, lets explain the Preset#2 ‘Dark Red-Green’:



Note: on top of the Roundline the Label is not readable here (black font on black bar): 

Roundline Color 2 (the middle one) is used within the Roundline and in some skins for the 3rd graph in a diagram:

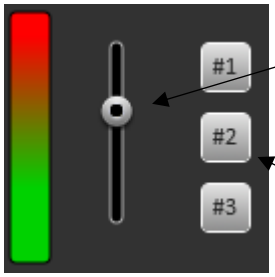
Example: Roundline Color 1 = red, **Color 2 = green**, Color 3 = blue:



Load some Presets

Select Color design of the Roundline background

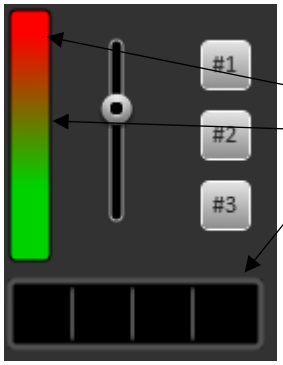
Slider and Custom Preset



Change the edge / angle between Roundline color 1 and 3 or move the middle color 2 with the slider. Please note any change here will refresh all active skins immediately. You should try to find your favorite setting just with a few skins activated. With many skins active the slider becomes pretty slow!

The 3 additional buttons are for your personal presets.
Right mouse klick on a button saves your current setting to the slot.
Left klick simply loads your preset.

Preview bars



The vertical and horizontal preview bars show your current color settings

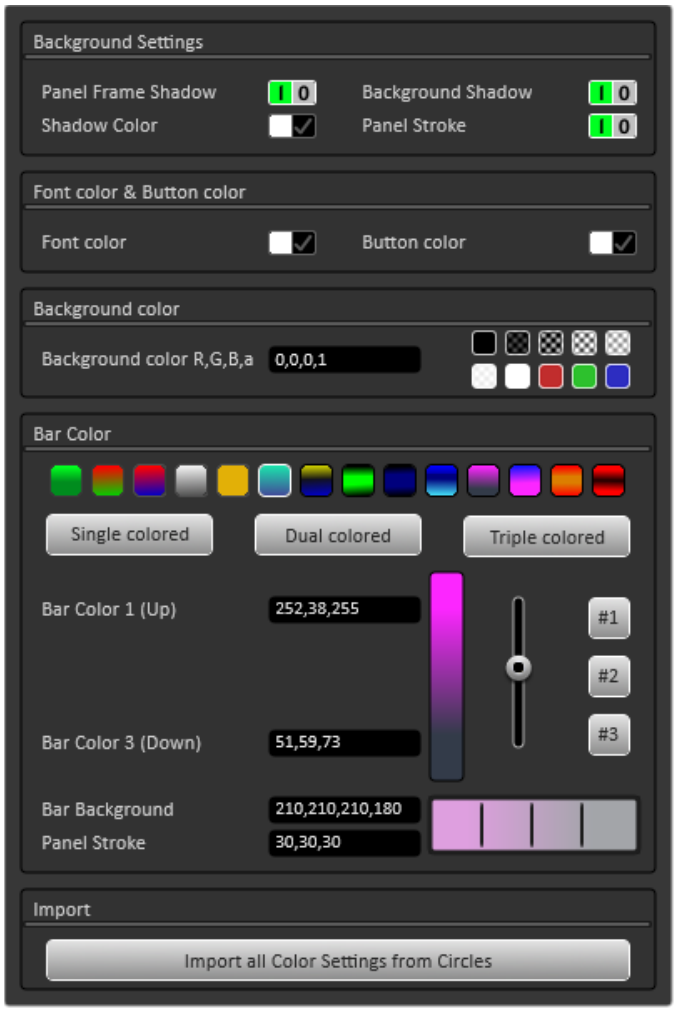
Roundline Color Settings
Color Edge
Bar and Divider Settings

Import

Once you finally configured a color setup you could easily import all settings from Panel to Circle skins or vice versa.

3.5 Color Settings (Panel)

The Panel color settings are nearly similar to the circle except the options for the frame and shadow.



Panel Frame Shadow

Enable/Disable a black or white shadow of the panel frame

Black frame shadow on

frame shadow off

Background Shadow

Enable/Disable a black or white shadow in the middle of the Frame

BG Shadow on Frame Shadow off

BG Shadow on Frame Shadow on

Panel Stroke

Enable/Disable a colored panel stroke

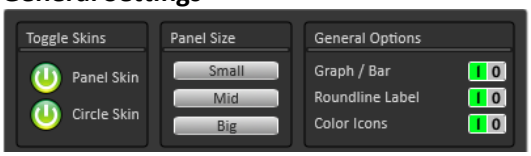
Red Panel Stroke on Frame and BG Shadow off

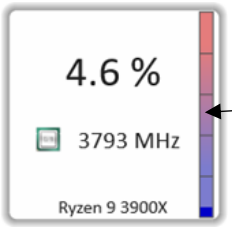
Red Panel Stroke on Frame and BG Shadow on

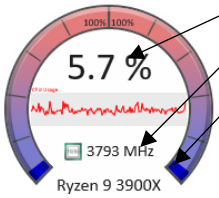
4. SYSMonitor skins for Windows, HWiNFO & MSI Afterburner

Skins of this group provides a layout for Windows, two layouts for HWiNFO and a 4th layout for MSI Afterburner. Some options are available for all skins:

General Settings







Toggle Skin
Toggle (activate / deactivate) the skin

Panel Size
Select Small, Mid or Big layout for the panel skin

General Options

- Enable/Disable the graph in Circle and the right Bar in Panel Skins
- Enable / Disable the Roundline Label showing the Max/Min value in the gauge

Color Icons

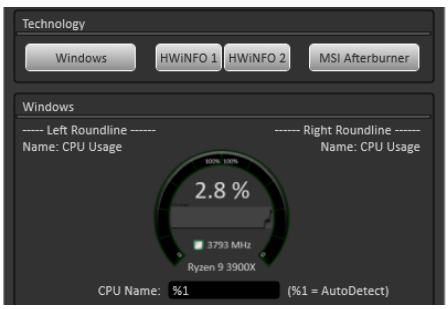
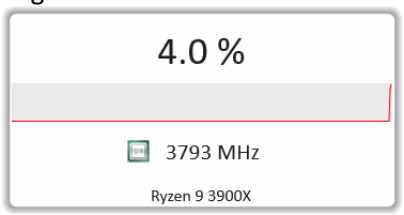
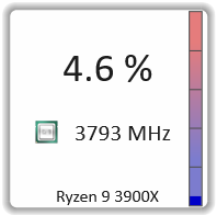
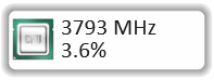
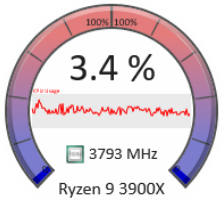
- Enable Color Icons or use black/white icons only. If the non-colored Icons are black or white depends on the Button Color Settings

4.1 CPU

General

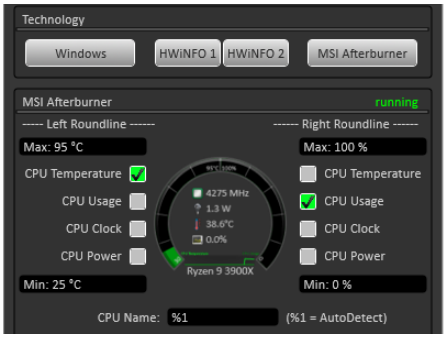
- Left mouse klick on the skin activates Windows Task-Manager
- Right mouse klick to open Rainmeter options including link to 'Skin Options' and 'Color Settings'
- Mouse wheel button / middle mouse button activates Scale Mode
- Mouse hover activates Top10 Process List buttons

Windows

Settings	Skins
 Choose your own CPU name displayed in the skin if not detected correctly. If you want to keep auto detection, use %1	Big Panel  Mid Panel  Small Panel  Circle  Skin shows • CPU load in %, visualized in Roundline and Mid Panel Bar • CPU load graph • Default CPU clock from Windows Registry • CPU name from Windows Registry

MSI Afterburner

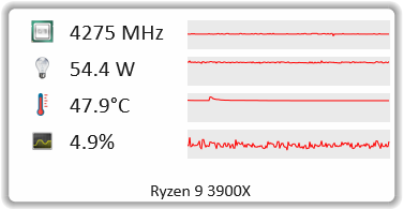
Settings



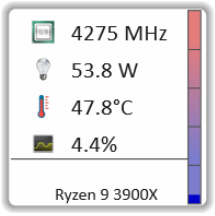
Allows sensor selection for the left and right Roundline. Make sure to set correct Min/Max ranges for the gauge.

Skins

Big Panel

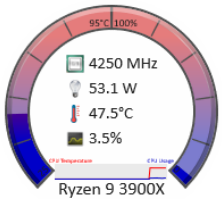


Mid Panel



Small Panel

Circle

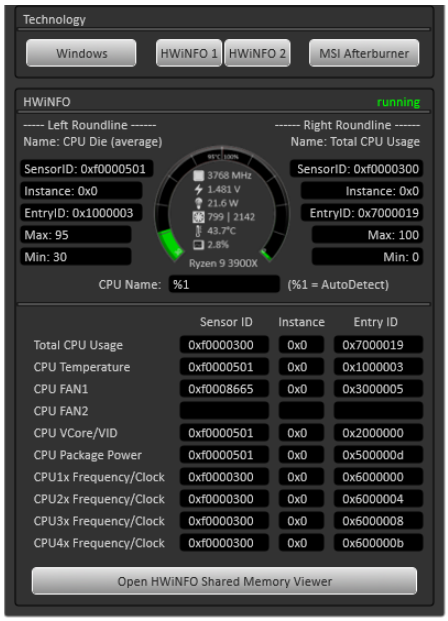


Skin shows current values for

- CPU Frequency in MHz
- CPU Power in Watts
- CPU Temperature in °C or F
- CPU Load in % and visualized in Mid Panel Bar
- Graph for sensors configured for left and right Roundline

HWiNFO

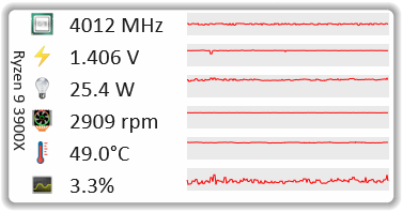
Settings



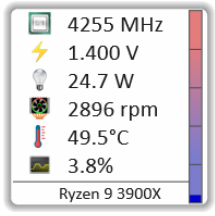
Configure your sensors here. See FAQ section how to find out your correct sensor values with Shared Memory Viewer.

