

WiFiLogger 1.00



MANUAL

WiFiLogger

WiFiLogger is a 3rd party data logger with built-in Wi-Fi communication. It contains the same features like original/clone data logger, but also increases the abilities of whole weatherstation by adding direct communication with the internet.

WiFiLogger can be use with Davis weather stations consoles:

- Vantage Pro2
- Vantage Vue
- Weather Envoy
- Vantage Pro

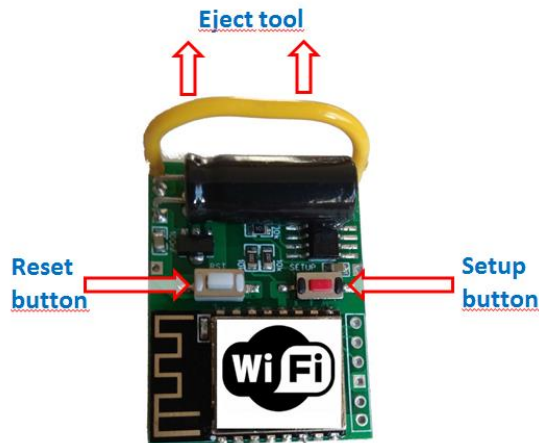
With WiFiLogger you can connect wireless using:

- Any device with WiFi interface(smartphone, laptop, router) + any web browser.
- Cumulus, free weather station software by [Sandaysoft](#)
- Davis WeatherLink®

Its main functionality is autonomously send data to selected websites:

- Send archive data using FTP
- www.wunderground.com
- www.pwsweather.com
- [Citizen Weather Observer Program](#)
- [WeatherLink®](#)
- to be continued...

How to start



First, install data logger into your console:

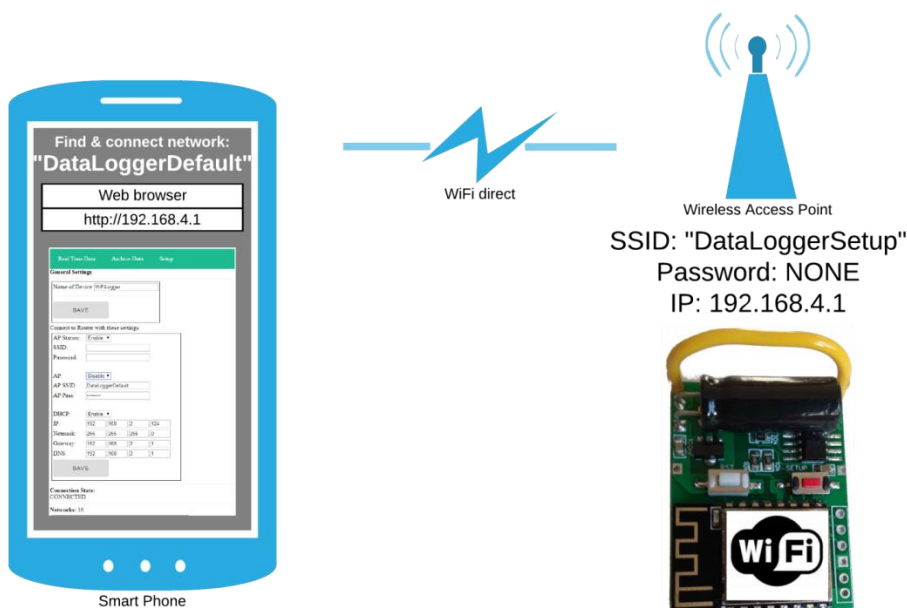
- turn off console, unplug AC wire and remove batteries
- insert data logger into the socket in the console which is under the plate that holds the batteries.”
- connect AC plug to power up console

WiFi configuration

When WiFiLogger is power up for the first time, it starts in a configure mode. For all other cases you have to switch WiFiLogger to setup mode. To do this you need to push setup button „red” for about 10 seconds.

