WS View Plus (WSV+) and Web UI Local Network Manual



Table of Contents

1	The Difference between WSV+ and the Ecowitt app	1
2	The Difference between WSV+ and the Web UI	1
3. 9	Setup of a New Device in the Local Network Configuration (LAN/WLAN)	1
	3.1. Adding a Device (console, gateway, camera) to your local network. Example: HP2560	1
4.	Devices Management	4
	4.1. My Devices and Device List	4
	4.2. My Devices and Favorites	4
	4.3. IP Connection for add device you know the IP address	5
5. (Cloud and Local Weather Server Setup	6
	5.1. Cloud Weather Server (Optional)	7
	5.2. Customer chosen upload/posting target (Customized Server option)	8
	5.3. WSV+ Dashboard Units Setting	9
	5.4. Connecting to your console without having a local network available	9
	5.5. configuring the Weather services and your local network access with the WebUI	10
6. I	Device Settings in the WS View Plus and Web UI	11
	6.1. Open Live Data	11
	6.2. Weather Services	. 13
	6.3. Calibration	14
	6.4. Rain totals	. 15
	6.5. Device Setting	. 17
	6.6. Sensor ID	18
	6.7. Configure Router in Local network	. 19
	6.8. Live data units	20
	6.9. SD Card	20

1. The Difference between WSV+ and the Ecowitt app

The main difference between WS View Plus and Ecowitt app lies in their management focus. WSV+ acts locally and has some optional internet features. The Ecowitt app acts via the internet and has also local options (but always needs to be logged in to your ecowitt.net account). One can also say that WS View Plus manages devices connected to the local router by connecting to the local router. In contrast, the Ecowitt app manages devices linked to the Ecowitt cloud account (so you must log in to an account to use it). These two different starting points led to the development of two separate apps.

2. The Difference between WSV+ and the Web UI

WS View Plus is a mobile app with a similar view and organization as the Web UI. Historically the predecessor app WS View (without Plus) existed already early before the consoles starting with the GW1100 were able to house an integrated web page. While the WebUI only exists for one device, WSV+ can manage all devices inside the same local network and will show them in a list (device list). Both WSV+ and the WebUI of each console work on the same device and will therefore synchronize settings the other one has changed.Users can access the WebUI via the device's IP address through a browser to view the user interface. At present, the GW3000 and WS6210 SD card settings are in the Web UI only. Also network configuration is in the WebUI only.

3. Setup of a New Device in the Local Network Configuration

(LAN/WLAN)

3.1. Adding a Device (console, gateway, camera) to your local network.

Example: HP2560

1. Press the "+" button on the bottom task bar, on the next page choose the console and press the "next" at the top right corner.

2. Follow the guided instructions to activate the console's own WLAN, tick the "Completed operation" and press "Next" at the top right corner.

3. Switch your phone's WiFi to the the WLAN of the console.

In case of the HP2560 console, a console without an API (application programming interface), the name of this WLAN will be: EasyWeatherPro-xxxxx.

Note:

Other consoles like the WS2320, WS2910, HP3500 and HP2550 may show two different SSID names: EasyWeather-WFIxxxx or EasyWeatherPro-xxxxx. The devices without the Pro name extension still have an early version of the Wi-Fi firmware and cannot be upgraded to the Pro version (the-device firmware can) and therefore do not have a WebUI.

The Weather Service only firmware ("WiFi firmware") does not support adding sensors or devices via the WSV+ app or, if they have one, via the WebUI. They do not show live data either. The older HP2550 consoles also offer the use the device itself for network configuration.



4. Press the "Scan" to choose the SSID(Service Set Identifier, wireless network name) of your (WLAN/WiFi) router

5. Enter the router password and press "Next". (You can skip the upload weather server option and setting it later.)

6. Once your device has connected with the router of your local network, you will be asked to connect your smartphone/tablet again to the same local network.

7. When you do this, you will see your device as an entry in the WSV+ device list showing the following information:

EasyWeatherPro-xxxxx MAC xx:xx:xx:xx IP: xxx.xxx.xxx VER: 5.x.x



Note:

With devices with EasyWeather or EasyWeatherPro entries (WIFI firmware name) only the Weather Services (posting data to the Ecowitt Cloud, Weather Underground, WeatherCloud and WOW be configured. Also the posting to a customer defined address can be configured (Customized Server).