Skins

Big Panel

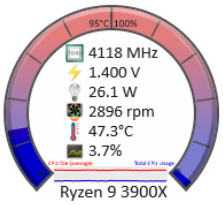


Mid Panel

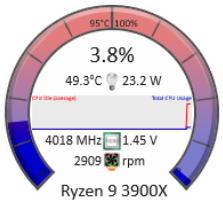


Small Panel

Circle HWiNFO1



Circle HWiNFO2



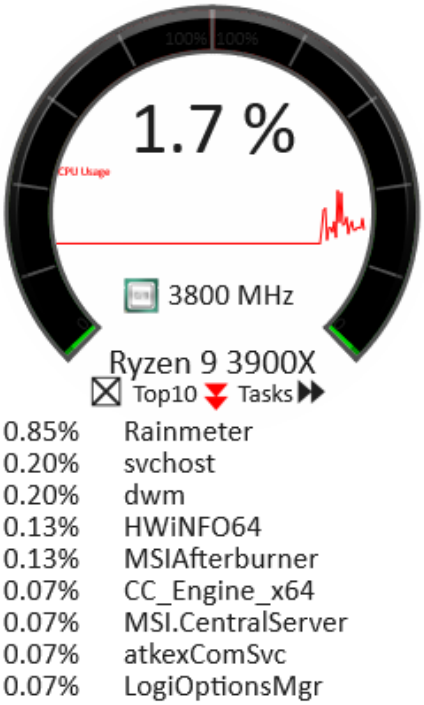
Skin shows current values for

- CPU Frequency in MHz
- CPU VCore in Volts
- CPU Package Power in Watts
- FAN1/2 Speed of your CPU cooler
- CPU Temperature in °C or F
- CPU Load in % and visualized in Mid Panel Bar
- Graph for sensors configured for left and right Roundline

Note: the CPU frequency displayed is calculated as an average of the 4 configured sensors. Always configure all 4, even you use a dual core for example. On a multicore processor select any cores (e.g. Core 1, 3, 5, 7 of an Octa-Core processor)

Integrated Process Viewer

Additionally to the ProcView skins CPU, GPU and RAM provides an integrated Top10 list for active processes. Hover the skin to show the activation buttons.

<table>
<tr>
<td> 
</td>
<td>Hover the skin to display the process list buttons.

Turn on a list of Top10 processes below the skin

Turn on a list of Top10 processes on the right

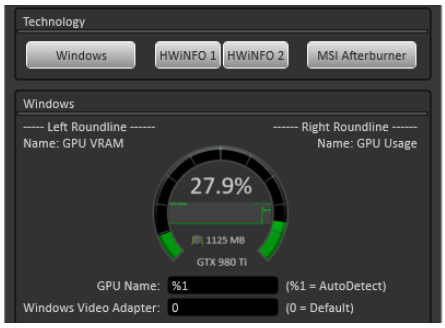
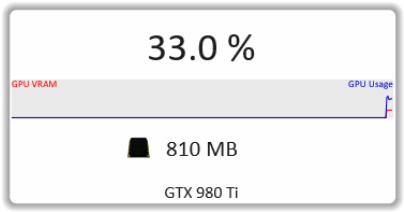
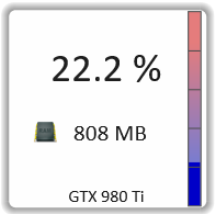
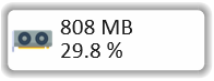
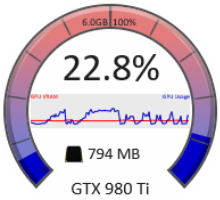
Close the Top10 list</td>
</tr>
</table>

4.2 GPU

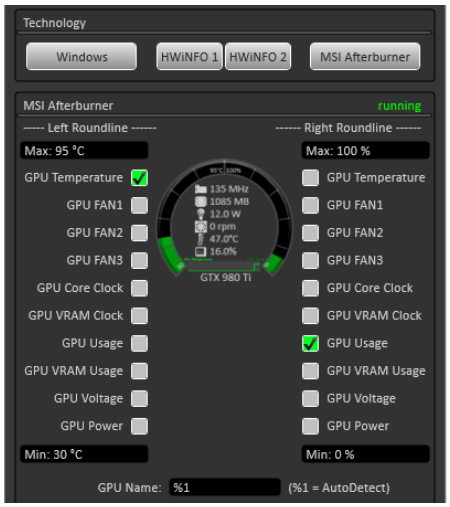
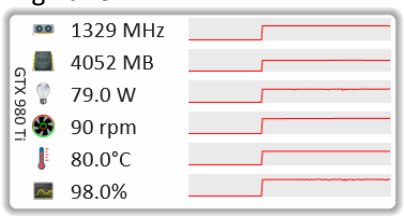
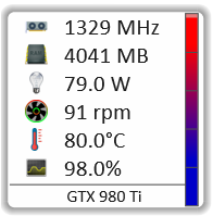
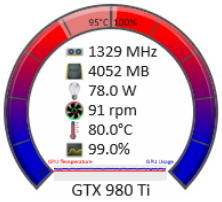
General

- Right mouse klick to open Rainmeter options including link to ‘Skin Options’ and ‘Color Settings’
- Mouse wheel button / middle mouse button activates Scale Mode
- Mouse hover activates Top10 Process List buttons

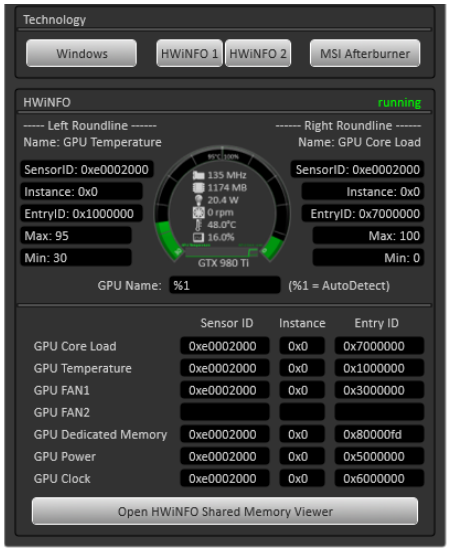
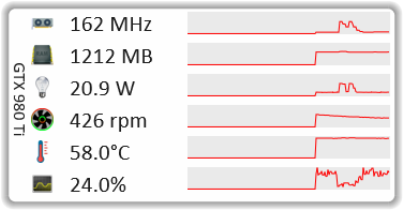
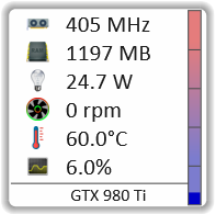
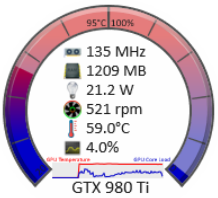
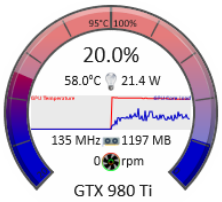
Windows

Settings	Skins
 Choose your own GPU name displayed in the skin if not detected correctly. If you want to keep auto detection, use %1. If detection does not work, try a higher Windows Video Adapter (e.g. 5)	Big Panel  Mid Panel  Small Panel  Circle  <u>Skin shows</u> • GPU load in %, visualized in Roundline and Mid Panel Bar • GPU memory used, visualized in right Roundline and graph • GPU name from Windows Registry **Note**: during first start the skin detects the GPU in Windows registry. The skin must be refreshed manually first time to activate the value readings.

MSI Afterburner

Settings	Skins
 Allows sensor selection for the left and right Roundline. Make sure to set correct Min/Max ranges for the gauge.	Big Panel  Mid Panel  Small Panel  Circle  Skin shows current values for • GPU Core Frequency in MHz • VRAM usage • GPU Power in Watts • FAN1 | FAN2 speed • GPU Temperature in °C or F • GPU Load in % and visualized in Mid Panel Bar • Graph for sensors configured for left and right Roundline **Note**: The skin includes support for 2 FANs only (1 & 2). For visualization in the Roundline you can choose some other sensors not displayed as text.

HWiNFO

Settings	Skins
 Configure your sensors here. See FAQ section how to find out your correct sensor values with Shared Memory Viewer.	Big Panel  Mid Panel  Small Panel  Circle HWiNFO1  Circle HWiNFO2  <u>Skin shows current values for</u> • GPU Core Frequency in MHz • VRAM usage (dedicated memory) • GPU Power in Watts • FAN1 | FAN2 speed • GPU Temperature in °C or F • GPU Load in % and visualized in Mid Panel Bar • Graph for sensors configured for left and right Roundline

5. SYSMonitor skins for HWiNFO & MSI Afterburner

5.1 GPU2

The skin for a second graphics card is similar to the first one except the Windows layout.

5.2 FPSView

The FPSView skin requires Rivatuner Statistics Server running to detect 3D applications and report Framerates and Frametimes. If no 3D application or Game is detected, the skin shows the 2D Mode:

The skin switches to the 3D Mode automatically once you start a Game.