When you turn on config mode. WiFiLogger will start to act as an access point. You will be able to search for „DataLoggerSetup” open Wi-Fi network.

- connect to „DataLoggerSetup” network with your smartphone, or laptop
- go to URL <http://192.168.4.1/> and navigate Setup -> Wi-Fi Setup or type direct address <http://192.168.4.1/wifi.html>



Go to <http://192.168.4.1/wifi.html>

Connection State:
CONNECTED

Networks: 16

Make steps:

Set enable „AP Station”

Type your home Wi-Fi network SSID to „SSID”

Type your home Wi-Fi password to „Password”

Set disable „AP”

„AP SSID” and „AP Pass” leave it unchanged

Set enable „DHCP”

Click „SAVE” button

Web site will reload with new settings. If everything goes correct

„Connection State” will change to „CONNECTED”

From this moment WiFiLogger is connected to your router and your home network.

Network „DataLoggerSetup” will remain available until WiFiLogger won't be restarted.

WiFi configuration

When WiFiLogger is connected to home network, it will receive its own IP address. It can be read, while still connected to DataLoggerSetup, at <http://192.168.4.1/info.html>.

The screenshot shows the WiFiLogger web interface. At the top, there are tabs for 'Real Time Data', 'Archive Data', and 'Setup'. The 'Setup' menu is open, showing options: 'Weather Station Setup', 'Data Export Setup', 'Network Info' (highlighted in green), 'WiFi Setup', and 'System'. Below the menu, the 'Network Information' section displays the following details:

SSID:	HOME NETWORK SSID
IP:	192.168.2.124
Netmask:	255.255.255.0
Gateway:	192.168.2.1
DNS:	192.168.2.1
Mac:	DC:4F:22:02:E5:14
AP mac:	DE:4F:22:02:E5:14
AP IP :	0.0.0.0

Below the network information, there is a section for system status:

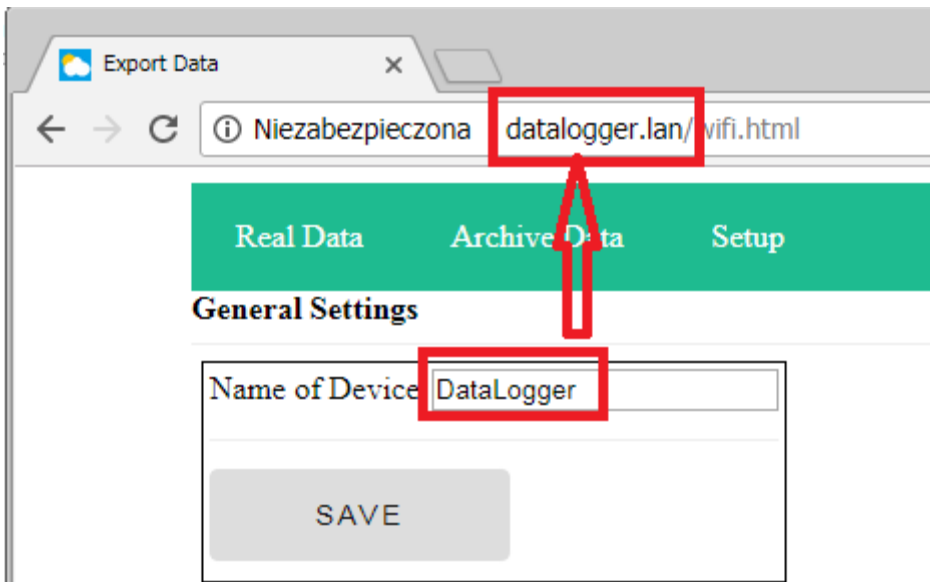
Station Time:	13.03.2018 13:42:13
NTP Time:	13.03.2018 13:42:13
Last sync:	13.03.2018 13:41:50
Uptime:	0 days 0:1:22
Last boot:	13.03.2018 13:41:50

At the bottom of the network information section, there are two blue buttons: 'REFRESH' and 'RENEW NTP'.

