Before mounting the system it is important to consider the possible scenarios (see below) and evaluate the right position for Wi-Fi router.

2. Find a new location for the router taking care about the signal decrease due to materials through which the radio signal has to pass:
   1. Change the direction of the antenna.
   2. Install an extension (cable or repeater)

The distances indicated in the below examples are between WIFI LOGGER CARD and the router.

The principal components of the VSN 300 WIFI LOGGER CARD are shown in the figure and described in the following table:

<table>
<thead>
<tr>
<th>Main components</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antenna connection cable</td>
<td>1</td>
</tr>
<tr>
<td>Antenna RF Technology Corp. Model EA-79 F RP SMA</td>
<td>1</td>
</tr>
<tr>
<td>Connection terminals</td>
<td>1</td>
</tr>
<tr>
<td>LED</td>
<td>1</td>
</tr>
<tr>
<td>Status LED 2</td>
<td>1</td>
</tr>
<tr>
<td>Status LED 1</td>
<td>1</td>
</tr>
<tr>
<td>Coaxial connector</td>
<td>1</td>
</tr>
<tr>
<td>Mechanical mounting bracket</td>
<td>1</td>
</tr>
</tbody>
</table>

3. Preliminary operation

The inside of the inverter may be accessed only after the inverter has been disconnected from the grid and from the photovoltaic generators.

The VSN300 WIFI LOGGER CARD must be installed only by trained professional installers.

Turn off the inverter by physically disconnecting the AC and DC voltages, as well as any voltage connected to the multiradon relay.

Before starting installation, check the indications on the inverter’s label in order to discharge any stored energy in the fault device.

Open the inverter front cover.

Antenna installation

Add the antenna to the inverter by passing it through the M20 cable gland opening, the gasket, the plastic lock nut and the adapter (flexure)

Attach the antenna bulk head connector to the inverter using the supplied plastic bush nut (torque 58 in-lb). For some inverter models (FCC 02-03-02-074-09) and TRIO 03-03-02-074-09 it will be necessary to use the adapter kit due to the greater thickness of the inverter enclosure. In this case, proceed as follows:
- Install the gasket on the adapter
- Install the antenna to the inverter using the plastic bush nut (torque 58 in-lb)
- Pass the antenna connection cable into the inverter by passing it through the M20 cable gland opening, the gasket, the antenna bulk head connector (torque 58 in-lb)
- Pass the antenna connection cable into the inverter by passing it through the M20 cable gland opening, the gasket, the antenna bulk head connector (torque 58 in-lb)

Screw the antenna to the support

Use only antenna type RP Technology Corp. Model EA-79 F RP SMA (or a similar type having equal or lesser gain)

4. Install VSN300 WIFI LOGGER CARD

Installation without adapter

Installation with adapter

Conect the antenna cable to the coaxial mounting connector present on the card.

During this step, pay special attention to aligning the terminal of the antenna cable with the mounting connector. Do not apply pressure on the terminal, it is not allowed with the mounting connector.
Users who log in as an "admin" can open and view the contents of your site. Additionally, they can make changes.

1. End of the procedure. The system is now setup.

9. Create the credential (User Name and Password) of the user.

7. Fill in the site information

- Configuration wizard (in this example 192.168.0.100) on an internet router.
- System not connected.
- Recovering the just assigned IP address by consulting the "Home" Wi-Fi router's internal configuration pages.
- Using VSN300's host name in place of just assigned IP address

8. Activate the Wi-Fi connection on the tablet/smartphone/PC and connect to the VSN300 WIFI LOGGER CARD. Select the "Home" WLAN network and enter the password to enable access. Select the "Station Mode" operation mode combined with DHCP IP address assigning method (strongly recommended). The device used to perform the commissioning of the VSN300 must be connected to the "Home" WLAN network before continuing the configuration process described in the next steps.

4a. Verify that the IP address of the installation site is correct or insert IP is missing.