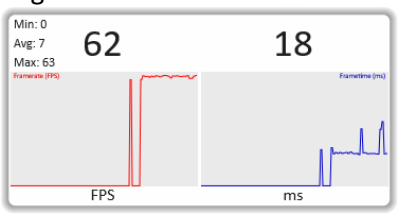
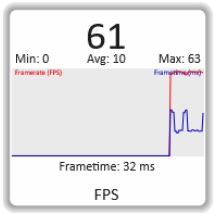
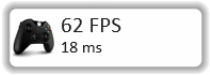
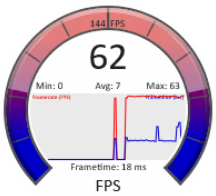
General

- Right mouse klick to open Rainmeter options including link to ‘Skin Options’ and ‘Color Settings’
- Mouse wheel button / middle mouse button activates Scale Mode

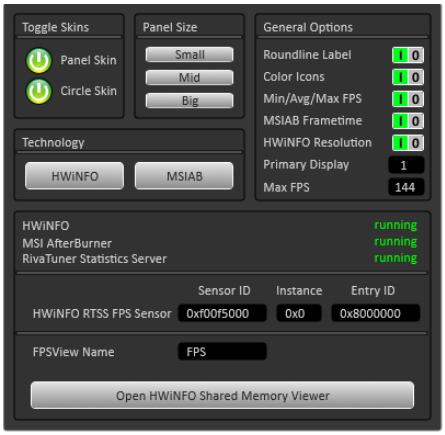
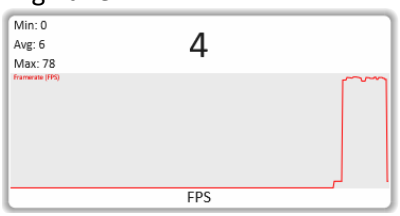
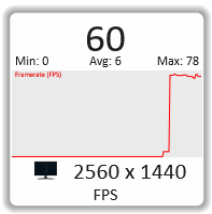
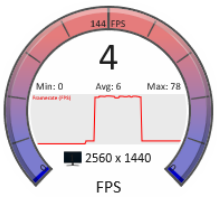
Additional General Options

- Show/Hide the Min/Avg/Max information in the skin
- Show/Hide the Frametimes in MSI Afterburner layouts
- Show/Hide the Display Resolution information in HWiNFO layouts
- Configuration field to add the Monitor Number for Resolution measurement
- Configuration field for the maximum possible FPS in your system used for the gauge visualization

MSI Afterburner

Settings	Skins
	Big Panel  Mid Panel  Small Panel  Circle  Skin shows current values for • In-game Framerate (FPS) • Minimum, average and maximum Framerate • In-game Frametimes in ms

HWiNFO

Settings	Skins
	Big Panel  Mid Panel  Small Panel  Circle  Skin shows current values for • In-game Framerate (FPS) • Display Resolution • Minimum, average and maximum Framerate

6. SYSMonitor skins for Windows & HWiNFO

6.1 RAM

The RAM skin shows information about your installed memory and the Windows Swap file.

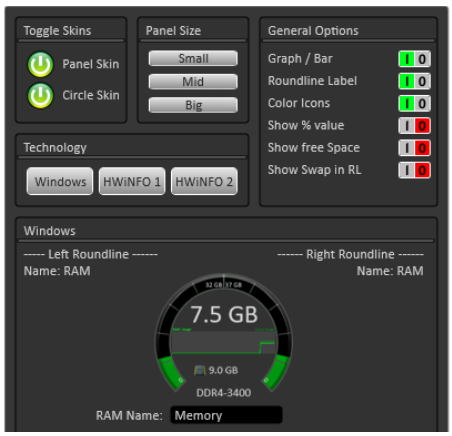
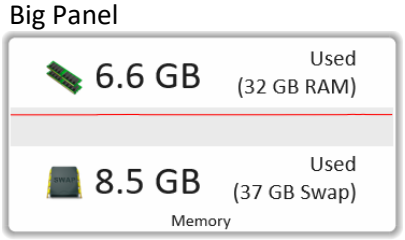
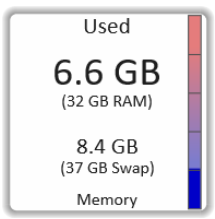
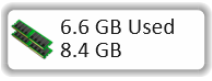
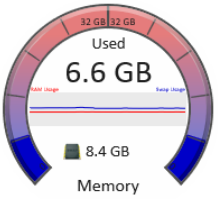
General

- Right mouse klick to open Rainmeter options including link to ‘Skin Options’ and ‘Color Settings’
- Left mouse klick opens Windows Resource Monitor
- Mouse wheel button / middle mouse button activates Scale Mode
- Mouse hover activates Top10 Process List buttons

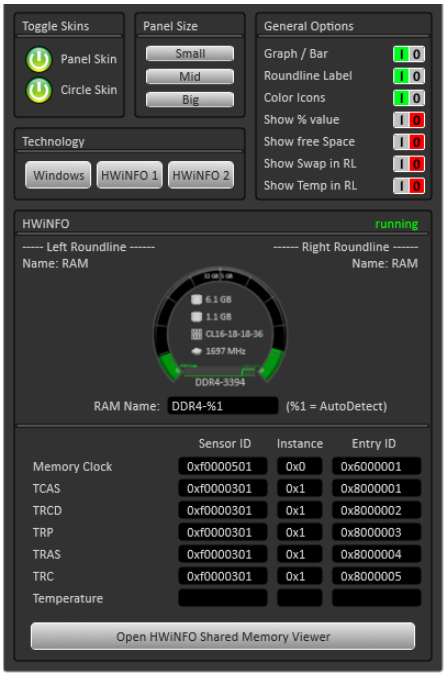
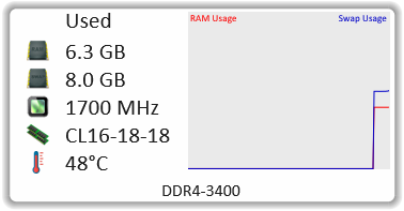
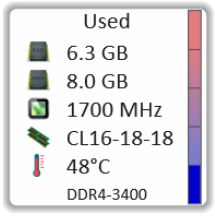
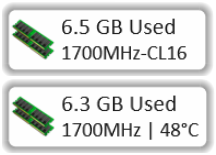
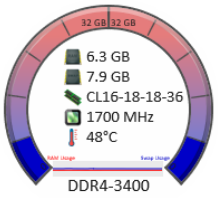
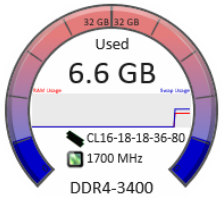
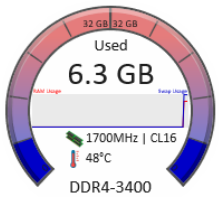
Additional General Options

- Show % value instead of MB/GB
- Show free space/memory instead of used
- Circle Roundline shows RAM values only on both sides. Activated ‘Show Swap in RL’ displays the swap usage in right Roundline

Windows

Settings	Skins
 Choose your own Memory name displayed in the skin	Big Panel  Mid Panel  Small Panel  Circle  Skin shows • Current RAM used • Maximum available RAM • Current Size of the Swap file • Maximum Windows reserved Swap file size

HWiNFO

Settings	Skins
	Big Panel  Mid Panel  Small Panel  Circle HWiNFO1  Circle HWiNFO2  

Configure your sensors here. See FAQ section how to find out your correct sensor values with Shared Memory Viewer.

Skin shows current values for

- RAM used
- Swap File size
- Memory frequency
- Most important RAM Timings
- RAM Temperature if available
- Roundline shows RAM used on both sides

Optional:
If your memory provides an integrated temperature sensor it will be enabled within the skins and you can enable Roundline and graph visualization ('Show Temp in RL' switch)

6.2 DualDrive / DualDrive2

The DualDrive skins are a simple add-on to the single drive skins showing drive information for a typical setup of two drives (one OS SSD, one Data HDD) in a single skin. Sensors must be configured in the Drive skins, the DualDrive skin allows drive selection only.

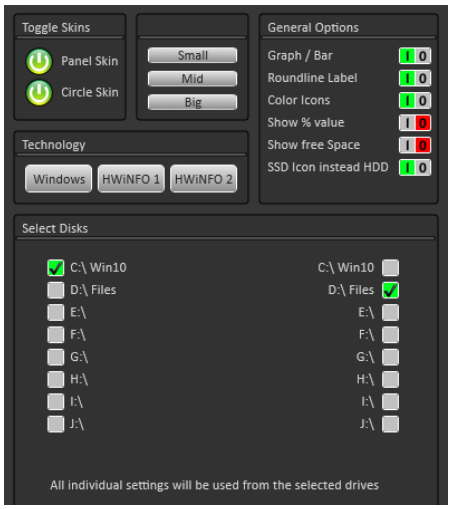
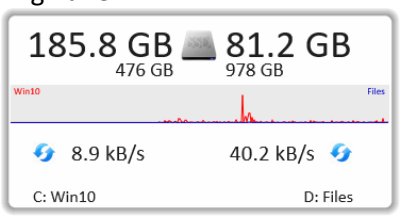
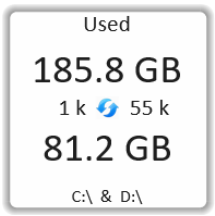
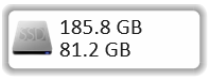
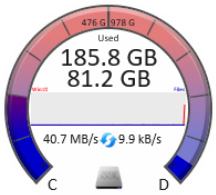
General

- Right mouse klick to open Rainmeter options including link to 'Skin Options' and 'Color Settings'
- Mouse wheel button / middle mouse button activates Scale Mode

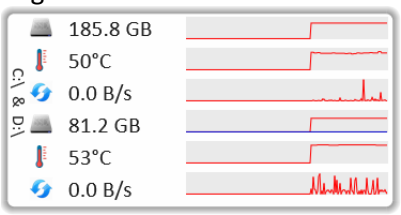
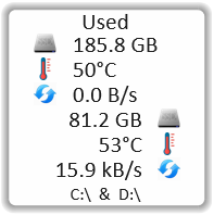
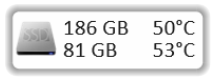
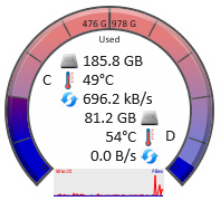
Additional General Options

- Show % value instead of MB/GB
- Show free space/memory instead of used
- Show a SSD icon instead of a HDD icon

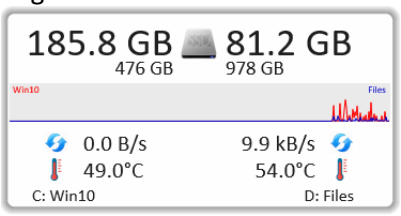
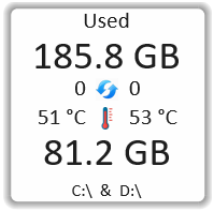
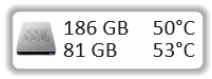
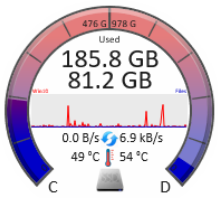
Windows

Settings	Skins
 Choose your two drives monitored with the skin	Big Panel  Mid Panel  Small Panel  Circle  <u>Skin shows</u> • Current disk space used / free • Available drive size • Current activity on the disk in MBytes/s • Drive letter and Windows Name

HWiNFO1

Settings	Skins
	Big Panel  Mid Panel  Small Panel  Circle  <u>Skin shows current values for</u> • Disk space used / free • Drive temperature • Current activity on the disk in MBytes/s, also shown in graph • Drive letter

HWiNFO2

Settings	Skins
	Big Panel  Mid Panel  Small Panel  Circle  <u>Skin shows current values for</u> • Disk space used / free • Available space • Drive temperature • Current activity on the disk in MBytes/s • Drive letter and Windows Name

6.3 Drive1 – 8

The Drive skin is available for 8 disks in your setup and supports Windows but also more detailed HWiNFO sensor readings.

