SMA Wifi Set Up

Preparation Checklist

- **Bring your Smartphone, tablet or laptop with Ethernet patch cable along to the site**

If the installation site is remote, it is your first time commissioning this type of inverter, or it is known the inverter's WiFi has been deactivated, it is recommended you bring a computer with an Ethernet port and an Ethernet patch cable. This will make the configuration process easier should you experience any difficulty. Otherwise, any smartphone or tablet with WiFi capability should be sufficient.

- **Take a picture of the serial number, PIC and RID**

Information such as the serial number, PIC and RID can be found on the inverter label and the documentation that comes with the inverter. After the device is installed, information on the label may become difficult to read. If this information is not on hand (after leaving the installation site), taking a picture of the label and having it readily available will be useful for future reference. This information is necessary for registration to Sunny Portal and may be needed during commissioning.

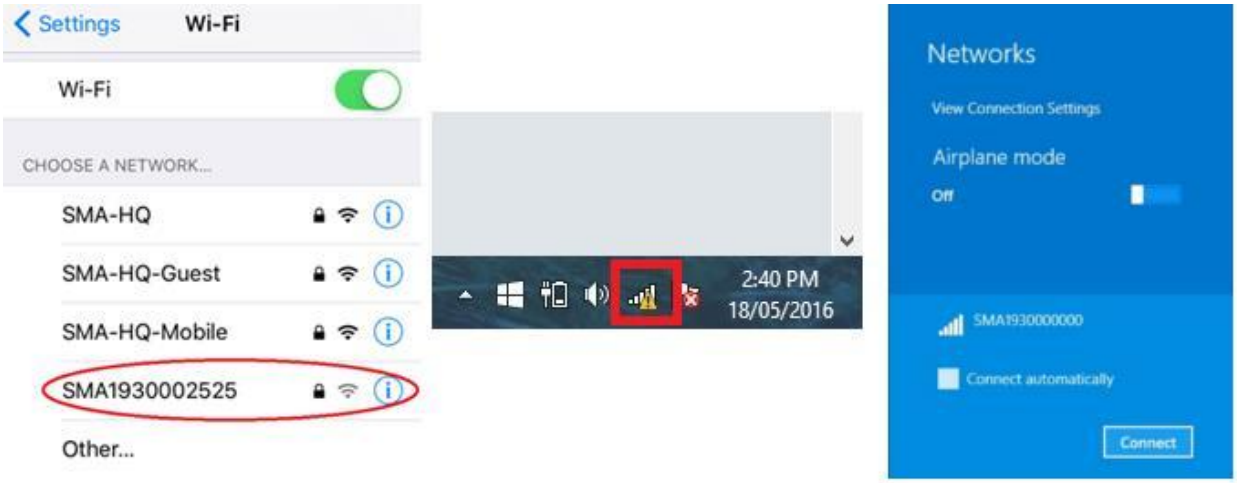
Step 1 – connect to the inverter

There are two different ways to connect your Sunny Boy inverter with WiFi to a local wireless network:

a) Connecting via WiFi using your laptop/smartphone/table
b) Connecting via an Ethernet cable using your laptop

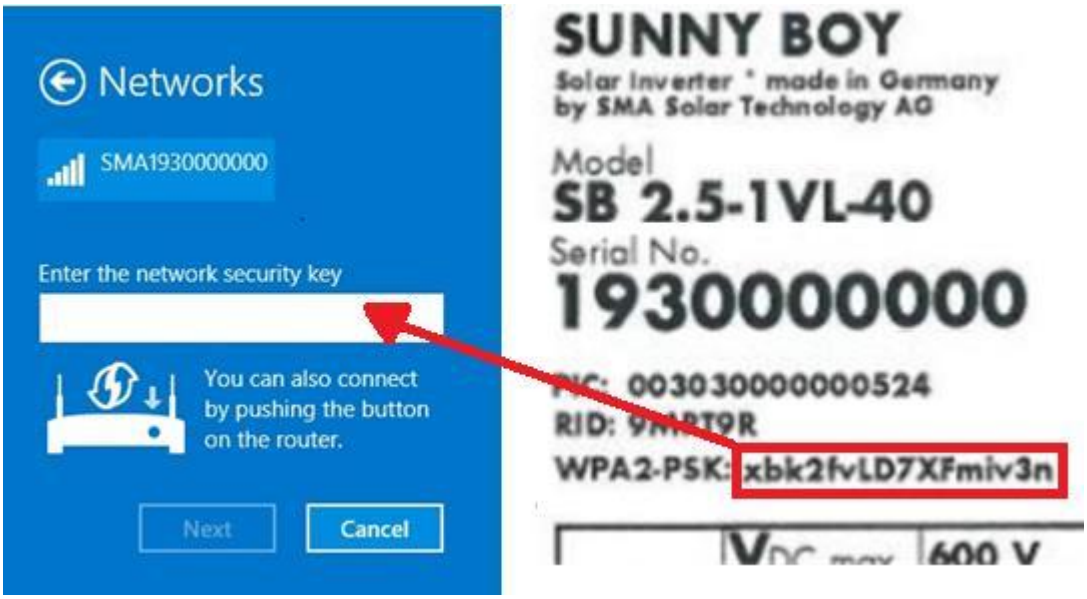
a) Connecting via WiFi using your laptop/smartphone/tablet

Access your device's WiFi connection in order to detect and connect to the Sunny Boy inverter which will be in the format of SMA19xxxxxxxx.