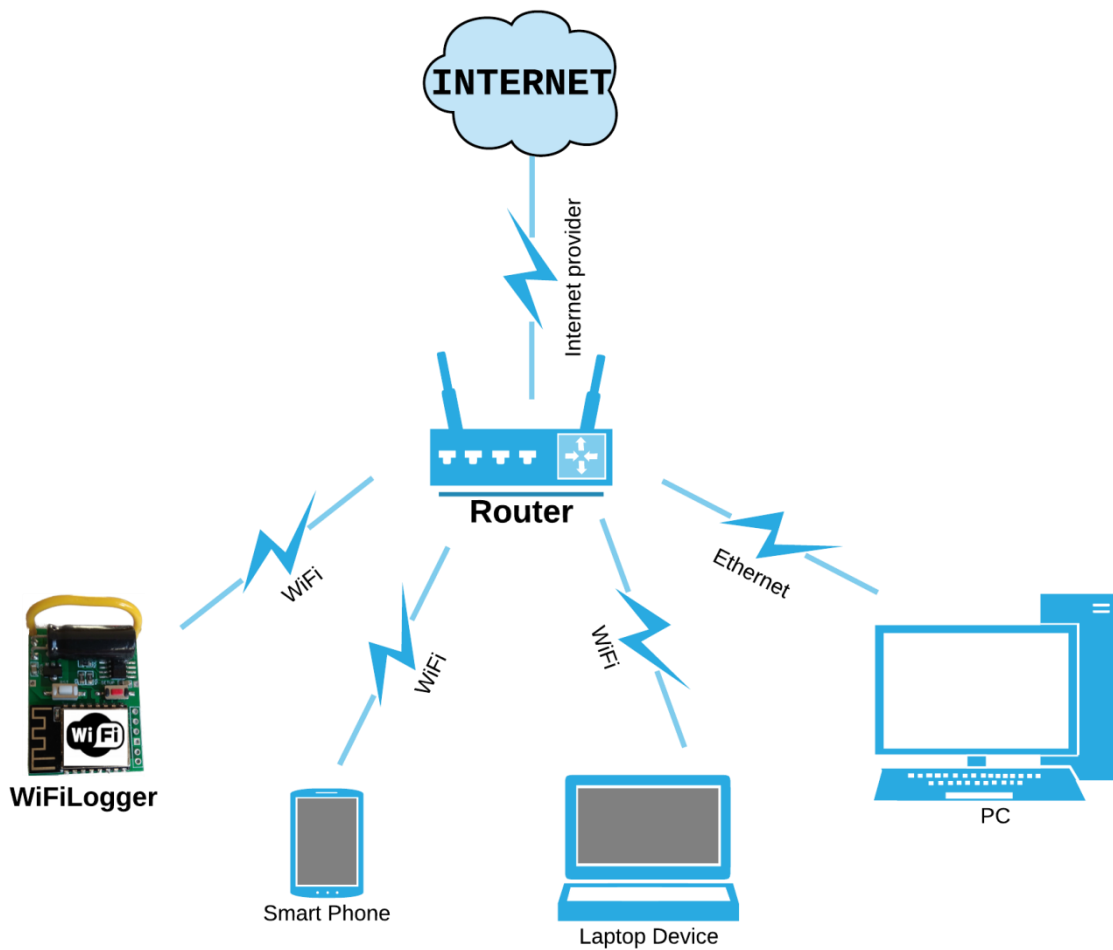
Or using original WeatherLink if you have available.

The screenshot shows the 'Communications Port' dialog box in WeatherLink. The 'Communications' section has radio buttons for Serial, USB, Modem, and TCP/IP (selected). The 'TCP/IP Connection' section has a 'TCP Port' field set to 22222 and a 'Local Device ID' field set to DC:4F:22:02:E5:14. A 'Communication Settings' dialog box is overlaid on top, displaying the message: 'Device with ID DC:4F:22:02:E5:14 found ! The IP Addr for device is 192.168.2.124'. The 'Modem Connection' section at the bottom has a 'Modem Init. String' field set to AT &F S7=60 E Q V X4 and an 'After Connect Wait' field set to 2 seconds.