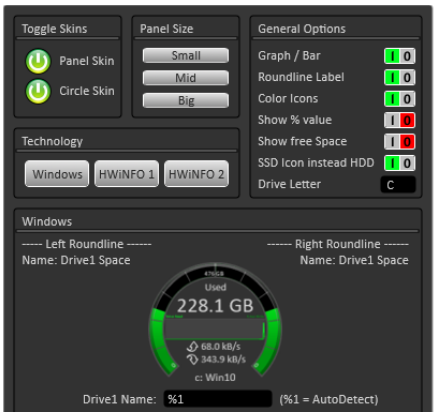
General

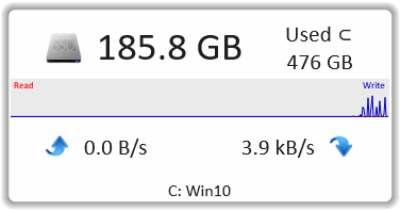
- Right mouse klick to open Rainmeter options including link to ‘Skin Options’ and ‘Color Settings’
- Left mouse klick opens the drive folder with Windows Explorer
- Mouse wheel button / middle mouse button activates Scale Mode

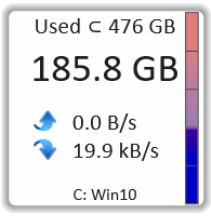
Additional General Options

- Show % value instead of MB/GB
- Show free space/memory instead of used
- Show a SSD icon instead of a HDD icon
- Configure the Windows Drive Letter for the drive to display

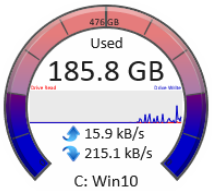
Windows

<table>
<tr><th>Settings</th><th>Skins</th></tr>
<tr>
<td>


Choose your own drive name if you don’t want to use the Windows name
</td>
<td>
Big Panel


Mid Panel


Small Panel

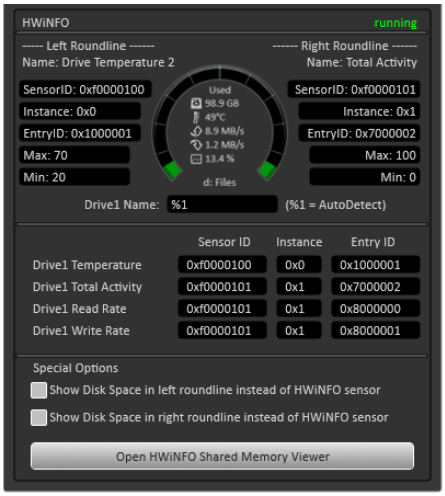
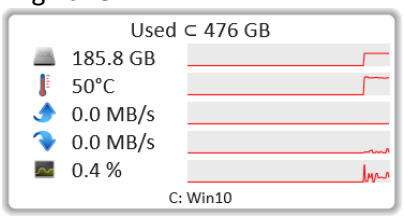
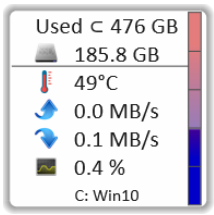
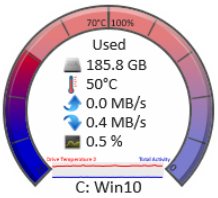
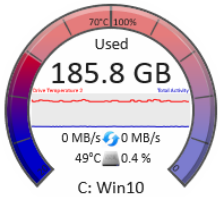

Circle


<u>Skin shows</u>

Disk space used / free
Displayed in both Roundlines and Bar
Available space
Current Read activity in MBytes/s
Current Write activity in MBytes/s
Activity visualized in the graph
Drive letter and Windows Name

</td>
</tr>
</table>

HWiNFO

Settings	Skins
	Big Panel  Mid Panel  Small Panel 
Configure your sensors here. See FAQ section how to find out your correct sensor values with Shared Memory Viewer.	Circle HWiNFO1  Circle HWiNFO2 

Skin shows current values for

- Disk space used / free
- Drive temperature
- Read activity in MBytes/s
- Write activity in MBytes/s
- Total Disk activity / usage

Special Options:
If you don't want to display a HWiNFO sensor on the Roundline enable the option to display the disk space status instead

7. SYSMonitor skins for HWiNFO only

Skins in this group requires full monitoring utility support which is possible with HWiNFO only. MSI Afterburner or Windows are not able to provide this information, therefore HWiNFO Layouts are available only.

7.1 CPU2

The skin for a second processor is similar to the HWiNFO layout of CPU skin.

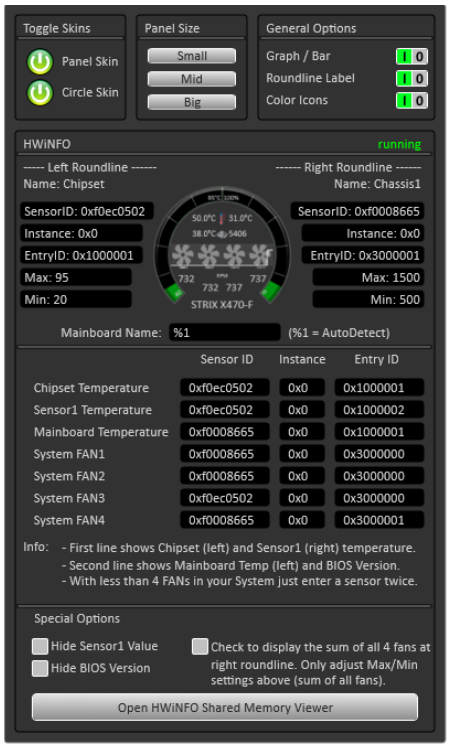
7.2 Mainboard

Usually a mainboard provides some sensors for your FANs, for the Chipset or PCH or other sensors connected. The Mainboard skin supports 3 temperatures and 4 FAN speeds

General

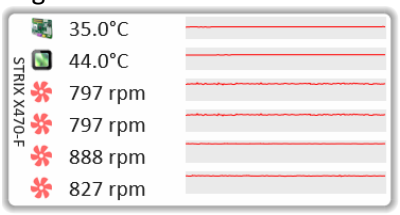
- Right mouse klick to open Rainmeter options including link to 'Skin Options' and 'Color Settings'
- Mouse wheel button / middle mouse button activates Scale Mode

HWiNFO

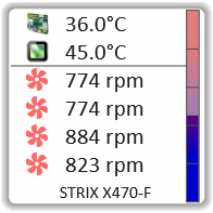
<table>
<tr><th>Settings</th><th>Skins</th></tr>
<tr>
<td>


Configure your sensors here. See FAQ section how to find out your correct sensor values with Shared Memory Viewer.

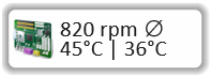
Big Panel



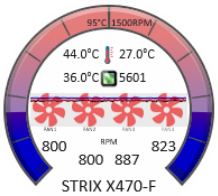
Mid Panel



Small Panel



Circle



Note:
The skin shows rotating FANs in light transparent Roundline Color 1 when a sensor value is detected. If your FAN stops and shows 0 rpm, the skin also stops rotating the FAN.
If you keep the FAN Sensor configuration empty, the FAN in the skin will be hidden.
I would strongly recommend to always configure all FANs, even you have less available. Use a FAN twice if needed or enter your FAN to all 4 sensors if you just have one.

Skin shows current values for

- Chipset / PCH temperature (44/45° in example)
- Sensor1 temperature (Circle only, 27°C in example)
- Mainboard / System temperature (35/36° in example)
- 4x FAN
- Mainboard BIOS Version
- Rotating FANs
- Average FAN speed in Small Panel

Special Options:

- Hide the Sensor1 Value in Circle skin if not needed
- Hide the BIOS version in Circle skin if not needed
- If you want to have the status of all FANs in the right Roundline there is a sum calculation integrated. Take care of correct Min/Max Setting when using this option, it's the sum of all 4 FANs!
</td>
</tr>
</table>

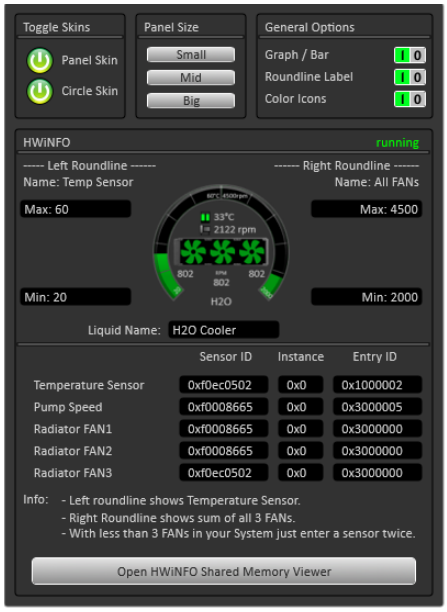
7.3 Liquid

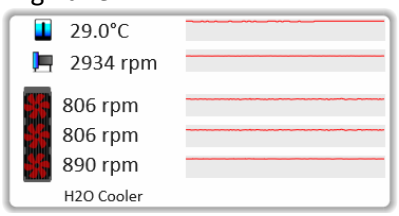
The liquid skin is a specialized version of the mainboard skin for setups working with AiO or custom liquid cooling setups. It can use the same values already configured in mainboard skin but for sure allows to enter extra sensors. With both skins in combination, up to 7 FANs, a Pump and 4 temperatures could be displayed.