When you do the network provisioning with devices which have the local Ecowitt API, the SSID of the access point (hotspot, device WLAN) will be:

DEVICE-name-WIFIxxxx

e.g. GW3000B-WIFIxxxx, WH1820A-WIFIxxxx

This will also be the device name entry in the WSV+ device list when this (or more) device(s) are registered to the same local network. Devices who are connected to your network through their LAN interface (GW2000, GW3000) do not need the above provisioning procedure. Your router will directly recognize it and provide it with a network address (IP address). them at WSV+ will recognize them at startup directly and add them to its device list.

Devices with their full name in the device list like GW3000A-WIFIxxxx have the local Ecowitt API and can be fully configured, calibrated and upgraded and their live data (realtime sensor data) can be displayed in WSV+. Only the network settings and the SD card management for devices who have a SD card cannot be done via WSV+. This is only possible via the WebUI of these devices in the respective sections (menu): <u>http://IP-address-of-your</u> device

4. Devices Management

4.1. My Devices and Device List

This page shows all of the router- connected devices in a sample network. This list cannot be edited. If you want to delete an entry, you have to reset the device in its hardware. Powering it off will still show the device but the entry will be grayed-out and inactive.



4.2. My Devices and Favorites

If you want this entry to look more pleasant, you can create an entry in the Favorites view of the device list by tapping on the star icon at the very right of the device list entry, Then you can choose the icon of your device and acknowledge. As a result you will see the icon in front of the device list data. The Favorites list will become the default view when you start WSV+ in future. The Device name in the Favorites list can be edited during creation and later. If you want to change it later, press the settings icon (gear wheel) at the right end of the list entry.

Example: see below



4.3. IP Connection for add device you know the IP address



In case the device is not showing up in device list page after the router registration is done, you may enter the IP address (to be found in your router under the MAC address of the device -) manually and continue for weather service setup, view live data etc.

5. Cloud and Local Weather Server Setup

Devices with a device list entry EasyWeather(Pro) are described below.

For devices with their own device name (e.g. GW3000A-WIFIxxxx), the Weather Server setup and customized server configuration as shown below will be only one of many options.

Posting to a customer chosen server/IP address is another option here.

You decide where this post will go. The receiving server can be in in the internet or inside your local network at your choice.



Press the desired device list entry of your console to go on

5.1. Cloud Weather Server (Optional)

Configuring the weather servers means that you are sending your weather data to these public weather services. If you don't want to do that, skip this section.



5.2. Customer chosen upload/posting target (Customized Server option)

<	Upload		Save
	EasyWeatherPro-1	CCA02	
◀ WeatherOb	servationsWebsite	e Customized	D
	Customized	4	
Disab	е	Enable	
Protocol Type Sar	ne As:		
Ecow	tt	Wunderground	
Path : /data/report/ Port:			
80			
Jpload Interval:			
60	Seconds	3	

Examples:

1. you are running the Home Automation software HomeAssistant on a server in your local network and want to send your weather station data there.

Then the HomeAssistant software will ask you to make entries in this customized server dialogue:

Protocol: Ecowitt

upload interval: 8 seconds

 you have your own internet website and want to process your weather data there your software on your webhost expects the data in Wunderground protocol format to be sent to a directory with the name ../report/data then the entries on this page would be: Protocol: Wunderground ServerIP/Hostname: my-weather-website-domain.compath: /report/data Port: 8080 upload interval: 8 seconds

5.3. WSV+ Dashboard Units Setting

Your WSV+ Dashboard unit settings can be made on this page via the Setting button in the bottom task bar. These settings will apply for your view inside WSV+ only. Other view with other tools (e.g. Ecowitt.net dashboard, WebUI) can and have to be done in the respective tool.

Setting		<	Units	Sav
Units Setting	>	Temperature:	*C	۴F
Ecowitt upload speed	>	Pressure:	hPa	inHg mmHg
Default UI	>	Wind:	m/s km/h	knots mph
Guide	>	Precipitation:	mm	in
App version: 2.0.51 Check App Update		Irradiance:	fc	lux W/m ^a
		Capacity:	L	m³ gal
	- 1			
	- 1			
(\pm)				
	G 2			

5.4. Connecting to your console without having a local network available

If you run your weather station in an environment without a local network, you can still connect to your console with WSV+ to configure the Weather Network options as described before, or, if the console is equipped with the local Ecowitt API, do the whole configuration (except SD card and network) and view live data of your weather station and the connected sensors via the console's own access point or hotspot (which needs to be activated).