Or using local DNS. Go to URL http://YOUR_DEVICE_NAME.lan



Using an IP address, you can log in from any device in your home (smartphone, PC computer).



NTP settings

Go to http://IP_ADDRESS/wifi.html

Real Time Data **Archive Data** **Setup**

General Settings

Name of Device:

Connect to Router with these settings:

AP Station:

SSID:

Password:

AP:

AP SSID:

AP Pass:

DHCP:

IP:

Netmask:

Gateway:

DNS:

Weather Station Setup

Data Export Setup

Network Info

WiFi Setup

System

Connection State:
N/A

Networks:

SSID	Channel	Secure	RSSI
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NTP Settings

NTP Server:

Update: minutes (0=disable)

Make steps:

Set „NTP Server” Place server name here. Don't use IP address.

Set „Update” interval in minutes, how often it will be checked.

Click „SAVE” button

When time is being updated from NTP server. Weather station internal clock is checked and updated if necessary.

It is possible to check NTP time manually. Go to http://IP_ADRESS/info.html and click on „RENEW NTP” button.

The screenshot shows a web interface with a green header bar containing three tabs: "Real Time Data", "Archive Data", and "Setup". Below the header, the "Network Information" section is displayed. It contains a table of network parameters and a section for time synchronization. At the bottom of the time synchronization section, there are two buttons: "REFRESH" and "RENEW NTP". The "RENEW NTP" button is highlighted with a red rectangular border.

Network Information	
SSID:	
IP:	192.168.2.124
Netmask:	255.255.255.0
Gateway:	192.168.2.1
DNS:	192.168.2.1
Mac:	DC:4F:22:02:E5:14
AP mac:	DE:4F:22:02:E5:14
AP IP :	0.0.0.0
Station Time:	13.03.2018 15:20:02
NTP Time:	13.03.2018 15:20:02
Last sync:	13.03.2018 14:55:49
Uptime:	0 days 0:25:12
Last boot:	13.03.2018 14:55:49
REFRESH RENEW NTP	

Weather station config

Go to http://IP_ADDRESS/setup.html

WiFiLogger don't keep console settings in non-volatile memory. Settings from console are being read 5 seconds after power up/restart WiFiLogger, or while opening site "Weather Station Setup" ([setup.html](#)).

Button "set" cause direct setup console. After that web site ([setup.html](#)) is being reloaded, and console settings are read once more.

When you change some settings manually on the console, you will have to open ([setup.html](#)) web site for settings reading, or simply restart your WiFiLogger.

Real Time Data	Archive Data	Setup
Set Time & Date Time & Date: <input type="text" value="11:40"/> <input type="text" value="2018-03-15"/> Time Zone: <input type="text" value="(GMT+01.00) Prague, Belgrade, Bratislava"/> Daylight Saving <input type="checkbox"/> <input checked="" type="checkbox"/> AUTO <input type="button" value="set"/>		Weather Station Setup Data Export Setup Network Info WiFi Setup System
"Time Setup" AM/PM <input type="text" value="24-Hour Mode"/> <input type="button" value="v"/> Month/Day Format <input type="text" value="Day/Month"/> <input type="button" value="v"/> <input type="button" value="set"/>		
"Latitude/Longitude" Signed degrees format (DDD.dddddd) Check here or here Latitude: <input type="text" value="40,6508267"/> <input type="button" value="v"/> Longitude: <input type="text" value="-73,5225747"/> <input type="button" value="set"/>		
"Set Archive Interval" Setting new archive interval will automatically erase whole memory. Do it? <input type="checkbox"/> <input type="text" value="30 min"/> <input type="button" value="set"/>		
"Select Units" Temperature: <input type="text" value="°C (Tenths of a degree)"/> <input type="button" value="v"/>		

Latitude and Longitude written to console