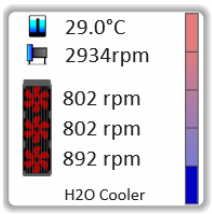
General

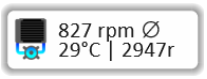
- Right mouse klick to open Rainmeter options including link to ‘Skin Options’ and ‘Color Settings’

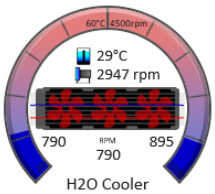
HWiNFO

<table>
<tr><th>Settings</th><th>Skins</th></tr>
<tr>
<td>


Configure your sensors here. See FAQ section how to find out your correct sensor values with Shared Memory Viewer.
</td>
<td>
Big Panel


Mid Panel


Small Panel


Circle


<u>Skin shows current values for</u>

Any temperature sensor, e.g. liquid temperature
Pump speed
3x FAN
Rotating FANs
Average FAN speed in Small Panel

<u>Note:</u>
The left Roundline is fixed to the temperature sensor, the right one to the sum of all 3 FANs. Use again the correct Min/Max values here regarding your FAN specifications.
</td>
</tr>
</table>

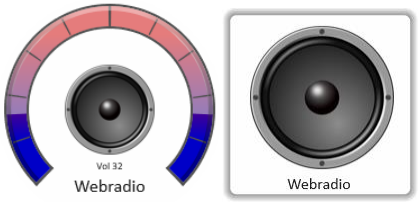
8. SYSMonitor skins for Windows only

Skins available in this group do not require any monitoring utility like HWiNFO or MSI Afterburner. All functions integrated are directly supported by Rainmeter itself and provided from Windows. Except the need to install VLC media player for Webradio skin, there is no configuration required.

8.1 Webradio

The Webradio skin allows playing online music streams in any codec format. Simply select a predefined station or open the configuration to add any Stream URL you would like to listen to.

If offline / not playing, the skin simply shows a speaker icon

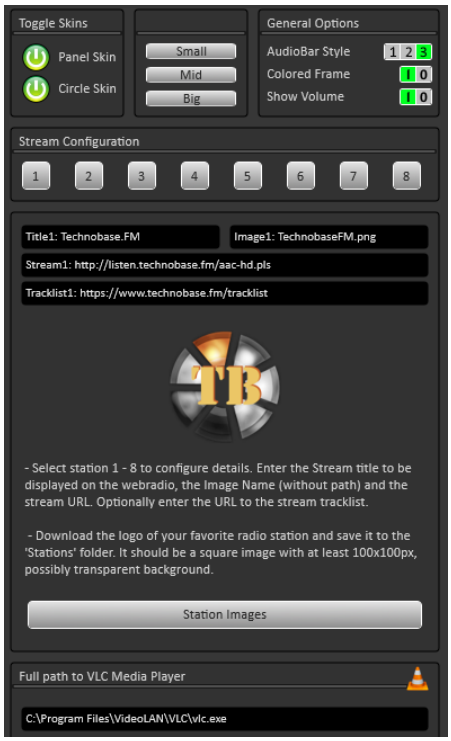


General

- Right mouse klick to open Rainmeter options including link to ‘Skin Options’ and ‘Color Settings’
- If offline, left mouse klick opens the predefined radio stations list. If you select one, music streaming starts
- If playing, left klick on the station icon opens the defined track list website
- Mouse wheel up/down changes Windows volume, middle mouse button activates Scale Mode

Additional General Options

- Change the design of the Audio Bars
- Show/Hide the Volume

<table>
<tr><th>Settings</th><th>Skins</th></tr>
<tr>
<td>


Configure your stations 1 – 8 here. Make sure to enter the correct path to VLC media player executable.

Note:
</td>
<td>
Big Panel


Circle with AudioBar Style 1


Circle with AudioBar Style 3

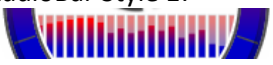

Available Buttons

Mute, Stop
Pause / Play
Stations List

The Roundline shows the current Windows volume

Mid Panel


Small Panel


AudioBar Style 1:

Show Bars according your Bar or Roundline single/dual/triple color configuration in Circle and Panels

AudioBar Style 2:

Show Bars with Roundline/Barcolor 1

AudioBar Style 3:

Show Bars in Panel with Barcolor 3
Show circular AudioBars in Circle with Roundline Color 1
</td>
</tr>
</table>

Stream configuration with skin settings

Check the website of your favorite radio station to find the direct Stream URL, current track list and station Icon. Please do not use the website URL, you need the link to the stream. Try it out if the stream works by opening VLC media player, select Media -> Open Network Stream and paste your link here for testing.

1. Download the station icon and save it as a .jpg or .png file to
   ...*YourDocumentsFolder*\ Rainmeter\Skins\SYSMonitor\@Resources\Images\Stations\
   You should modify the icon to a size of 128x128px and save it without spaces in the Filename

2. Enter the configuration now the Webradio skin settings
   - Title to be displayed in the skin
   - The file name of the icon you prepared
   - The full stream URL
   - The URL to the website including the track list (optional)

Manual stream configuration

If you would like to modify all stations in a faster way you could easily add the information directly to the skin configuration file. Open the following file with any text editor:

...*YourDocumentsFolder*\ Rainmeter\Skins\SYSMonitor\@Resources*Stations.inc*

Stations.inc

```
[variables]

PathToVLC               =C:\Program Files\VideoLAN\VLC\vlc.exe

StationTitle1           =1Live
StationImage1           =1Live.png
StationURL1             =https://wdr-1live-live.icecastssl.wdr.de/wdr/1live/live/mp3/128/stream.mp3
StationTrackListURL1    =https://www1.wdr.de/radio/1live/on-air/1live-playlist/index.html

StationTitle2           =SWR3
StationImage2           =SWR3.png
StationURL2             =https://swr-swr3-live.cast.addradio.de/swr/swr3/live/mp3/128/stream.mp3
StationTrackListURL2    =https://www.swr3.de/playlisten/index.html
```

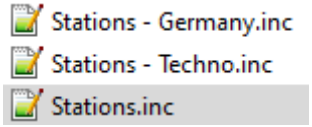
Simply refresh the skin to activate your changes after saving the file.

Configuration of more stations

Due to space restrictions only 8 stations are included. You could prepare a second stations list to switch easily by just renaming a file. Check out

...*YourDocumentsFolder*\ Rainmeter\Skins\SYSMonitor\@Resources\

folder and prepare a second/third stations file if needed. The file named Stations.inc is the active one. Two files are already included as an example:



License Information:

The VLC media player control uses Omnimoapp.exe from Omnimo Skin by Xyrfo and fediaFedia.

8.2 Volume

The Volume skin shows the current Windows volume together with an interactive icon. Additionally, the active audio output is displayed if activated.

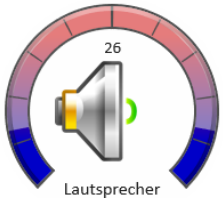
General

- Right mouse klick to open Rainmeter options including link to ‘Skin Options’ and ‘Color Settings’
- Left mouse button mutes / unmutes audio
- Mouse wheel up/down changes Windows volume
- Mouse wheel button / middle mouse button activates Scale Mode

Additional General Options

- Show/Hide the Volume
- Show active speaker output instead of skin name

<table>
<tr><th>Settings</th><th>Skins</th></tr>
<tr><td> 

Note:
The Roundline shows the current Windows volume</td><td>Circle
 

Mid Panel
 

Small Panel
 
</td></tr>
</table>

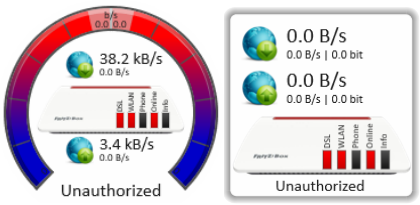
8.3 FritzBox

For AVM Fritz!Box routers the skin enables desktop visualization of some important router information without accessing the router’s web interface. To get this information the skin includes some Windows Power Shell Scripts using the router’s UPNP interface. Executing Power Shell Scripts, saving the router’s answer to a file and parsing the information out to display in the skin takes a view seconds. Therefore, the skin refreshes only once per hour automatically. Be aware of that when configuring colors which permanently refreshes all skins, you should deactivate the FritzBox skin until you have finished color adjustments.

The skin supports ADSL/VDSL connections with integrated modem but also WAN operating mode with any external modem connected. Before the skin could access the FritzBox UPnP interface, you need to prepare your router. Open the router’s web interface (usually http://fritz.box) and refer to ‘Home Network -> Network -> Network Settings’. Activate the Home Network share options (application access via TR-064 and status reporting via UPnP). If not available activate the expert view first.

Finally refer to the ‘System -> Fritz!Box users’ and enter a password for accessing the router from your home network

On first start of the skin the Power Shell scripts are not allowed to login to the router. The skin shows red LEDs and ‘Unauthorized’. Open the settings first and enter your router name or IP address and login credentials.

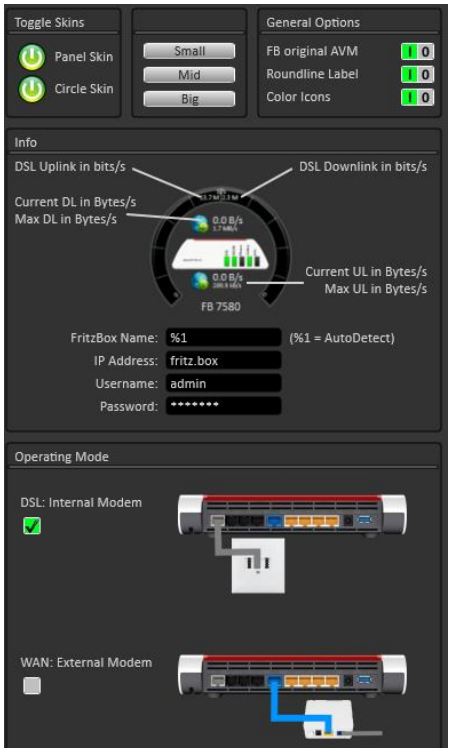
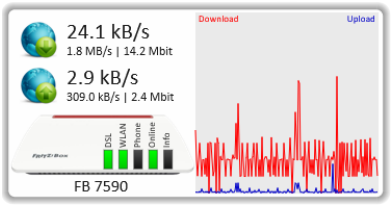
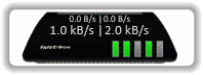


General

- Right mouse klick to open Rainmeter options with submenu ‘Custom skin actions’. The following options are available
  - Open ‘Skin Options’
  - Open ‘Color Settings’
  - Manually refresh the skin (execute the scripts to refresh all information)
  - Reconnect DSL to get a new IP address (only in DSL Mode)
  - Completely reboot the router
- Mouse wheel button / middle mouse button activates Scale Mode

