ABB Solar inverters
Quick installation guide
PVI-GSM/GPRS

Power and productivity for a better world

1. Components

<table>
<thead>
<tr>
<th>Components</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>PVI-GSM/GPRS module</td>
<td>1</td>
</tr>
<tr>
<td>Adhesive antenna with connection cable (3 mt)</td>
<td>1</td>
</tr>
<tr>
<td>Thermal documentation</td>
<td></td>
</tr>
</tbody>
</table>

2. Assembly Instructions

1. Insert the SIM card into the holder.

2. Reinsert the holder into the SIM card slot.

3. The packaging contains all the components required to correctly install and connect the PVI-GSM/GPRS.

3. SIM card: features and installations

In order to enable the PVI-GSM/GPRS module to send data collected by the PVI-AEC-EVO, it is necessary to insert into the specific slot a SIM Card with the following features:

- Activation of SIM Card
- SIM Card enabled for GSM service
- Machine-to-Machine SIM Card (M2M)
- Enabled for GSM/GPRS
- Inactive SIM Card (SIM Card not enabled)

To insert the SIM Card into the module:

1. Remove the SIM Card holder from the slot by pressing down on the holder release button with a pointed object (screwdriver, pen).

4. Connecting to the PVI-AEC-EVO

The PVI-GSM/GPRS module is connected to the PVI-AEC-EVO system and supplied by the expansion bus connector. Please refer to the following image.

- The connection and the disconnection of the PVI-GSM/GPRS module to the PVI-AEC-EVO must be done ONLY AFTER having disconnected the PVI-AEC-EVO from the electricity supply.
- LED POWER ON (GREEN): Indicates that the installation is ON.
- LED TX/RX (GREEN): Indicates that the module is connected to the expansion bus and is communicating with the PVI-AEC-EVO.
The sub-menu "Modem Activity" shows the current activity of the PVI-GSM/GPRS modem.

Please refer to the following table:

<table>
<thead>
<tr>
<th>Function</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MODEM_CONNECT_GPRS</td>
<td>Connects to GPRS network</td>
</tr>
<tr>
<td>MODEM_DISCONNECT_GPRS</td>
<td>Disconnects from GPRS network</td>
</tr>
<tr>
<td>MODEM_CHECK_SMS</td>
<td>Checks for incoming SMS</td>
</tr>
<tr>
<td>MODEM_READ_SMS</td>
<td>Reads the SMS message</td>
</tr>
<tr>
<td>MODEM_DATA_SEND_SMS</td>
<td>Sends data via SMS</td>
</tr>
<tr>
<td>MODEM_SEND_SMS</td>
<td>Sends SMS message</td>
</tr>
</tbody>
</table>

### Modem Status

- **Status**: Information about the modem status and the PVI-AEC-EVO system status.

### Modem Activity

- **Function**: Description of the modem activity.

### Modem Status and Activity

Using the PVI-AEG-EVO display and buttons (see PVI-AEC-EVO Quick Installation Guide), access the "INFORMATION" → "GSM / GPRS" menu. This menu contains the status menu which can be navigated using the arrow keys. The three sub-menus are: MODERN STATUS, MODERN SIGNAL, and MODERN ACTIVITY.

### Modern Status

The sub-menu "Modern Status" indicates whether the modem is ready to receive data using the GPS network.

### Modern Signal

- **Function**: Signal strength of the modem. User status of the modem. The signal strength is represented on a numerical scale from 0 to 1.

### Modern Activity

The sub-menu "Modern Activity" shows the current activity of the PVI-GSM/GPRS modem.

### Checking GPRS Modern Operation

Once connected to the PVI-AEC-EVO and GPRS modem and configured, the user can send SMS messages to the modem to verify its operation. The modem can be configured to send SMS messages to predetermined numbers on a regular basis, and the user can check the status of the modem and its connection to the GPRS network. The modem can also be configured to send SMS messages in response to certain events or conditions.

### Sending SMS Messages

The system is capable of sending SMS messages on an arbitrary mobile phone. The messages that the system receives, and therefore, it is able to respond to, are the following:

- **System structure request**: 000000#system test#
- **Power and energy level request**: 000000#read energy#

### Sending to the portal

The system has been commissioned and correctly configured. The system will send data to the portal management server according to the configuration settings, and it will have a regular data transmission to the portal. The user can test the data transmission by using the PVI-AEC-EVO buttons, and the system will send SMS messages to the following numbers:

- **Tel SMS**: 000000#test SMS#
- **Username**
- **APN**: Access Point Name: name of the access point for the GPRS network(*)

### List of available alarm conditions

The SMS messages listed in the table below are sent when an alarm condition is detected by the system.

### Contacts

- **Tel SMS**: 000000#test SMS#
- **Username**
- **APN**: Access Point Name: name of the access point for the GPRS network(*)

### Commissioning procedure

For details regarding the PVI-AEC-EVO system configuration and installation, please refer to the PVI-AEC-EVO Quick Installation Guide.

The PVI-AEC-EVO is the main voltage by the specific protection switch. Verify that the PVI-AEC-EVO has been started-up correctly and is properly po.