

WASP User Manual

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Overview

This guide outlines the basic procedures to get your WASP gateway device setup with a comprehensive overview on the monitoring application.

Requirements

To get started the following are required:

1. WASP-N or WASP-PoE device(s)
2. iOS device (recent device preferred)
 - a. Download the WASP Util app (see below)
3. CORE device(s)
4. A Wi-Fi network
5. Download the following files from the WASP product info [link](#)
 - a. File: WASP-POE QSG-15
 - b. File: Getting Started with WASP-N_MultiLanguage

WASP Device Setup

To connect the WASP (N or PoE) please refer to the documents mentioned above and follow the outlined procedures.

 Getting Started with WASP-N_MultiLanguage

 WASP-POE QSG-15

WASP iOS Application

Download the WASP Util application from the Apple iTunes store. Developers of the application are North Pole Engineering. This application is required for the WASP Device setup stage (above).



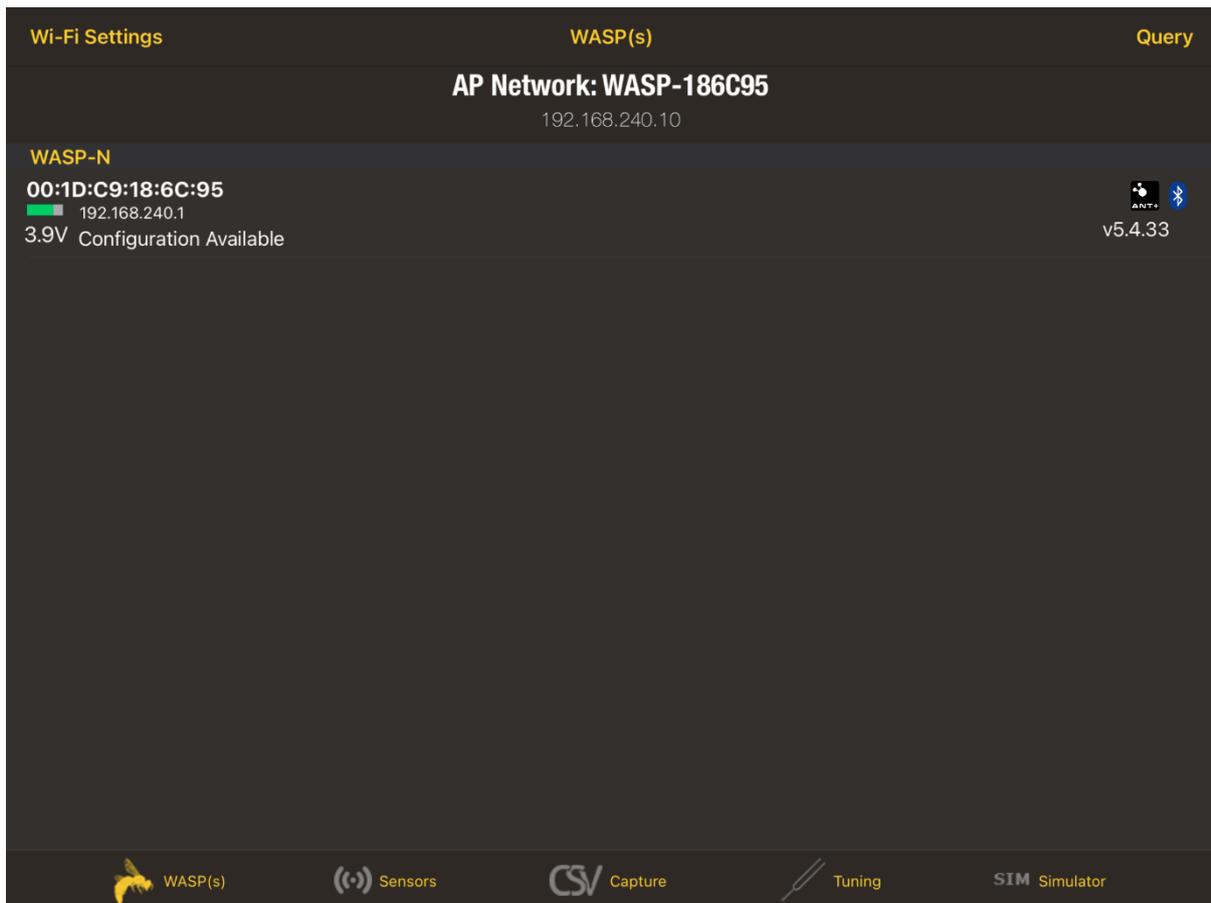
Dashboard Overview

Brief overview of the key features on the WASP Util Application

The main tabs for CORE monitoring purposes include:

- The 'WASP(s)' tab,
- 'Sensors' tab,
- And the 'CSV Capture' tab.

Each section will be further detailed in the next sections.

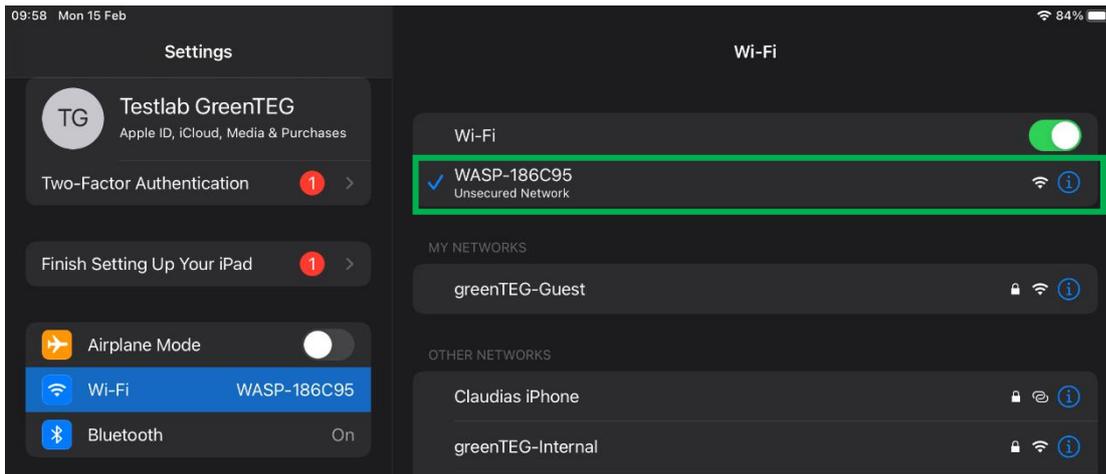


Cockpit view once entering WASP Util application

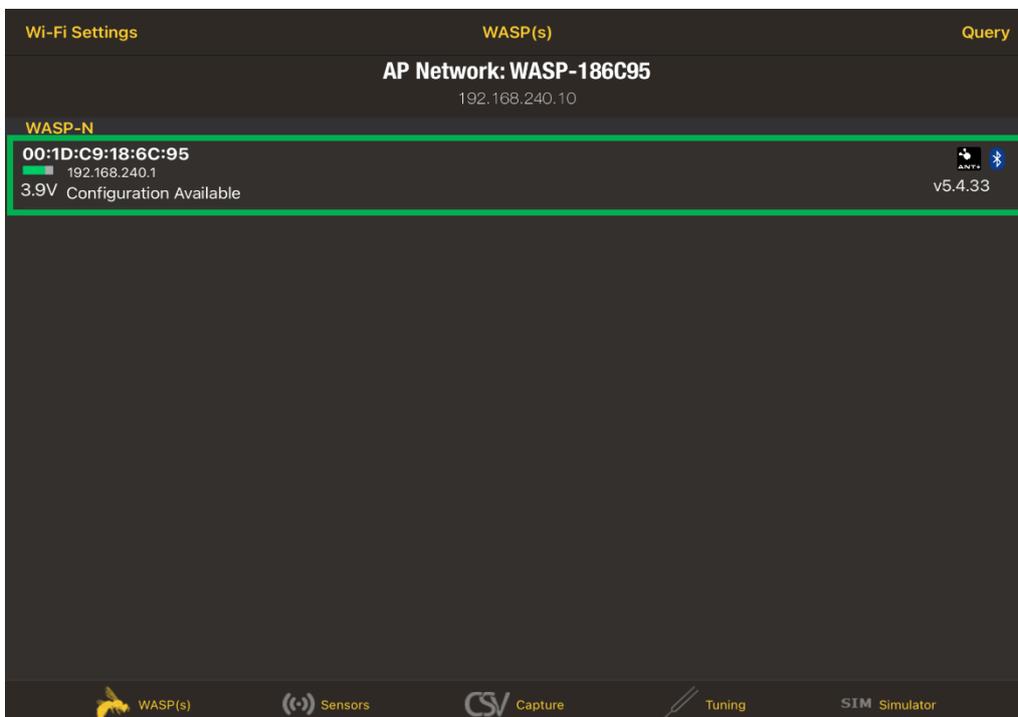
Ensure WASP connection is established

Before every monitoring session ensure your iOS device is connected to the WASP network to ensure successful CORE monitoring.

Connect your iOS monitoring device to the new **WASP network**. Network will be shown in your device's Wi-Fi settings.



To identify a successful connection, check the WASP(s) tab in the iOS application. A successful connection is shown with the green status bar. Green indicating a stable connection.



CORE Monitoring – Sensors Tab

With a successful WASP device connectivity, CORE monitoring is then possible. All monitoring features are available on the 'Sensors' Tab.

Clear	Sensors (9)	Imported Filter (1)	Sets
Core (9)		Parameter Graph	
684 (0x2ac)	Skin: °C: 22.0, F: 71.6 Quality: Poor CORE: °C: -327.7, F: -557.8	PPS: 1.50 RSSI: -43	
8669 (0x21dd)	Skin: °C: 34.3, F: 93.8 Quality: Not Used CORE: °C: 37.0, F: 98.6	PPS: 1.75	
8692 (0x21f4)	Skin: °C: 28.6, F: 83.5 Quality: Poor CORE: °C: -327.7, F: -557.8		
16330 (0x3fca)	Skin: °C: 18.0, F: 64.4 Quality: Not Used CORE: °C: 40.4, F: 104.7	PPS: 1.75 RSSI: -46	
