

EMONWRT

Quick Start Guide

v1.0

Current Sensor 3
CT3

Current Sensor 2
CT2

Current Sensor 1
CT1

Interrupt Port

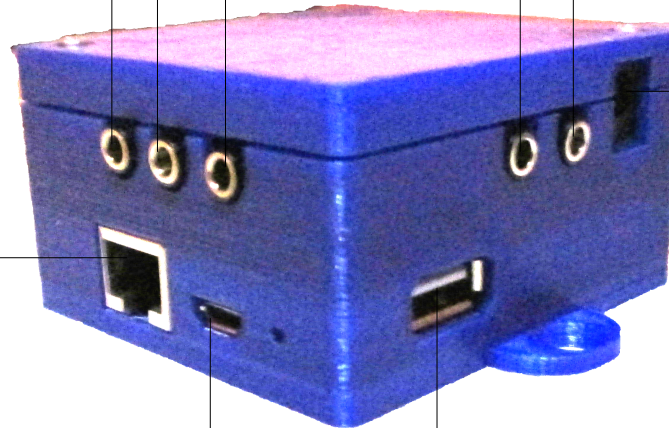
Temperature
sensor port
DS18B20

AC Adaptor Port.
**X Do not connect
a power supply
to this port.
EmonWRT does
not get powered
from this port.**

Ethernet Port
Configuration

MicroUSB Power Supply.
Power the EmonWRT using
any standard USB power
adaptor. (1A minimum)

USB Port for
OpenWRT use.





Connect the power cord
to the EmonWRT
microUSB port.

Any standard USB power
adaptor can be used.



Connect the EmonWRT to a computer using the ethernet cable.

Then open a web browser and go to address <http://192.168.2.1>

*It might be recommended to disable the Wifi on the computer.

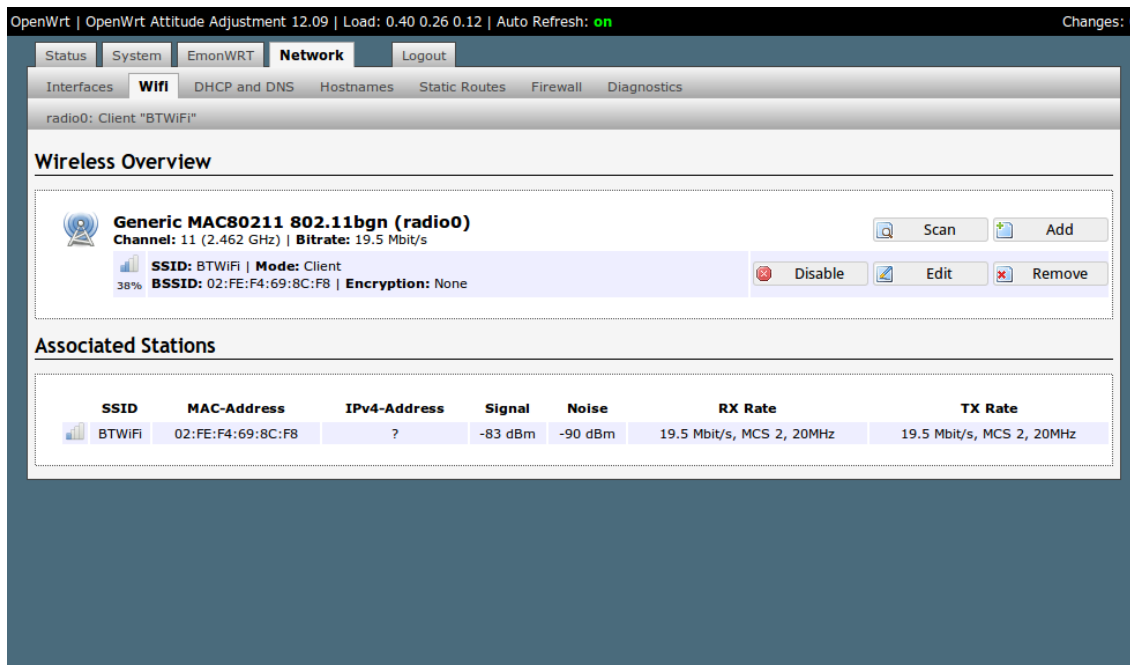
**The computer must obtain its ip from dhcp on the ethernet connection.