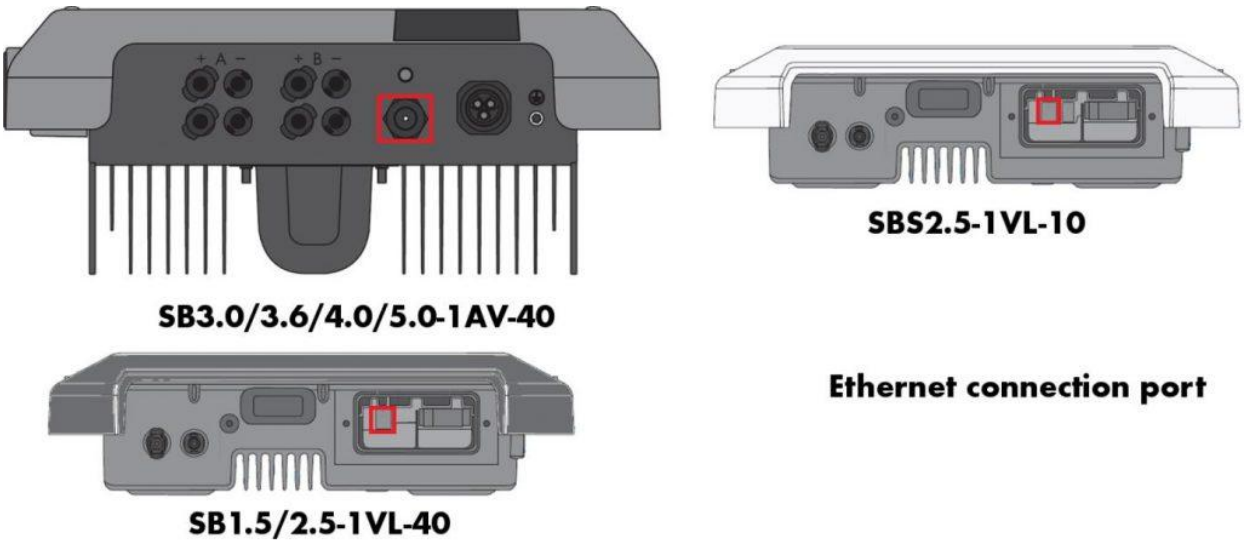
For a brand new installation, the WiFi password (Network Security Key) is **SMA12345** (mind the capital letters).

After the initial inverter setup through the 'Installation Assistant', this initial WiFi password will permanently change to the WPA2-PSK password written on the inverter label. Be mindful of the password as it is case sensitive. The initial WiFi password will also change to the WPA2-PSK password after 10 hours of operation whether or not the initial setup has been performed.



b) Connecting via an Ethernet cable using your laptop

Connect the Ethernet cable to the computer and to the inverter port as shown in red in the image below.

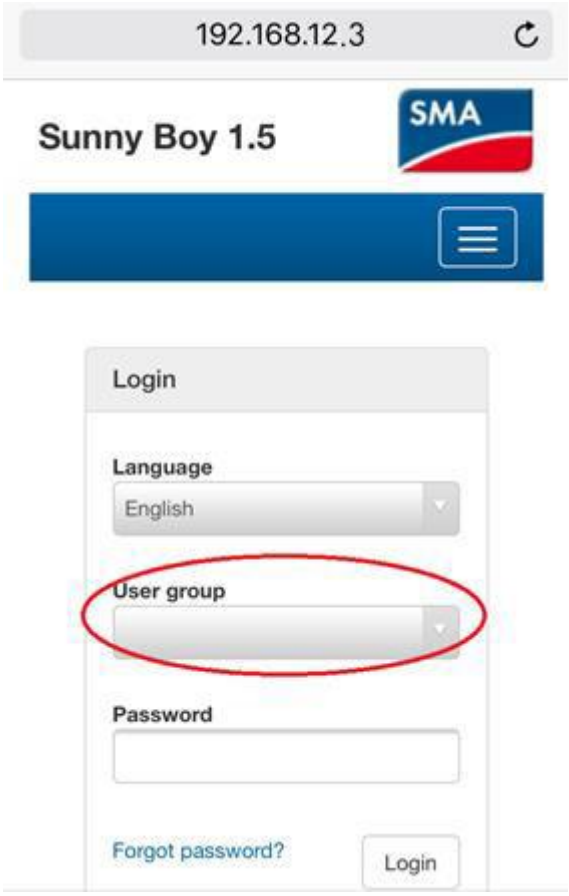


Step 2 – Log in to the inverter interface

Once you have connected to the inverter via WiFi or with a cable, go to your internet browser and type in the default IP address into the adress bar according to the image below.