This is possible because each WLAN enabled Ecowitt console has its own WLAN access point or hotspot. Then connect with your mobile device to the WLAN with the SSID EasyWeather-WIFIxxxx, EasyWeathrPro-xxxxx or Device-WIFIxxxx, open WSV+ and select "IP connection". Here you enter the hotspot IP address 192.168.4.1 and you will be taken to either the Weather Network page (EasyWeather(Pro) or to the Live Data page.

5.5. configuring the Weather services and your local network access with

the WebUI

Access to your console via the WebUI is needed for network and SD card configuration. No other tool can do this.

(Exception: the HP25x0 consoles where you can do this inside the console)

There can be two situations:

1. Your console is not yet connected to your local network router

If you still have to register the console to the local network, you can also do this via the WebUI. Then you will have to connect your mobile device to the WLAN each WLAN enabled Ecowitt console comes with.

SSID EasyWeather(Pro).... Or DeviceX-WIFIxxxx (e.g. GW3000A-WIFI4711)

2. Your console is already connected to your local network router

Access to the Web is possible (a) via the console's hotspot IP in your Browser or (b) via the local network once the console has been added to your local network.

(a) Switch on the local WLAN of your console (see manual)

Open your browser and enter the default IP address 192.168.4.1 of the console hotspot.

(b) Open your browser in the same LAN your console is connected to and enter its IP address (you can find the IP in your router via its MAC address, or on the Factory \rightarrow About [Display] page in the HP25x0 consoles or in the device list of WSV+).

		Wunderground
Interval (minutes)	Ecowitt.net	Station ID
	BC:FF:4D:1C:CA:02	Station Key
	Save	
		weathercioud
	WIFI Network	Weathercloud ID
	alar: Scan Router	Weathercloud Key
	Show password fugure to the router's 2.4647	WeatherObservationsWebsite
	band.	Station ID
IP Address Mode	Receive Automatically(DF V	Station Key
Static IP Address	192.168.3.19	
Static Subnet Mask	255.255.255.0	
Static Gateway	192.168.3.1	Customized O Disable O Enable
Static DNS Server	205.171.3.65	Protocol Type Same As 🛛 🗨 Ecowitt 💦 Wunderground
	Apply	Server IP / Hostname
Upgrade	🛿 Automatically upgrade firmware	
	Current version:V5.1.7 Check firmware	Path /data/report/
	When the device is successfully connected to the router, the AP ✔ (EasyWeatherPro-ICCA02) will be automatically shut down 5 minutes later	Port 80
	Apply	Upload Interval 60 Seconds
	Show password	Save
	It can be set to NULL or 8-63 characters, and the device will restart when password is changed.	
	Apply	

6. Device Settings in the WS View Plus and Web UI

6.1. Open Live Data





6.2. Weather Services

You can also change weather services after adding a device. Refers to Section 5.1 After the Network configuration is successful, data can be uploaded to the following weather station servers:

- ecowitt.net (Default upload to this server)
- wunderground.com
- weathercloud.net
- wow.metoffice.gov.uk
- Customized server

	Local Network		Weather Servi	ces
	Weather Services			
	Device Setting			
11:26	Unit Settings	Interval (minutes)	1 ~	
l lipload Save	Calibration	MAC	1C:69:20:E3:B3:57	
C Oproad Outo	Rain Totals			
Cowitt Wunderground Weathercloud	Sensors ID		Wunderground	
ecowitt.net	Live Data	Station ID		
Interval(minute)	SD-Card	Station Key		
1 2 3 4 5	Version:		Manhamland	
MAC: 1C:69:20:E3:B3:57	GW3000C_V1.0.0		weathercloud	
Bind to Ecowitt		Weathercloud ID		
Open your Web Browser, go to ecowitt.net or click on the		Weathercloud Key		
link above. Enter the MAC address above to register your device.			WeatherObservations	Website
Return to this application, select an update interval and save.				
		Station ID		
		Station Key		
		Customized	Disable	Enable
		Protocol Type Same As	Ecowitt	Wunderground
		Server IP / Hostname		
		Path	/data/report/	
			80	
		Upload Interval	60	Seconds
			Save	