36690 (0x8f52)	Skin: °C: 33.0, F: 91.5 Quality: Not Used CORE: °C: 36.7, F: 98.1	PPS: 2.00 RSSI: -34	
40508 (0x9e3c)	Skin: °C: 18.0, F: 64.4 Quality: Not Used CORE: °C: -327.7, F: -557.8	PPS: 1.75 RSSI: -49	
46995 (0xb793)	Skin: °C: 22.2, F: 72.0 Quality: Poor CORE: °C: -327.7, F: -557.8	PPS: 2.00 RSSI: -14	
56606 (0xdd1e)	Skin: °C: 20.6, F: 69.1 Quality: Not Used CORE: °C: -327.7, F: -557.8	PPS: 1.75 RSSI: -40	
59093 (0xe6d5)	Skin: °C: 21.8, F: 71.2 Quality: Poor CORE: °C: -327.7, F: -557.8	PPS: 1.25 RSSI: -47	

Filter Sensor view to only show CORE devices. See image below for the CORE filter classification.

For multiple CORE monitoring, each CORE is represented by a separate row. More information on the displayed variables will be discussed in the next section.

Displayed information per CORE device

Each core device is characterised by its ANT ID and BLE (last 4 digits).

8669 (0x21dd)	Skin: °C: 34.3, F: 93.8 Quality: Not Used CORE: °C: 37.0, F: 98.6	PPS: 1.75 RSSI: -56
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ANT ID
BLE (last 4 digits) – shown in brackets.

Skin: Skin temperature Celsius and Fahrenheit
Quality: Data quality, 'Not used' signifies that the CORE is not worn
CORE: core body temperature in Celsius and Fahrenheit

PPS: Packets per second; measure of throughput from devices
RSSI: Received Signal Strength Indicator; measure of radio frequency signal strength.