10. This label is necessary to remember all the identification data of VSN300 WIFI LOGGER CARD and it should be applied in the dedicated area shown below.

At the end of installation phase, apply the following labels:
- FCC label. This label is supplied with the VSN300 WIFI LOGGER CARD and must be applied near the regulatory label of the inverter. The FCC label contains the FCC ID of the VSN300 WIFI LOGGER CARD.
- Identification label. This label is necessary to remember all the identification data of VSN300 WIFI LOGGER CARD and it should be applied in the dedicated area (see paragraph 10).

3. Type the default IP address 192.168.117.1 in an internet browser.

- Switch the Wi-Fi connection of the tablet/smartphone/PC to the "Home" WLAN network to which the VSN300 WIFI LOGGER CARD is connected.
- If for any reason you lost the IP address assigned to the VSN300 step 4c you can continue the commissioning wizard by executing one of the following procedures:
  - Losing VSN300's host name in place of just assigned IP address
  - Further information about host name associated to VSN300 are provided in the product manual available on www.abb.com/sites/inverters monitoring and communication section.
  - The provisioning or local monitoring is only going to work during daylight hours when the inverter has DC power.

4. The VSN300 is able to operate in two different modes of operation:
- "Station Mode" accessing point or in the mode is established local monitoring only. The card behaves like an "access point" generating a wireless network to which the user can connect to monitor its own inverter (PV plant locally, through the Plant Viewer Mobile App the mobile or through direct access to Web User Interface UIW built-in card).
- "Station Mode": this mode is used to send data to the cloud platform, Aurora Vision, allowing remote access. Select the "Home" WLAN network and connect the VSN300 and insert the password to enable access. Select the "Station Mode" operation mode combined with DHCP IP address assigning method are strongly recommended in most installations.

5. Using the default IP address 192.168.117.1, browse to the "Home" Wi-Fi router’s internal configuration pages. Please consult the documentation related to the "Home" Wi-Fi router for further details on how to access its configuration pages.

6. The VSN300 WIFI LOGGER CARD is equipped with 3 status LEDs that can behave as follows:
- Blinking green and yellow, together - Installing Data Partition
- Blinking green and yellow, flashing - Start-up phase
- Blinking green only - Provisioning Access Point Enabled
- Blinking green and yellow flash together 5 times - Inverter Serial Number Acquired

11. Congratulations!

- Select a 3-month trial period
- Type the product key on the bottom label:

ABB
VSN300 WIFI LOGGER CARD
SN: YYWWSSSSSS
MAC:  XX:XX:XX:XX:XX:XX
PRODUCT KEY:  XXXX - XXXX - XXXX - XXXX

9. Provisioning of the VSN300 WIFI LOGGER CARD via Web Browser

- The first configuration of the VSN300 can also be performed using a smartphone or a tablet running the Mobile App Plant Viewer for mobile.

- To turn on the inverter by physically connecting the AC and DC outputs. The VSN300 WIFI LOGGER CARD will automatically power up and after 80 seconds, acts as an access point, detectable by a tablet, smartphone or PC.

- Activating the Wi-Fi connection in the tablet/mobile/PC, and connect to the VSN300 WIFI LOGGER CARD’s access point (VSN300 – PPP00-WNN-XXX, where XXX = Inverter serial number. The device used to perform the commissioning of the VSN300 must be connected to the "Home" WLAN network before continuing the configuration process described in the next steps.

- During this step, confirm that all the terminals are correctly aligned. Any terminal misalignment may result in damage to the card and/or to the inverter.

- Tighten the locking screw to attach the card to the inverter (the screw secures the mounting bracket to the inverter) and seal the terminals connection outside the hole on the mechanical mounting bracket using the cable tie.

- Special note for installation on inverters equipped with arc fault device.

8. The provision is only going to work during daylight hours when the inverter has DC power.

- In these type of inverters it is necessary to install a standoff (supplied with the equipment) under the mechanical mounting bracket.