6.3. Calibration

			Local Network		Calibratio	n
11:26	0 0 1	₹ 7 9	Weather Services			
<	Calibration C	Save	Device Setting	Irradiance Gain	1.00	Range: 0.10 - 5.00
Calibration Mu	Iti_CH Temp&Humi Multi_CH Soil	Multi_C	Unit Settings	UV Gain	1.00	Range: 0.10 - 5.00
Irradiance Gain:	1.00		Calibration	Wind Gain	1.00	Range: 0.10 - 5.00
				InTemp Offset	0.0	
UV Gain:	1.00	_	Live Data	In Lumi Offrat	0	- 9/
Wind Gain:	1.00		SD-Card	Abs Offset	0.0	hPa
InTemp Offset:	0.0	°C	Version: GW3000C_V1.0.0	Rel Offset	0.0	hPa
InHumi Offset:	0	%		OutTemp Offset	0.0	°C
OutTemp Offset:	0.0	°C		OutHumi Offset	0	%
				WindDir Offset	0	•
OutHumi Offset:	0	%				
Abs Offset:	0.0	hPa			Save	
Rel Offset:	0.0	hPa			Soil Calibra Multi CH T&H C	alibration
WindDir Offset:	0				Multi CH Temp (Calibration
					AQIN Calibr	ation
					Reset to De	faults

6.4. Rain totals

page supp	ports set	tings such	as:		
			Local Network Weather Services		Rain Totals
			Device Setting Unit Settings	Rainfall data priority	Piezoelectric rain gauge
			Calibration Bain Totals	Rain Day	0.3 mm
11:27		···· ? 20	Sensors ID	Rain Week	0.3 mm
<	Rain	Save	Live Data	Rain Month	0.3 mm
Rainfall data priority:	Piezoelectric rain o	auge	SD-Card	Rain Year	0.3 mm
Choose which rain g	gauge data upload to server a	nd display.	Version: GW3000C_V1.0.0	Rain Gain	1.00 Range: 0.10 - 5.00
Rain Day:	0.0	mm		Piezo Daily Rain	0.0 mm
Rain Week:	0.0	mm		Piezo Weekly Rain	0.0 mm
Rain Month:	0.0	mm		Piezo Monthly Rain	0.0 mm
Rain Year:	0.0	mm		Piezo Yearly Rain	0.0 mm
Rain Gain:	1.00			Piezo Rain1 Gain	1.00 When rain rate less than 4 mm/h, Range: 0.10 - 5.00
Piezo Daily Rain:	0.0	mm		Piezo Rain2 Gain	1.00 When rain rate less than 10 mm/h, Range: 0.10 - 5.00
Piezo Weekly Rain:	0.0	mm		Piezo Rain3 Gain	1.00 When rain rate less than 30 mm/h, Range: 0.10 - 5.00
Piezo Monthly Rain:	0.0	mm		Piezo Rain4 Gain	1.00 When rain rate less than 60 mm/h, Range: 0.10 - 5.00
Piezo Yearly Rain:	0.0	mm		Piezo Rain5 Gain	1.00 When rain rate more than 60 mm/h, Range: 0.10 - 5.00
Piezo Rain1 Gain:	1.00			Reset Daily Rain at	0:00 ~
				Reset Weekly Rain at	Sunday ~
Piezo Rain2 Gain:	1.00 When rain rate less than 10 m			Rainfall Season	January ~
					Reset
					Save

(1) Choose traditional or piezoelectric rain gauge data to be uploaded to the WU server, as only one rain gauge data can be accepted when you have both our haptic rain gauge and tipping bucket type rain gauge.