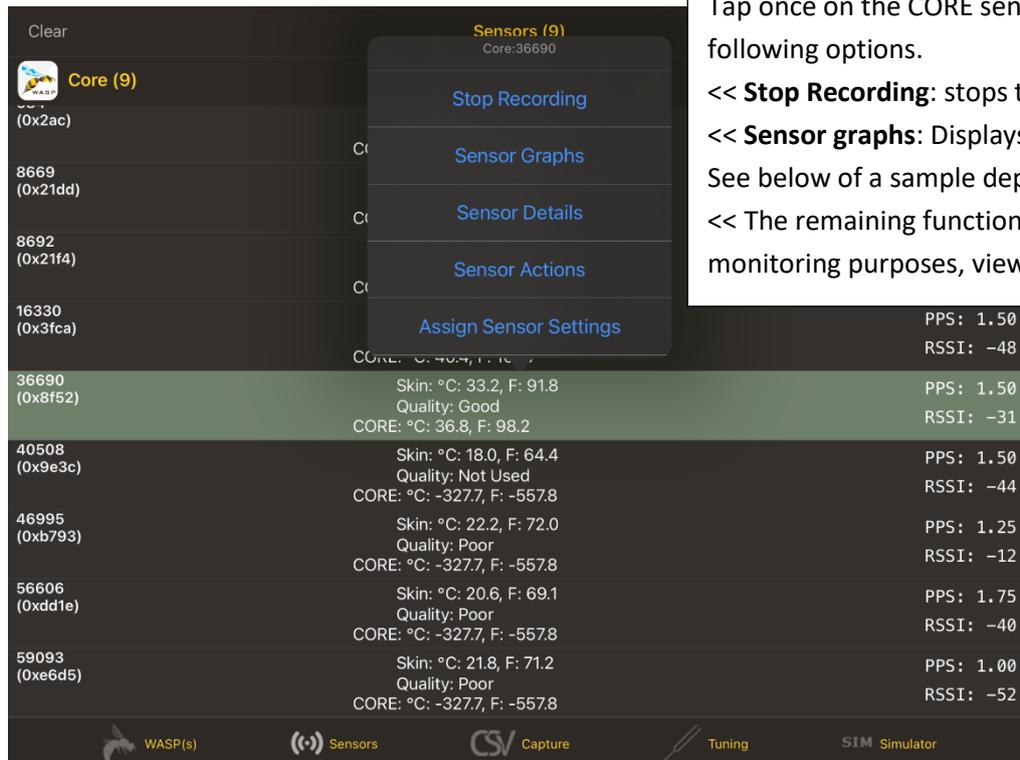
Recording CORE data or Remove the device

The data from the CORE can be recorded and viewed in live graphs.

To record a specific core, swipe left and select the Record function.

To remove the device from the sensor list, select the Remove button.

Skin: °C: 33.1, F: 91.6 Quality: Good CORE: °C: 36.8, F: 98.2	PPS: 1.25 RSSI: -30	Remove	Record
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ID	Core ID	Skin: °C	Skin: F	Quality	CORE: °C	CORE: F	PPS	RSSI
36690	(0x8f52)	33.2	91.8	Good	36.8	98.2	1.50	-31
40508	(0x9e3c)	18.0	64.4	Not Used	-327.7	-557.8	1.50	-44
46995	(0xb793)	22.2	72.0	Poor	-327.7	-557.8	1.25	-12
56606	(0xdd1e)	20.6	69.1	Poor	-327.7	-557.8	1.75	-40
59093	(0xe6d5)	21.8	71.2	Poor	-327.7	-557.8	1.00	-52

Tap once on the CORE sensor row to see the following options.