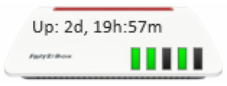
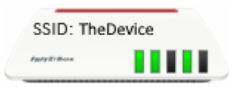
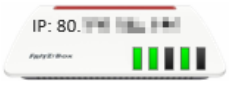
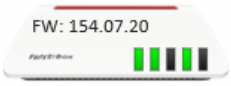
Additional General Options

- Choose a white or black Router Icon (original AVM is white)

Settings	Skins
 Configure your Router Name and login credentials <u>Note:</u> The Roundline shows the current Network usage related to the maximum possible download / upload rate.	Big Panel  Mid Panel  Small Panel with black icon  Circle  <u>Skin shows</u> • Your current computer network traffic in Bytes/s • Your router DSL connection speed in Bytes/s and bits/s (Big/Mid Panel) or in Bytes/s only in Small Panel and Circle • FritzBox status LED for DSL Connection, WLAN and Online status

Hover Options

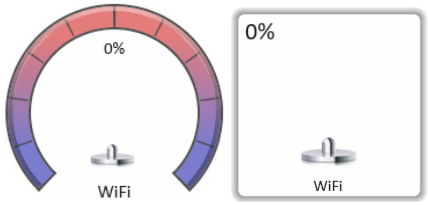
Hover a LED with your mouse curser to display additional information:

DSL Icon	WLAN Icon	Phone Icon	Online Icon	Info Icon
				
DSL Uptime	Your WiFi Name	Laster Caller details	External internet IP address	Current Router Firmware

Note: Left mouse klick on Laster Caller details to copy the caller number to your clipboard

9.1 WiFi

The WiFi skin shows the current status of your WLAN connection. Without a WiFi Adapter / connection no information will be displayed:

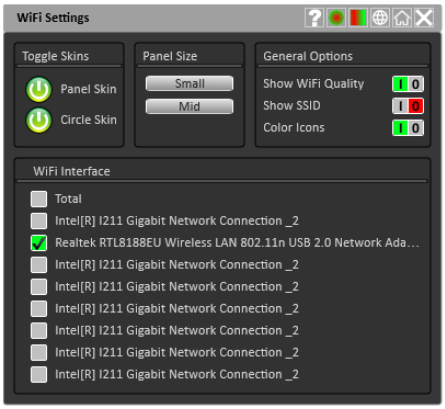
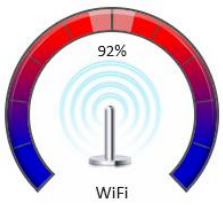
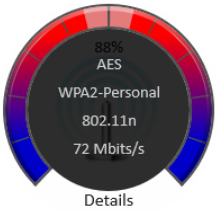
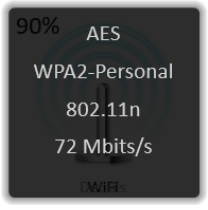
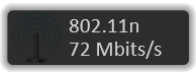


General

- Right mouse klick to open Rainmeter options including link to ‘Skin Options’ and ‘Color Settings’
- Mouse wheel button / middle mouse button activates Scale Mode
- Hover the WiFi icon to show more details

Additional General Options

- Show/Hide WiFi Connection Quality information in %
- Show SSID (your WLAN name) instead of the skin name ‘WiFi’

Settings	Skins
 Select your WiFi Adapter to display the correct bandwidth <u>Note:</u> The Roundline shows the current WiFi connection status	Circle  Mid Panel  Small Panel  **Additional details on mouse over** Circle  Mid Panel  Small Panel  • Active encryption • IEEE WiFi Standard • Connection bandwidth

9.2 Network & Network2

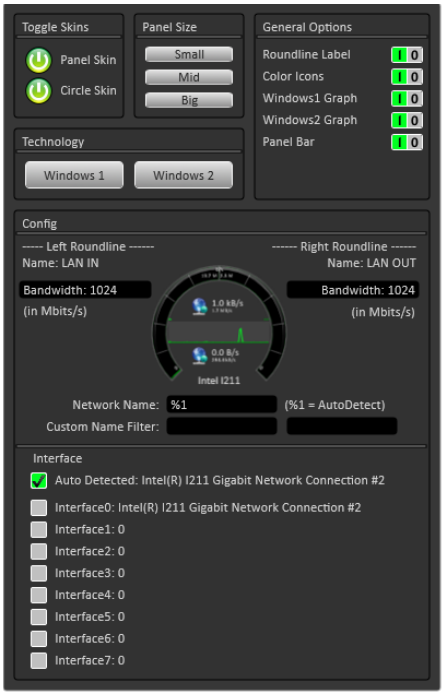
The Network and Network2 skin allow monitoring of wired ethernet interfaces.

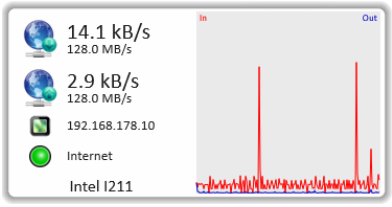
General

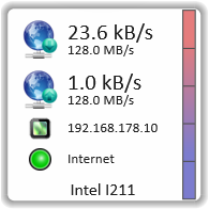
- Right mouse klick to open Rainmeter options including link to ‘Skin Options’ and ‘Color Settings’
- Left mouse klick to open network shares folder
- Mouse wheel button / middle mouse button activates Scale Mode

Additional General Options

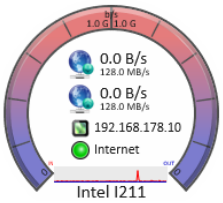
- Choose two different Circle Layouts (Windows 1 & 2) and enable/disable the graph individually

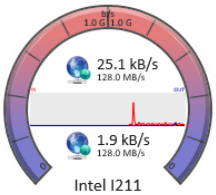
<table>
<tr><th>Settings</th><th>Skins</th></tr>
<tr>
<td>


Configure your maximum interface bandwidth in Mbits/s and select the interface to monitor if auto detection is wrong
</td>
<td>
Big Panel


Mid Panel


Small Panel


Circle Windows layout 1


Circle Windows layout 2


<u>Skin shows</u>

Your current computer network traffic in Bytes/s
Your Interface speed in Bytes/s
The active IP address of the used interface
The internet connection status of this interface

</td>
</tr>
</table>

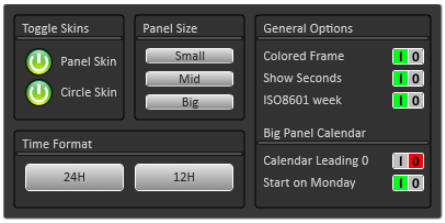
9.3 Time

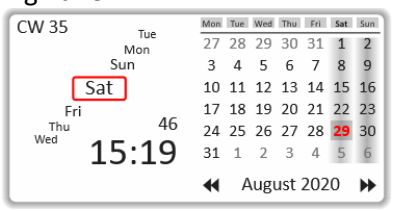
General

- Right mouse klick to open Rainmeter options including link to ‘Skin Options’ and ‘Color Settings’
- Mouse wheel button / middle mouse button activates Scale Mode

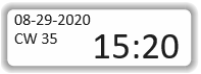
Additional General Options

- Choose either to use standard week number definition (US) or the ISO8601 version (EU)
- Display moth days 1 – 9 with leading 0
- For the full calendar in Big Panel skin select to start week on Sunday or Monday

<table>
<tr><th>Settings</th><th>Skins</th></tr>
<tr><td>


Configure 12 or 24h time format
</td><td>
Big Panel


Mid Panel


Small Panel


Circle


<u>Skin shows</u>

Local Time
Local Date
Calendar week
Moving Weekday List with marked active one
Full calendar in Big Panel skin

</td></tr>
</table>

License Information: The calendar implementation in Panel layout is based on LuaCalendar v5.0 by Smurfier

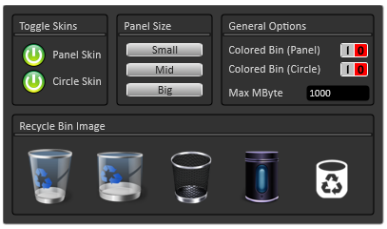
9.4 Trash

General

- Right mouse klick to open Rainmeter options including link to ‘Skin Options’ and ‘Color Settings’ or to empty recycle bin (playing standard windows empty sound included)
- Left mouse klick to open recycle bin
- Mouse wheel button / middle mouse button activates Scale Mode

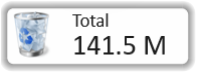
Additional General Options

- Select additional colored recycle bin icon
  Empty bin shows icon covered with Roundline / Bar color 3
  Full bin shows icon covered with Roundline / Bar color 1
- Configure the maximum storage size for your recycle bin as a reference for the Roundline and Big Panel bar.