(2) Rainfall calibration

(3) Rain reset time for Daily Rain/Weekly Rain/Rainfall Season

(4) For Piezo Rain1~5 Gain calibration

The Piezoelectric rain gauge working principle: raindrops fall on the sensor's surface so that the monitoring panel produces small mechanical vibration, the vibration of the mechanical stress, and the sensor produces a voltage difference corresponding to the amount of rainfall. In practice, the measurement of precipitation by piezoelectric rain gauges is influenced by environmental factors such as wind, terrain, and debris. In the case of large rainfall intensity, rainfall intensity can be measured by the piezoelectric rain gauge, but the raindrops landing may have two impacts on the monitoring panel so that the measured rainfall value is larger; for minimal rainfall intensity, due to the vertical momentum is too small, so that the measured rainfall value is small. Therefore, it is necessary to calibrate the piezoelectric sensors for

different rainfall intensities depending on the environment in which they are located. As a sanity check the sensor also verifies if there is water present along with the vibration to exclude effects produced by other vibrations.



WS90 and WS85 are weather sensor arrays equipped with piezoelectric rain gauges. To make your rain data more accurate, you can calibrate the rain sensor accuracy by yourself: 1. A reference is needed to record the rainfall value, and it is also important to be able to record the rain rate. Our WH40 rain sensor can be used for this purpose.

You can set five rain gain parameters: Piezo Rain1: Rain5. We usually leave Rain1 as it is unless you can confirm it consistently produces the same result, and then you can adjust this.
 Please ensure that you record rain data as follows: set rain4 gain to 6/7.5, which equals 0.8. For easier management, set rain2, rain3, and rain5 all to 0.8 for now.

Only when different rain rates are recorded, divide the ws90 rain by 0.8 to get 1.0 rain, and then recalculate (reference/ws90/0.8) to precisely adjust the corresponding rain gain setting.

6.5. Device Setting

This page supports s	ettings for de	vice itself:		
		Local Network Weather Services		Device Setting
11:27 < System	···· ∻ ₽ Save	Device Setting Unit Settings Calibration Rain Totals	Sensor Type	 If your weather transmitter model is WH24, please turn this option on.
75		Sensors ID	Frequency	RFM433MHz v
		Live Data SD-Card	Automatic Frequency Control(AFC)	-
Sensor Type:			Temperature Compensation	■ WH65/WH69/WS80/WS90
If your weather transmitter mo	del is WH24,	Version: GW3000C_V1.0.0	Auto Timezone	Auto Timezone
			Timezone	Asia/Shanghai
Frequency:	RFM433M		Date	2024/12/06/14:59
Automatic Frequency Control(AFC):	\odot		Upgrade	Automatically upgrade firmware
Temperature Compensation: WH65/WH69/	WS60WS90		Version	Current version:V1.0.0 Cneck firmware
Auto Timezone:			Device AP Auto OFF	 Disable the gateway's self broadcasting SSID after successfully connecting to your own wireless network. This will disable the (GW3000C-WIFIB357), used only for device setup.
Timezone:	Asia/Shanghai			Save
Date:	2024-12-06 11:27		Login & AP Password	Show password
Auto Upgrade:	0			It can be set to NULL or 8-63 characters, and the device will restart when password is changed.
Check new version				Apply
Device AP Auto OFF:				Restore default
Disable the gateway's self broadcasting SSID after	successfully			Rebot
				in boot
Network manageme	ent and SD car	d configuration	can only be ha	ndled in the WebUI