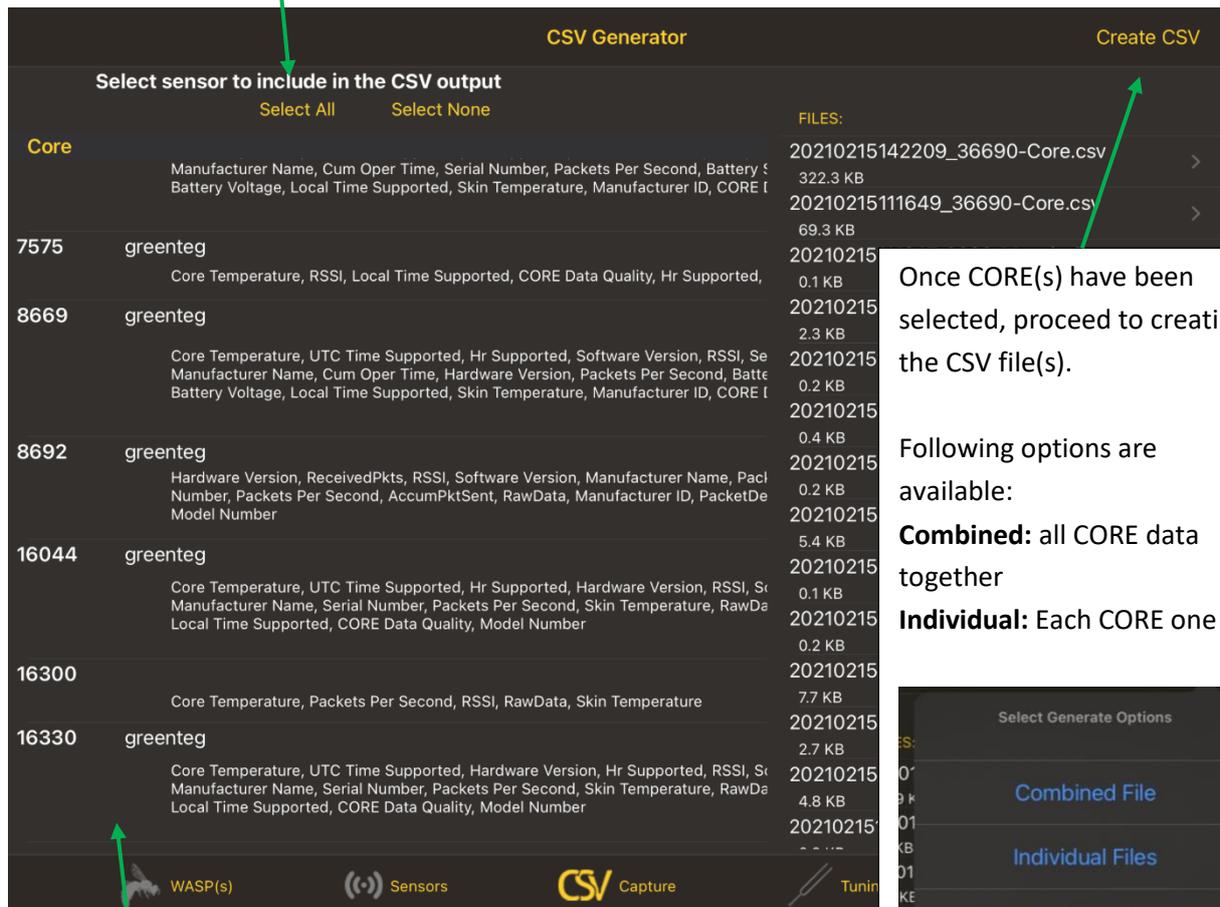
- << **Stop Recording**: stops the record session.
- << **Sensor graphs**: Displays the live graphs. See below of a sample depiction.
- << The remaining functions have no effect on monitoring purposes, view as needed.



Data Download - CSV

To download CORE monitoring data, visit the CSV capture tab.

To download data, select CORE(s) as needed
 Can select all using the 'Select all' option.
 Or simply tap the CORE row for singular selection