<table>
<tr><th>Settings</th><th>Skins</th></tr>
<tr><td>


Configure 12 or 24h time format and select your favorite trash icon
</td><td>
Big Panel


Mid Panel


Small Panel


Circle with full trash


Circle with empty trash

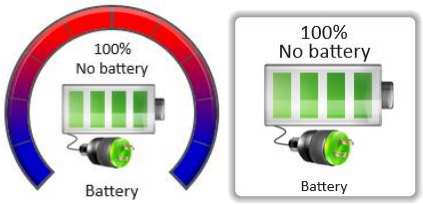

<u>Skin shows</u>

Number of deleted files in trash
Bin size in MBytes
Interactive trash icon (full/empty)

</td></tr>
</table>

9.5 Power

The Power skin shows the current status for your battery and mainly designed using the SYSMonitor skin on mobile computers. Without a battery detected, the skin shows:

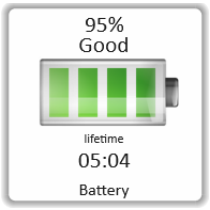
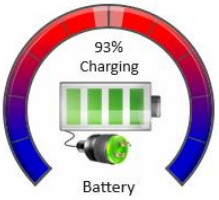
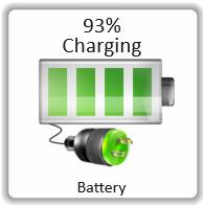


General

- Right mouse klick to open Rainmeter options including link to 'Skin Options' and 'Color Settings'
- Left mouse klick opens Windows Energy Settings
- Mouse wheel button / middle mouse button activates Scale Mode

Additional General Options

- Show/Hide the skin name 'Battery'
- Show/Hide the battery status (2nd line)

Settings	Skins
 <u>Note:</u> The Roundline shows the current battery status	**Running on Battery** Circle  Mid Panel  Small Panel  **Power connected** Circle  Mid Panel  Small Panel  <u>Skin shows</u> • Charge state in % • Reported battery status • Interactive battery icon • Reported lifetime in hh:mm

9.6 ProcView & ProcView2

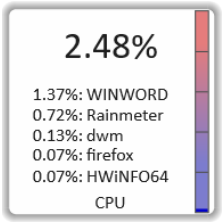
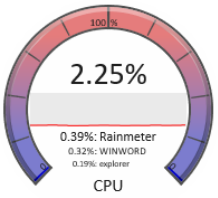
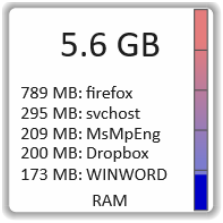
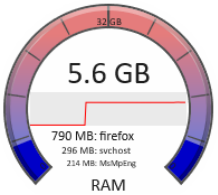
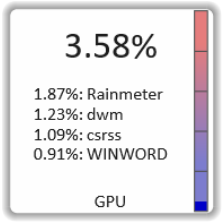
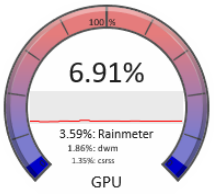
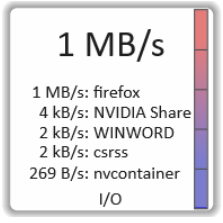
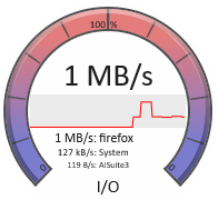
ProcView is a simple process viewer showing the top windows processes causing load on your device.

General

- Right mouse klick to open Rainmeter options including link to 'Skin Options' and 'Color Settings'
- Left mouse klick opens Windows Resource Viewer
- Mouse wheel button / middle mouse button activates Scale Mode
- Hover skin to display buttons allowing to switch the device monitored (CPU -> RAM -> GPU -> IO)

Additional General Options

- Due to the function there are no options for the ProcView skin except show/hide the bar in Panel skin

Settings	Skins
	CPU Panel  CPU Circle  RAM Panel  RAM Circle  GPU Panel  GPU Circle  I/O Panel  I/O Circle  Note: The I/O value shown is the overall read & write usage for network or disk interfaces. An auto scale function is implemented to detect the maximum of your system. Example: When measuring 500MBytes/s as a transfer speed to a disk, from now on 500MB/s is the maximum value for the Roundline and Bar. You won't see much happening on the gauge later when system is idle.

10. SYSMonitor Revision History

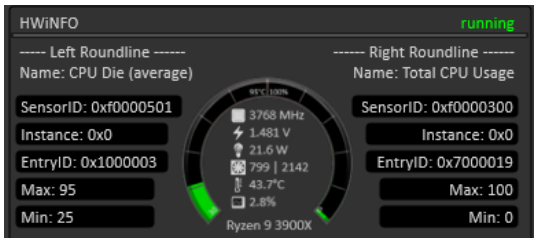
Rev	Description
1.0	▪ Initial release
1.1	▪ FritzBox Circle: Updated Roundline calculation to avoid "jumping" Roundlines at zero data transfer ▪ FritzBox: Fixed Error Log entries caused by FritzBox skin when refreshing ▪ Trash: Added Empty Sound and fixed Roundline/bar status when size is above max value ▪ Settings: Added marker for White/Black switches in Color Options ▪ Settings: Added option to enable/disable Glossy 3D effect for circle skins ▪ Webradio: Updated Audio Bar Style (now Style 1) ▪ Webradio: Added 2 new single colored audio bar styles ▪ Webradio: Updated button frames and removed Colored Speaker option ▪ Webradio: Added several new Radio Streams and Images (just rename the stations.inc file in Resources folder) ▪ GPU: Improved Detection for Intel iGPU ▪ RAM: corrected settings page ▪ RAM: Added Temperature Display to HWiNFO skins layouts ▪ Several additional code corrections
1.2	▪ Added temperature variable to display 'F' instead of 'C' (needs manually to be set in variables.inc) ▪ Added Skins for second Processor (HWiNFO support only) ▪ Added Skins for second Graphics Card (MSI Afterburner and HWiNFO support only) ▪ RAM: corrected virtual/swap memory measurements in Windows Skins ▪ Updated HWiNFO Shared Memory Viewer to Rev 3.2.0 ▪ Fixed GPU Name not displayed correctly in Windows Panel skins
1.3	▪ FritzBox: corrected DSL Status LED if router has no signal ▪ CPU: corrected sensor readings from MSI Afterburner to get average values for the complete CPU and not for Core1 only ▪ GPU: Added Video Adapter Selection in GPU Options to change Windows Adapter ID of GPU if not detected correctly ▪ RAM: corrected temperature display ▪ Trash: corrected colored trash icon function in panel skins ▪ Trash: corrected trash icon #5 when using black button color ▪ Updated GPU & CPU Name Filter for Windows ▪ Added Network2 Skin to support Dual LAN Solutions ▪ Added FPSView Skin. HWiNFO skin shows framerate and display resolution, MSIAB skin shows Framerate and Frametime. ▪ Added Technology Buttons to Home Settings. This allows switching the whole group to Windows/HWiNFO/MSIAB technology ▪ Added additional low-resolution images to reduce CPU load caused by Rainmeter (read FAQ how to install) ▪ Several small corrections and bugfixes ▪ Removed help pages from settings and added a full user guide instead
1.4	▪ Corrected refresh function for skin titles to fix date not updated correctly ▪ Fixed FAN Icon disappearing at 0 RPM in Liquid and Mainboard skins ▪ Fixed wrong Circle Roundline Min/Max Settings when MSIAB and HWiNFO settings are different in CPU and GPU Skin ▪ FritzBox: corrected LED status when Router is reporting WiFi disabled ▪ FritzBox: Added support for WAN Operating Mode with external modem connected ▪ Updated GPU & CPU Name Filter for Windows

1.5	▪ Reworked complete setup pages for better usability ▪ Added some more general options to configuration page ▪ Added support for 2 additional drives (Drive7 & 8) ▪ Added second DualDrive Skin ▪ Added second ProcessViewer Skin ▪ Added Top10 Process List Option to Circle CPU(1), GPU(1) and RAM Skins ▪ Fixed issue in Time Skin code causing Rainmeter Error entries

11. FAQ

11.1 How do I setup the Roundlines correctly?

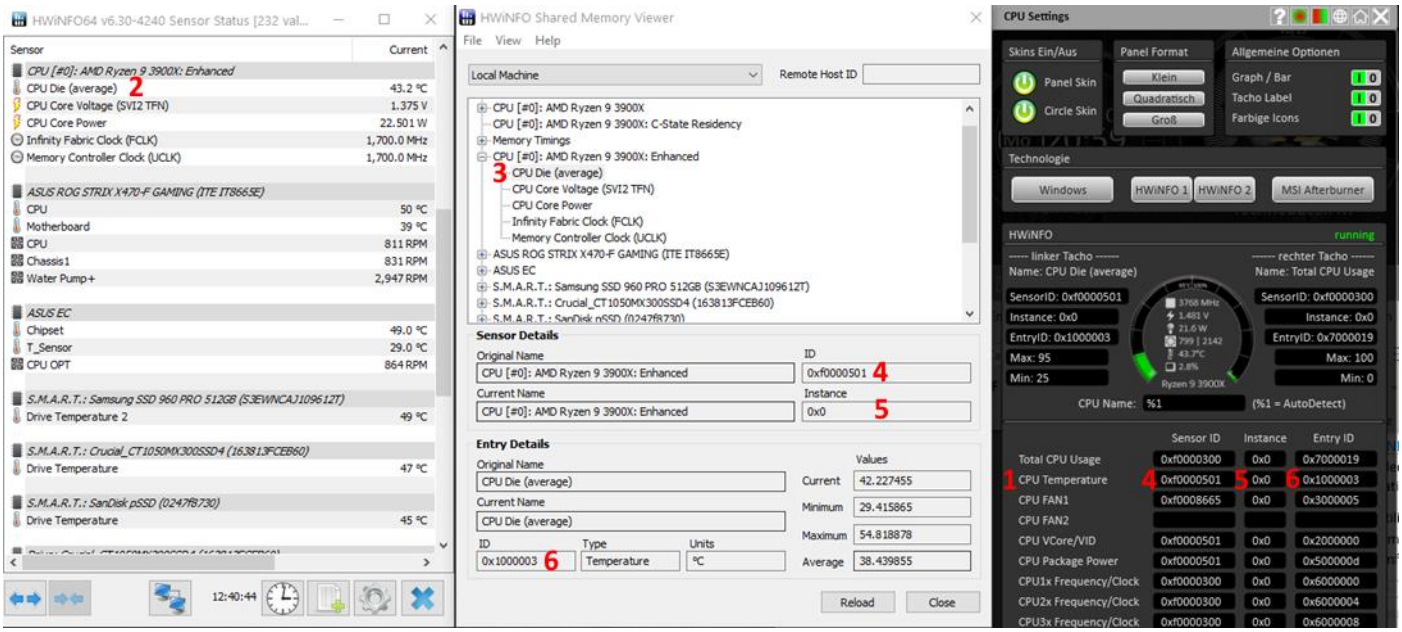
The current sensor values shown in Roundlines and Panel Bars are usually calculated as a percentage value. For correct calculation, the skin needs to know what the maximum and minimum is. When configuring the sensors make sure to enter the correct values here. Refer to your Mainboard Manual, CPU or FAN specifications to find out the specifications for your hardware. For temperatures, it's your decision.