6.6. Sensor ID

This page is for sensor management – view,	re-registering	and act	ive ser	sorID	assignr	nent
Local Network			Sensors ID			
Weather Service Device Setting						
Unit Settings	Name Wind & Rain	ID 0x27EF	Battery	Signai	Re-register	Edit
Calibration Rain Totals	Temp & Humidity & Solar & Wind &	0x531B		Ť.ul	Re-register	Edit
Sensors ID	Rain Temp & Humidity Rolar & Wind &	0x13		Ťat	Re-register	Edit
Live Data SD-Card	Rain Solar & Wind	Learning		Ť	Re-register	Edit
Sensors ID Wersion: GW20000 V1 0	Rain	0x1859C		Ť.ul	Re-register	Edit
D Tul Rengister 2	Temp & Humidity	Disable		Ť	Re-register	Edit
ID 531B D Tutil Re-register 2 1	Temp & Humidity	Learning		Ť	Re-register	Edit
77 2 10 Tutil Recegator 2	Temp & Humidity & Solar & Wind	Learning		Ť	Re-register	Edit
10 T Re-regular 2	Lightning	Learning		Ť	Re-register	Edit
	PM25 & PM10 & CO2	0x27CE		¶.atl	Re-register	Edit
TAHAPID T Representer	РМ2.5 CH1	Learning		Ť	Re-register	Edit
Disable Terretaria	РМ2.5 СН2	Learning		Ť	Re-register	Edit
Learning	РМ2.5 СНЗ	Learning		Ť	Re-register	Edit
LearningRe-register	PM2.5 CH4	Learning		Ť	Re-register	Edit
Learning Re-regular	Leak CH1	0xCED7		Ÿ.,	Re-register	Edit
Coo 27CE Tutl Re-register	Leak CH2	Learning		Ť	Re-register	Edit
CHT ID T Re-register 2	Leak CH3	Learning		Ť	Re-register	Edit
CH2 ID Learning T Re-register	Leak CH4	Learning		Ť	Re-register	Edit
CH3 ID T Re-register 🖉	Temp & Humidity CH1	0x28		Ť.11	Re-register	Edit
CH4 ID Receiptor @	Temp & Humidity CH2	0x93		¶.atl	Re-register	Edit
	Temp & Humidity CH3	Learning		Ť	Re-register	Edit
	Temp & Humidity CH4	Learning		Ť	Re-register	Edit
	Temp & Humidity CH5	Learning		Ÿ	Re-register	Edit
	Temp & Humidity CH6	0x71		Ÿ.11	Re-register	Edit
	Temp & Humidity CH7	0x89		Ÿ.ul	Re-register	Edit
	CH8	Learning		Ť	Re-register	Edit

In the newer firmware editions there will be two sensor ID pages with 31 entries each for a better overview on the WebUI – in WSV+ everything is displayed on one large page

6.7. Configure Router in Local network

	Local Network Weather Services		Local Network
?	Device Setting	МАС	1C:69:20:E3:B3:57
Configure Router	ve Unit Settings		
	Calibration	IP Address Mode	Receive Automatically(DHC ~
	Sensors ID	Static IP Address	0.0.0.0
SCAN	Live Data	Static Subnet Mask	0.0.0.0
word	SD-Card	Static Gateway	0.0.0.0
	Version:	Static DNS Server	192.168.3.1
dress 192.168.3.12			Apply
et Mask 255.255.255.0			
100,100,0,1			
192.168.3.1		Router SSID	Scan Router
e enter your SSID from the list. If your router is , make sure you connect to the router's 2.4 GHz t	d.	WIFI Password	If you router is dual-band, make sure you conn 2.4GHz band.
		IP Address Mode	Receive Automatically(DHC ~
		Static IP Address	192.168.3.12
		Static Subnet Mask	255.255.255.0
		Static Gateway	192.168.3.1
		Static DNS Server	192.168.3.1
			Apply

6.8. Live data units

6.9. SD Card

SD card management can only be done in the WebUI at present (for GW3000 and WS6210), not on the other apps.

1.SD card file system format: Only FAT32 is supported. For cards larger than 32GB, use the Rufus tool to format the SD card to FAT32. Download the tool from https://rufus.ie/en/. Tip: When replacing it with a higher-capacity card, please be mindful of the memory card's maximum read/write cycles and lifespan.

2.Real-time status display and hot-swap support: The system monitors the SD card's status in real time and allows for its insertion or removal without restarting the device.

3.SD card information display: The interface shows detailed SD card information, including storage capacity and read/write frequency.

4.Multi-level directory management: The system adopts a multi-level directory structure for easy file categorization and management by users.

5.Sensor data storage: Data collected by sensors is saved in .csv format in the root directory of the SD card, facilitating direct access and analysis of data.

6. the capital letter (A, B, C ...) in the file name will be increased and a new file created when you change one or more of your unit settings.

Local Network		SD Card		
Weather Services Device Setting Unit Settings Calibration	Name : SD16G Speed : 20 MHz Interval : 5 minutes Edit	Type : SDHC/SDXC Size : 15238 MB		
Rain Totals	Path: /			
Sensors ID	File Name	Size (Bytes)	Operation	
Line Dete	202411A.CSV	998	Download Delete	
Live Data	202411Allsensors_A.CSV	2984	Download Delete	
SD-Card	202411B.CSV	714	Download Delete	
	202411Allsensors_B.CSV	2104	Download Delete	
Version:	TXT	217	Download Delete	
GW3000C_V1.0.0	ТХТ	192	Download Delete	
	txt	191	Download Delete	