CSV Generator Create CSV

Select sensor to include in the CSV output
 Select All Select None

Core	Manufacturer	Parameters	File Name	Size
		Manufacturer Name, Cum Oper Time, Serial Number, Packets Per Second, Battery Voltage, Local Time Supported, Skin Temperature, Manufacturer ID, CORE I	20210215142209_36690-Core.csv	322.3 KB
			20210215111649_36690-Core.csv	69.3 KB
7575	greenteg	Core Temperature, RSSI, Local Time Supported, CORE Data Quality, Hr Supported,	20210215	0.1 KB
8669	greenteg	Core Temperature, UTC Time Supported, Hr Supported, Software Version, RSSI, Se	20210215	2.3 KB
		Battery Voltage, Local Time Supported, Skin Temperature, Manufacturer ID, CORE I	20210215	0.2 KB
			20210215	0.4 KB
8692	greenteg	Hardware Version, ReceivedPkts, RSSI, Software Version, Manufacturer Name, Pacl	20210215	0.2 KB
		Number, Packets Per Second, AccumPktSent, RawData, Manufacturer ID, PacketDe	20210215	5.4 KB
16044	greenteg	Core Temperature, UTC Time Supported, Hr Supported, Hardware Version, RSSI, S	20210215	0.1 KB
		Manufacturer Name, Serial Number, Packets Per Second, Skin Temperature, RawDa	20210215	0.2 KB
		Local Time Supported, CORE Data Quality, Model Number	20210215	7.7 KB
16300		Core Temperature, Packets Per Second, RSSI, RawData, Skin Temperature	20210215	2.7 KB
16330	greenteg	Core Temperature, UTC Time Supported, Hardware Version, Hr Supported, RSSI, S	20210215	4.8 KB
		Manufacturer Name, Serial Number, Packets Per Second, Skin Temperature, RawDa	20210215	
		Local Time Supported, CORE Data Quality, Model Number	20210215	

WASP(s) Sensors CSV Capture Tunin

Once CORE(s) have been selected, proceed to creating the CSV file(s).

Following options are available:

Combined: all CORE data together

Individual: Each CORE one file



Select Generate Options

- Combined File
- Individual Files
- Combined & Individual
- Raw ANT Files

Before Creating the CSV, the CSV output variables can be edited. To do so simply left swipe the CORE information row and select/unselect the data parameters.

CSV Generator
Create CSV

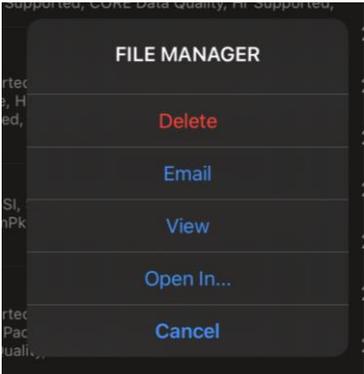
Select sensor to include in the CSV output

Select All Select None

ID	Manufacturer	Sensors	File Name	Size
Core		Manufacturer Name, Cum Oper Time, Serial Number, Packets Per Second, Battery Voltage, Local Time Supported, Skin Temperature, Manufacturer ID, CORE I	20210215142209_36690-Core.csv	322.3 KB
7575	greenteg	Core Temperature, RSSI, Local Time Supported, CORE Data Quality, Hr Supported,	20210215111649_36690-Core.csv	69.3 KB
8669	greenteg	Core Temperature, UTC Time Supported, Hr Supported, Software Version, RSSI, Se	20210215111247_8692-Muscle Oxygen.csv	0.1 KB
			20210215111247_8692-Core.csv	2.3 KB
8692	greenteg	Core Temperature, UTC Time Supported, Hr Supported, Software Version, RSSI, Se	20210215111247_8669-Muscle Oxygen.csv	0.2 KB
			20210215111247_8669-Core.csv	0.4 KB
			20210215111247_7575-Core.csv	0.2 KB
16044	greenteg	Hardware Version, ReceivedPkts, RSSI, Software Version, Manufacturer Name, Pacl	20210215111247_16044-Core.csv	5.4 KB
			20210215111247_16044-Core.csv	0.1 KB
16300		Core Temperature, UTC Time Supported, Hr Supported, Hardware Version, RSSI, S	20210215111247_16300-Core.csv	0.2 KB
			20210215111247_16300-Core.csv	7.7 KB
16330	greenteg	Core Temperature, Packets Per Second, RSSI, RawData, Skin Temperature	20210215111247_16330-Core.csv	2.7 KB
			20210215111247_16330-Core.csv	4.8 KB
			20210215111247_16330-Core.csv	2.7 KB

WASP(s)
Sensors
CSV Capture
Tuning

Each file can be viewed or download with the following options:



Final Note:

If you are interested in learning more about customizing your cockpit’s functionalities and user experience, we are open to discuss initial considerations together over a call. Next steps can include a more in-depth discussion with the engineers from Northpole (WASP OEM) and/or with other potential gateway/cockpit providers for tailored features. We have evaluated other gateway providers for our CORE solutions; hence a desired solution can be delivered.