

# THINGMAGIC IZAR AND SARGAS READER WiFi SETUP GUIDE



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## REVISION HISTORY

Date	Version	Description
11/5/2018	SRGS_IZAR_WiFi-SG Rev 11052018	<ul style="list-style-type: none"> <li>Initial release.</li> </ul>

## WiFi Setup Steps

The following steps walk you through setting up WiFi on the ThingMagic Sargas or IZAR Reader, firmware 5.3.2 or higher. The procedure applies to a wide range of wireless USB adapters. JADAK has referenced EDIMAX N150 in the development and testing of this solution and the instructions.

1. Login to the reader's web interface (see the reader Quick Start Guide).
2. Copy the IP address from the LAN configuration pane.
3. Using this IP address, telnet into the reader using an open source terminal program such as PuTTY.
4. Paste the IP address in the terminal program and select **Telnet** connection.
5. Click **Open**.
6. Once you have accessed the console port with a terminal program, enter the default user name **debian** and the default password **rootsecure**.
7. Attach the WiFi dongle to the reader's USB host port.



8. List the USB devices and their properties in Linux®.
9. Type **lsusb** to list the Wireless Adapter from step 7.

```
debian@IZAR-9ef433: ~  
Linux 3.8.13-bone86 (IZAR-9ef433.localdomain) (0)  
IZAR-9ef433 login: debian  
Password:  
Last login: Tue Jul 24 09:49:06 UTC 2018 from BED-JOHNG.local on pts/0  
Linux IZAR-9ef433 3.8.13-bone86 #1 SMP Tue Oct 10 12:28:54 EDT 2017 armv7l  
  
The programs included with the Debian GNU/Linux system are free software;  
the exact distribution terms for each program are described in the  
individual files in /usr/share/doc/*/copyright.  
  
Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent  
permitted by applicable law.  
debian@IZAR-9ef433:~$ lsusb  
Bus 001 Device 002: ID 7392:7811 Edimax Technology Co., Ltd EW-7811Un 802.11n Wi  
reless Adapter [Realtek RTL8188CUS]  
Bus 001 Device 001: ID 1d6b:0002 Linux Foundation 2.0 root hub  
Bus 002 Device 001: ID 1d6b:0002 Linux Foundation 2.0 root hub  
debian@IZAR-9ef433:~$
```

10. View the wireless card information and settings by typing **iwconfig**.

```

debian@IZAR-9ef433: ~
Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
debian@IZAR-9ef433:~$ lsusb
Bus 001 Device 002: ID 7392:7811 Edimax Technology Co., Ltd EW-7811Un 802.11n Wi
reless Adapter [Realtek RTL8188CUS]
Bus 001 Device 001: ID 1d6b:0002 Linux Foundation 2.0 root hub
Bus 002 Device 001: ID 1d6b:0002 Linux Foundation 2.0 root hub
debian@IZAR-9ef433:~$ iwconfig
wlan0      unassociated  Nickname:<"WIFI@REALTEK">
           Mode:Auto  Frequency=2.412 GHz  Access Point: Not-Associated
           Sensitivity:0/0
           Retry:off   RTS thr:off   Fragment thr:off
           Power Management:off
           Link Quality=0/100  Signal level=0 dBm  Noise level=0 dBm
           Rx invalid nwid:0  Rx invalid crypt:0  Rx invalid frag:0
           Tx excessive retries:0  Invalid misc:0  Missed beacon:0

lo         no wireless extensions.

eth0       no wireless extensions.

usb0       no wireless extensions.

debian@IZAR-9ef433:~$

```

11. WiFi can be enabled by adding 4 parameters in the **tm.conf** file.

```

debian@beaglebone:~$ sudo vim /tm/etc/tm.conf

net_interface='wlan0'

wpa_ssid_wlan0=' WiFi-UserName '

wpa_psk_wlan0 = ' WiFi-Password '

iface_wlan0='dhcp'

```

12. Edit the file and save the changes. Reboot the reader.

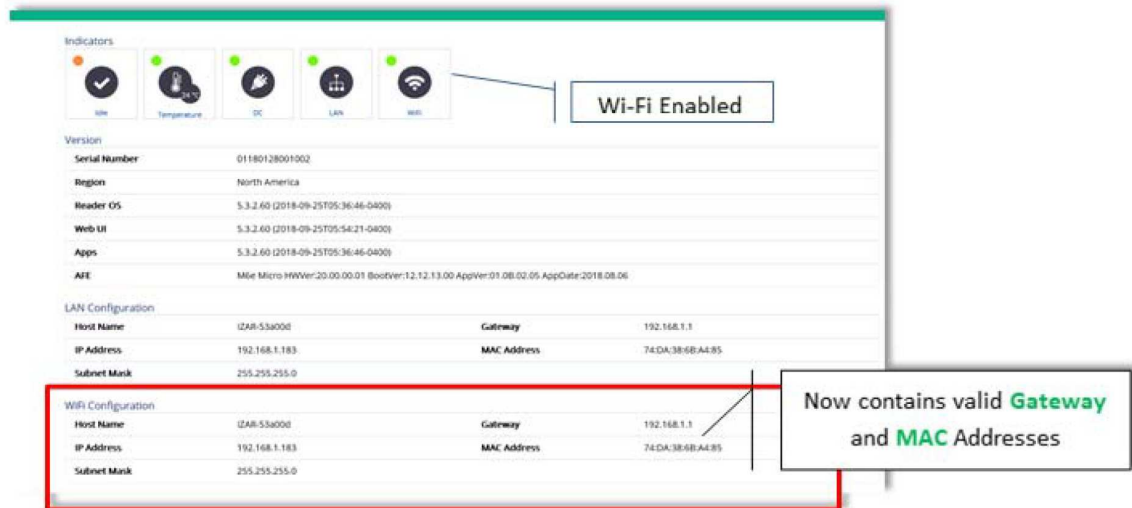
```

debian@beaglebone:~$ sudo reboot.

```

13. Login to the reader's web interface (see the reader Quick Start Guide).

14. With the WiFi dongle connected to the USB host port, you now see a WiFi status indicator under the reader **STATUS**, as shown below.



#### WiFi Disable Procedure

Remove the 4 parameters that were added to the **tm.conf** file in step 11 and reboot the reader.

```
debian@beaglebone:~$ sudo vim /tm/etc/tm.conf

net_interface='wlan0'

wpa_ssid_wlan0=' WiFi-UserName '

wpa_psk_wlan0 = ' WiFi-Password '

iface_wlan0='dhcp'
```