The OpenWRT web interface will appear.

Login using

Username: root

Password: admin




OpenWrt | OpenWrt Attitude Adjustment 12.09 | Load: 0.40 0.26 0.12 | Auto Refresh: on | Changes: 0

Interfaces **Wifi** DHCP and DNS Hostnames Static Routes Firewall Diagnostics

radio0: Client "BTWifi"

Wireless Overview

 **Generic MAC80211 802.11bgn (radio0)**
Channel: 11 (2.462 GHz) | Bitrate: 19.5 Mbit/s
SSID: BTWifi | Mode: Client
38% BSSID: 02:FE:F4:69:8C:F8 | Encryption: None

Scan Add Disable Edit Remove

Associated Stations

SSID	MAC-Address	IPv4-Address	Signal	Noise	RX Rate	TX Rate
BTWifi	02:FE:F4:69:8C:F8	?	-83 dBm	-90 dBm	19.5 Mbit/s, MCS 2, 20MHz	19.5 Mbit/s, MCS 2, 20MHz

To connect the EmonWRT to your home router on the top tabs select **Network** then **Wifi**.

Then hit the Scan button to choose the Wifi network to connect to.

Select your home network in the list then hit **Join Network**.

Enter you home wifi password if applicable then hit the **Submit** button keeping all parameters as default.

Then hit **Save and Apply** on the following page.

On the top tabs select **Network** then **interfaces**. You should see confirmation that you are connected to your home network on the wwan interface.

Input API

Apikey authentication

If you want to call any of the following actions when your not logged in, add an apikey to the URL of your request: &apikey=APIKEY.

Read only:

Read & Write:

Available HTML URLs

The input list view	http://emoncms.org/input/node
This page	http://emoncms.org/input/api
Input processing configuration page	http://emoncms.org/input/process?inputid=1

Available JSON commands

To use the json api the request url needs to include .json

Post data

JSON format:	http://emoncms.org/input/post.json?json={power:200}
CSV format:	http://emoncms.org/input/post.json?csv=100,200,300
Assign inputs to a node group	http://emoncms.org/input/post.json?node=1&csv=100,200,300

Copy/Paste

Login to your emoncms account and go to **Input** then **Input API Help**.

Copy the Read & Write Apikey.

Return to the previous page select the EmonWRT tab on the top.

Paste the apikey in the appropriate field and hit **Save & Apply**.

Once you have applied the new settings restart the EmonWRT by disconnecting the power cord.

OpenWrt | OpenWrt Attitude Adjustment 12.09 | Load: 0.08 0.15 0.13 Unsaved Changes: 2

StatusSystemEmonWRTNetworkLogout

Main

EmonWRT Configuration

Configuration for communication with EmonCMS server

MAIN

ApiKey88ff6eqwert74b0123bfdws666eww695e

EmonCMS Hostname (or IP)emoncms.org

Node ID20

Reset

Save

Save & Apply

	Input	Feeds	Vis	Dashboard	Extras ▾	Account	Logout	Docs
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Node 12						
Node:	name	Description	Process list	last updated	value	
12	1		log kWhd	inactive	65.0	✎ 🗑️ 🔧
12	2		log kWhd	inactive	67.0	✎ 🗑️ 🔧
12	3		log	inactive	17687	✎ 🗑️ 🔧

Node 20						
Node:	name	Description	Process list	last updated	value	
20	1			5s ago	41.0	✎ 🗑️ 🔧
20	2			5s ago	2.00	✎ 🗑️ 🔧
20	3			5s ago	41.0	✎ 🗑️ 🔧
20	4			5s ago	4072	✎ 🗑️ 🔧
20	5			5s ago	3236	✎ 🗑️ 🔧

Node 25						
Node:	name	Description	Process list	last updated	value	
25	1			inactive	2075	✎ 🗑️ 🔧
25	2			inactive	3019	✎ 🗑️ 🔧

Powered by openenergymonitor.org

In the web browser connect to

<http://emoncms.org>

Select **Input** on the top menu and interfaces with a number 20 will appear there.

You should see the sensor being updated at regular intervals.

You're done... you can now record these input as feeds and make beautiful graphs... Check [emoncms documentation](#).