This will log you into the Sunny Boy's web user interface. To perform the initial configuration, you must login as 'Installer' by changing the User Group dropdown.

The first time you login, it will ask you to create a password, so make sure you keep the password in your records. The password will be used to register the inverter in Sunny Portal.

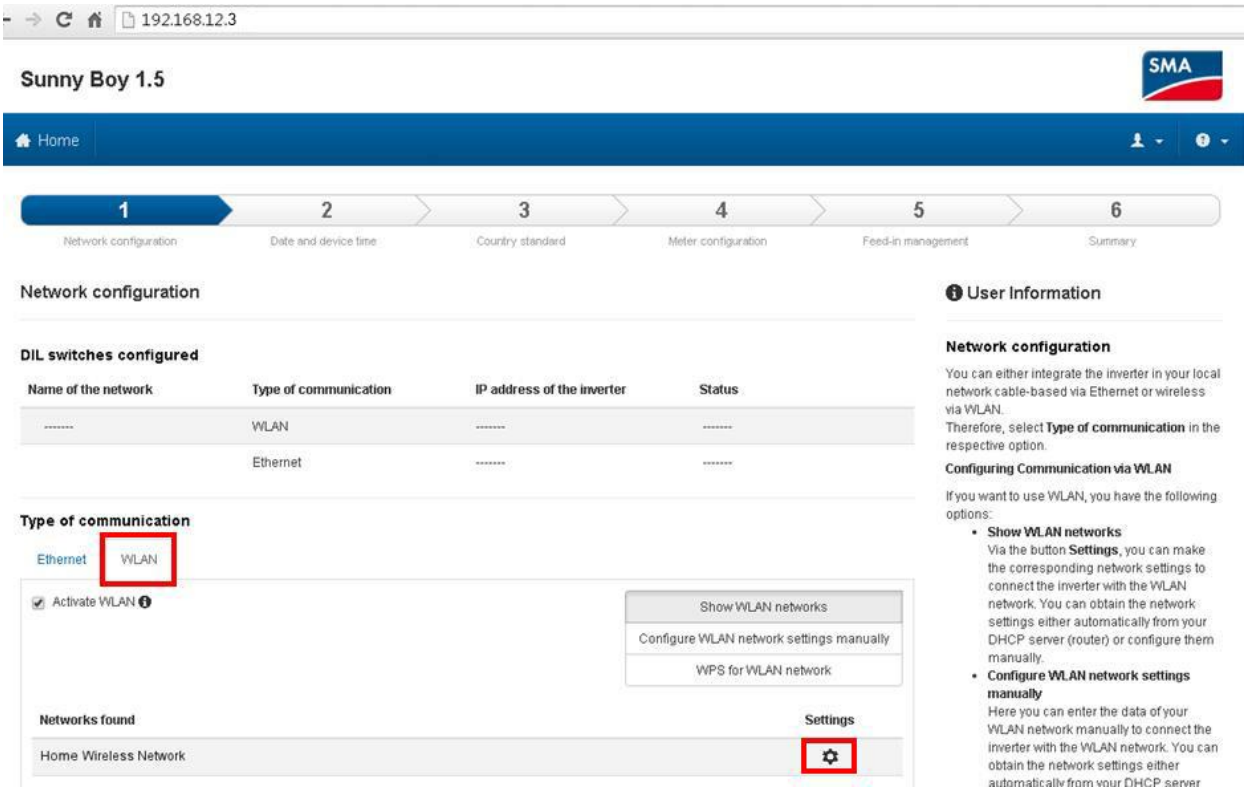


Step 3 – network configuration to a local wireless router

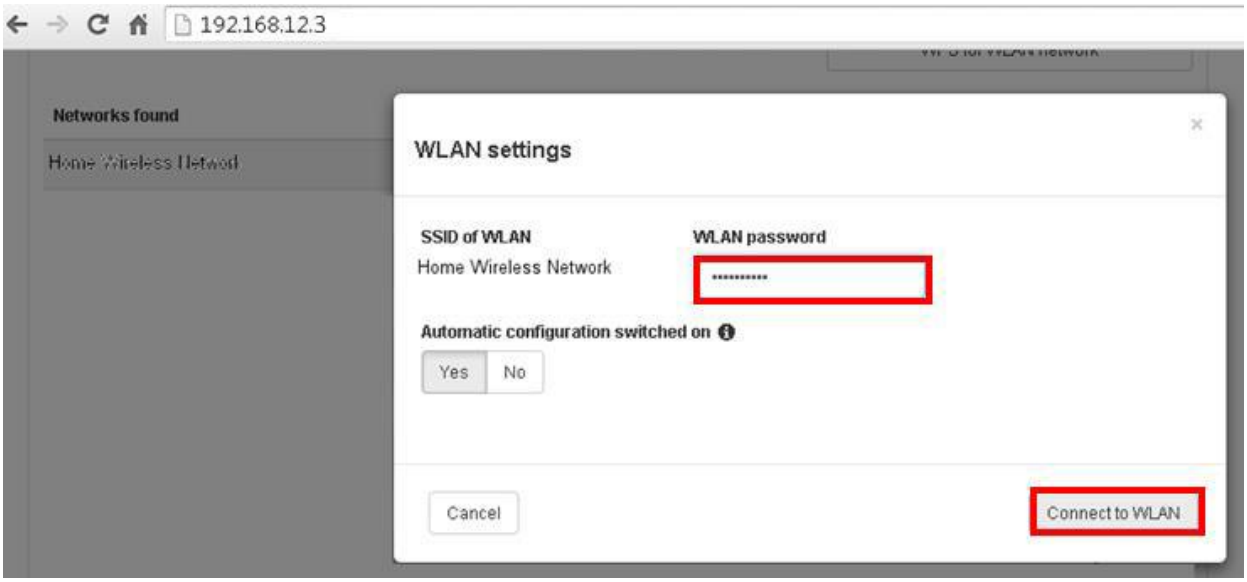
Once logged in, you will have the option to setup the inverter using the ‘Installation Assistant’.

If the “Configuration with Installation Assistant” does not appear, it can be selected from the symbol in the top right-hand corner of the interface shown below.

To synchronize the inverter to your local wireless network, select the “WLAN” tab and search for the local wireless network the inverter is connected to. Select that wireless network’s “Settings” icon.

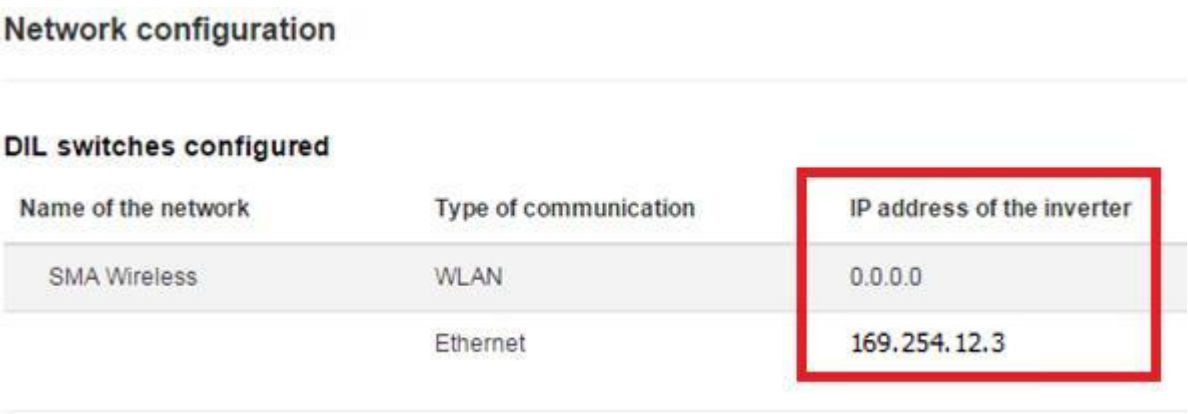


If the wireless network has a password, enter it in the area shown and then click “Connect to WLAN”



The router will then assign an IP address to the inverter if DHCP is enabled in the router. The new IP address will be shown in the network configuration page.

Note the new IP address of the inverter as this is how the customer will be able to login in the future.



Network configuration

DIL switches configured

Name of the network	Type of communication	IP address of the inverter
SMA Wireless	WLAN	0.0.0.0
	Ethernet	169.254.12.3

Click “Save and Next”. The Sunny Boy inverter has now been connected to the local wireless network. To complete commissioning, continue with the prompts in the Installation Assistant. The following video gives you an overview of these commissioning steps which are completed by an installer: Configuration of the Sunny Boy 1.5/2.5 via Web UI

Conclusion

New generation Sunny Boy inverters come equipped with factory-integrated WiFi and Ethernet capability which makes it very easy to integrate into a home network. This makes it ideal for local monitoring via the inverter’s own wireless home network or for online monitoring with SMA’s platforms such as Sunny Portal and Sunny Places. Connecting to the local wireless network is an easy process which can be completed in three simple steps: connecting to the inverter, logging in to the inverter’s user interface and configuring the network to a local wireless router.