11.2 How to get HWiNFO sensor values with HWiNFO Shared Memory Viewer

The default values provided by the skin are for my test setup only. Each hardware detected by HWiNFO may have different Sensor Specifications and you need to adjust all specs according your setup. To find out, you should

- Open HWiNFO utility
- Open Shared Memory Viewer
- Open the skin configuration page



- Step 1: Identify the Sensor Name needed (in our example, the CPU temperature)
- Step 2: Search the CPU Temperature in HWiNFO (in our example we use the average temperature)
- Step 3: open The Sensor Group in SharedMemoryViewer and select the Sensor
- Step 4: Copy & Paste the SensorID to the skin configuration
- Step 5: Copy & Paste the SensorInstance to the skin configuration
- Step 6: Copy & Paste the EntryID to the skin configuration

Some useful hints:

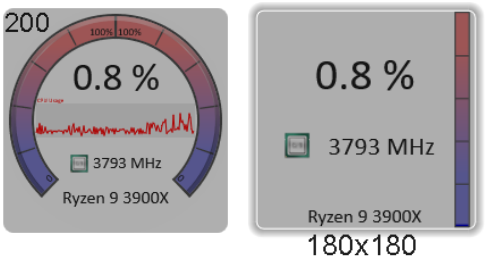
- SharedMemoryViewer only shows active sensors from HWiNFO utility. If you disable/hide a sensor in HWiNFO utility, it also disappears in SharedMemoryViewer and it can't be displayed in the SYSMonitor skin. Finish your skin setup first before disabling any sensors.
- An input fields in skin options could be activated by left mouse klick on the black field. Leave the field by pressing 'ESC' key or save and close with 'Return' key on your keyboard.
- Configuring all skins and HWiNFO sensors in a new setup may take a lot of time when working with the skin setting pages. A more comfortable way could be to add it directly to the skin file. For that, open *...*YourDocumentsFolder*\ Rainmeter\Skins\SYSMonitor\@Resources\HWiNFO-sensors.inc* with any text editor and edit the configuration here:

HWiNFO-Sensors.inc

```
[Variables]

;---- CPU Sensors and Values----

CPUName                     =%1

CPU_RLLeft_MaxValue         =95
CPU_RLLeft_MinValue         =30
CPU_RLRight_MaxValue        =100
CPU_RLRight_MinValue        =0

CPU-LeftRL_Id               =0xf0000501
CPU-LeftRL_Instance         =0x0
CPU-LeftRL_EntryId          =0x1000003

CPU-RightRL_ID              =0xf0000300
CPU-RightRL_Instance        =0x0
CPU-RightRL_EntryId         =0x7000019

CPU-Usage-Total_ID          =0xf0000300
CPU-Usage-Total_Instance    =0x0
CPU-Usage-Total_EntryId     =0x7000019

CPU-Temp_Id                 =0xf0000501
CPU-Temp_Instance           =0x0
CPU-Temp_EntryId            =0x1000003
```

11.3 Could I scale a skin (make it smaller or bigger)?

Yes, for sure. Hover a skin with your mouse and press Wheel / middle mouse button to activate the scale mode. The skin activates a light dark window and shows the current size in pixels. The size is the full circle diameter including background and for the panel it shows the main panel width and height without frame and shadows.



In scale mode mouse wheel up will increase the skin size, Mouse Wheel down will decrease the size. Simply move away from the skin with your cursor or press Middle Mouse Button again to close the Scale Mode.

A note on scaling: the skin is mainly designed based on Rainmeter shape functions. But some options inside like buttons or icons are integrated images. Unfortunately, shapes, images and especially text (fonts) will not scale fully identical. Depending on your resolution, Windows desktop scale setting and skin size you may see combinations which are not perfectly displayed. Some icons or buttons may move a bit away from their original position, some fonts may scale a bit to high/low before switching to the next font size.

This happens especially at small skin sizes below 200px.

Example:

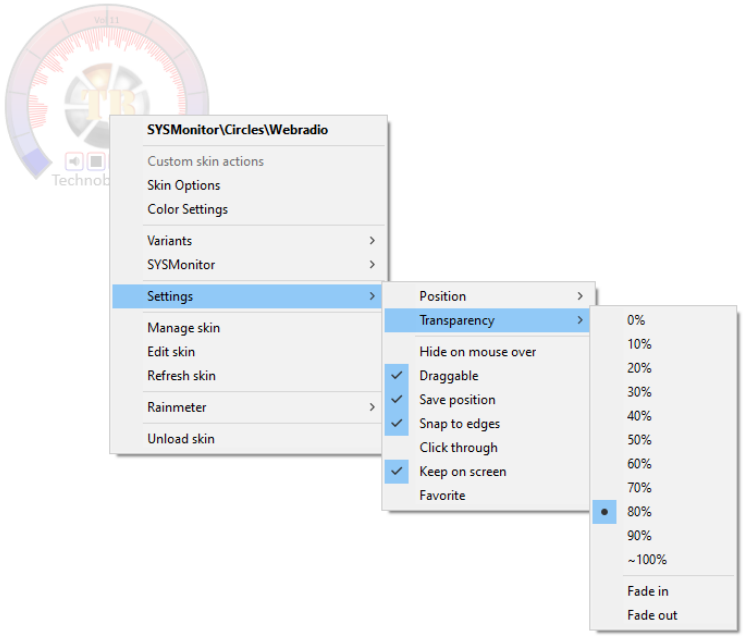
Webradio Buttons at a skin size of 180x180 or 200x200 looks fine:  but at 190x190  they move to the upper left of the shape.

Solution: I did not find any!

11.4 What about more skin transparency?

Rainmeter already includes a feature to set a transparency for each skin individually. There is no extra option integrated. To use the default transparency option right klick on a skin to open the Rainmeter menu and select

Setting -> Transparency ->



11.5 How to fix HWiNFO asking for admin privileges and RTSS sensor not detected in HWiNFO?

HWiNFO should run with administrator privileges but enabling autorun may cause a Windows UAC message on every system start. As a workaround you could create a new task in Windows Task Scheduler instead of using the integrated Autorun option.

- Disable Autorun for HWiNFO utility (set Autorun=0 in HWiNFO.ini File in program folder)
- Open Task Scheduler
- Create a new Task
- Choose your Name for the task, e.g. “HWiNFO”
- Activate ‘Run with highest Privileges’
- As trigger select User logon
- Configure a delayed start for 5 seconds (select 30s and enter 5 instead)
- As an action select your HWiNFO64.exe to start

This is also a workaround if MSIAB+RTSS does not start before HWiNFO and the RTSS sensor is not detected.

11.6 How to save my Rainmeter/Skin setup?

11.6.1 For re-installation of the OS

To save your complete configuration of Rainmeter and Skins you should save the content of 2 folders before starting a new installation:

a) Open your Windows File explorer and type %appdata% to the address line
Save all files from Rainmeter folder. This folder includes your saved layouts and for example the Rainmeter settings like Activated Skins, Skin position and Transparency settings

b) Open your documents folder
Save the Skins folder. This folder includes the SYSMonitor skin and all others you have installed including all skin settings made.

Once your OS is running again install Rainmeter and put all files back again.

11.6.2 For SYSMonitor revision updates

When a new skin revision is compatible to the previous revision files including configuration options will not be overwritten during update. Nevertheless, in most cases new features requires updating the configuration files, too.

But there is a way to transfer your settings to a new installation. You should save the following files before updating:

...*YourDocumentsFolder*\ Rainmeter\Skins\SYSMonitor\@Resources\

- Variables.inc includes skin options and color settings
- HWiNFO-Sensors.inc includes all your HWiNFO Sensor settings
- MSIAB-Sensors.inc includes custom GPU name configured and your Min/Max settings
- Windows-Sensors.inc includes configurations made for the Windows based layouts
- Stations.inc includes your configured radio stations

After updating SYSMonitor open your saved files and the new and copy your settings to the new version. Take care not to delete new or changed variables.

11.7 Rainmeter and MSIAB/HWiNFO show high CPU/GPU usage

You would get best skin experience using all utilities simultaneously, SYSMonitor skin, HWiNFO, MSI Afterburner and Rivatuner Statistics Server. But for sure this will cause some CPU, GPU and Memory load. The skin is optimized as good as possible, for example measurements and calculations are reduced to the minimum required and only low-resolution graphics are used. But the more skins are active, the higher the system will be stressed.

On new generation systems with mid to high-end hardware it's not a big deal and you should see low CPU usage. To give an example: on my main setup with Ryzen 3900X processor the CPU load caused by Rainmeter is within the range of 0.5 to 1.5% with 15 skins active. With the default skin layout, it's below 0.2%. The GPU load is a bit higher at about 7% because of displaying all the images, graphs and Roundlines.

On low to mid-range systems the CPU/GPU may show much higher usage. On a 2nd Gen Intel Core i3 processor for example the same setup of 15 skins may cause 10% CPU load.

Some HWiNOFO & MSI Afterburner optimizations are described in the chapters above to reduce the load as good as possible. For Rainmeter, the only way is to reduce the size of integrated images. By default good quality images and icons are included, but there is a low-resolution package included:

…\Rainmeter\Skins\Sysmonitor\@Resources\Images\Icons\

Unzip the LowRes zip file to the Icon's folder to try out. The original files are saved in HighRes package.If it still too high, disable skins to find out which one causes high load in your setup. One for example could be Webradio when using high-resolution station icons. Finally, it's up to your hardware setup and number of skins used!

11.8 Can I add a new Skin?

If you are familiar with Rainmeter skin coding, feel free to find out how it works. If you have no experience regarding Rainmeter skins, you won't have a chance to get it fully working.

11.9 Can I modify a Skin to display different content?

Why not? For HWiNFO skins simply input sensor information from a different sensor. The skin only displays a value beside an Icon. If you need to adjust the unit displayed, you should modify the skin file. Search for the String Meter showing the measurement result and the value in the skin files located in:

…\Rainmeter\Skins\Sysmonitor\Circles\ and …\Panels\ directory.

11.10 My antivirus reports a detection?

The skin is just a summary of simple script files accessing Windows, HWiNFO or MSI Afterburner values. There are only two executables inside which may be detected:

- HWiNFOSharedMemoryViewer.exe
  Test result: https://www.virustotal.com
- Omnimoapp.exe
  Test result: https://www.virustotal.com

One is accessing shared memory from HWiNFO, the other controls VLC. From my point of view these are false positives. If you're an expert and these 3rd party files are dangerous, please contact me!

11.11 I have a question, a new idea for new features or just a problem with the skin!

- Use the deviantart.com website of the skin to comment or contact me via private message
- Comment on the SYSMonitor thread in Rainmeter Forum
- Comment on the SYSMonitor thread in HWiNFO Forum

Any feedback is welcome here. Even positive! If you would like to discuss something or need detailed help, e-mail is also possible: plnky77@shared-files.de