

# RENESOLA MRG QUICK SETUP GUIDE



- Micro Replus Gateway (MRG) is an intelligent monitoring and easy to configure device that allows user to remotely monitor system performance anytime from anywhere on Renesola monitoring webpage.
- New systems can be registered at, <http://microreplusweb.renesola.com/>
- The MRG box contains the MRG, power cord, MRG serial number sheet, warranty card and installation manual. Please follow the following 7 easy steps to configure the MRG.

## Step 1: CONNECTION

- Connect the MRG to the internet using the CAT5/6 cable. Plug in the AC power cord into a dedicated power outlet. Once the AC power cord is connected to the MRG, the device will take about a couple minutes to boot up.

**NOTE: MRG operational voltage is between 100V-240V. MRG can operate with 220V/230V.**

## Step 2: MRG SERIAL NUMBER

- Click on the "Setting" tab on the top right corner of the "Summary Display". Navigate through the menu to check the MRG serial number under the "Version & SN & MAC". Make sure this matches with the printed serial number in the back of the MRG. If they do not match, please contact Renesola for further assistance.

**NOTE: Latest software version will be updated once connected to the internet.**

## Step 3: NETWORK SETTING

- Select the "Ethernet" tab to set the network settings. This process can be done either manually by selecting "Manual" option and entering the IP address, subnet mask, and default gateway or to select the "DHCP" option to have the network automatically assign the MRG with an IP address.

**NOTE: DHCP is recommended**

## Step 4: MICROINVERTER SERIAL NUMBER

- Select the "COM ID" tab to enter the serial number of each installed microinverter. The serial number is a combination of numbers/letters that need to be input into the "Inverter ID" field.
- The serial number sticker also can be found on the body of the microinverter or in the box.
- Input the digits/characters between the hyphens. If the digits start with "0's" you may skip the "0s" and enter the last 5 digits before the "-A". (Ex: for 21310-000164E6-A; enter 000164E6 or just 164E6) or (EX: for 21310-100018DF-A; must enter 100018DF)
- Scanner or keyboards (through the MRG USB port) can be also used to input the serial numbers.

## Step 5: DATE & TIME

- Select the "Date & Time" tab and adjust the appropriate date, time and time-zone.
- Finally, click on "OK" button to save all settings or changes.

**NOTE: The time-zone should match the time-zone set in the monitoring webpage. If you do not have a time-zone selection listed on the Gateway, then please set time-zone on monitoring webpage.**

## Step 6: SAVE AND RESTART

- To make the new configuration take effect, please click on "OK" button and restart the MRG.

## Step 7: NETWORK TEST

- Select the "Network Test" to test if the MRG is connected to the internet and communicates with the Renesola server. Click "Execute" button and wait few seconds to have the result. **GOOD** in the "Net State" box means the MRG connects to the internet and **GOOD** in the "Data Com" means the MRG successfully communicates with the Renesola server.

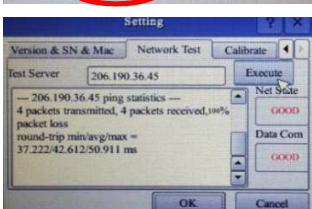
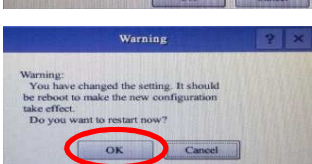
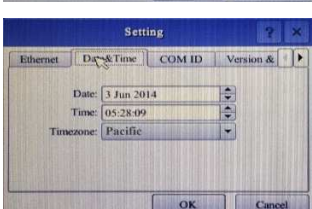
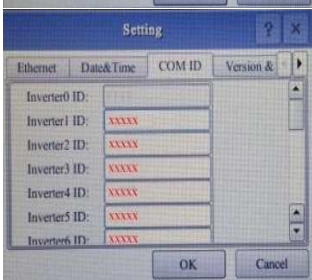
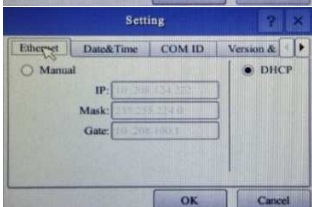
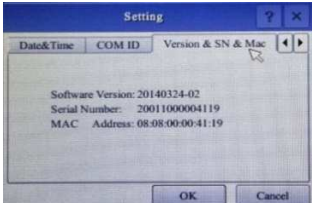
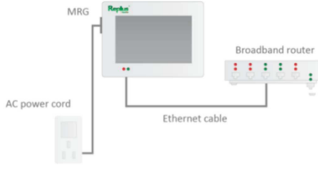
- **NOTE: If the test turns out BAD, please check the network and related settings**

## CONNECTED STATUS

Total number of connected microinverters can be found and verified on the top left side of the "Summary Display".

Connected X/XX ➡ Communicating to MRG / Total number of installed Microinverters.

**NOTE: Installers are to make sure all inputs are entered correctly into MRG and to make sure network test is passed, meanwhile make sure all microinverters are connected successfully before leaving end-user's site.**



# MRG TROUBLESHOOTING GUIDE

**Issue: The monitoring webpage cannot display any data, but MRG has all the data**

## **Troubleshooting**

- Please check the date and time, network settings and verify if the installation and setting of the MRG is according to the instructions.

**Issue: The new replacement microinverter does not appear on the MRG and the monitoring webpage**

## **Troubleshooting**

- Make sure to remove the serial number of the old unit and enter the new microinverter serial number into the MRG.

**Issue: MRG does not show any data or connected microinverter on the “Summary Page”**

## **Troubleshooting**

- Please check the serial number of microinverters in MRG. If the serial numbers are input correctly, verify if the grid voltage is present and is within the acceptable range (180V to 270V for 230V ) at the point of interconnection. If it is out of the acceptable range microinverters will not turn on. Also, make sure the dedicated solar breaker is on.

**Issue: Microinverter production with no communication**

## **Troubleshooting**

- MRG uses the existing power line network to communicate with the microinverters (power line communication protocol). Other high noise appliances or loads also share the same power line at the premises and often interrupt and attenuate the signal strength between the MRG and microinverters. Therefore, relocate the MRG to a different power outlet even if that outlet will not be the final location of the MRG. If this does not fix the problem try to identify and isolate the source of noise or use a dedicated breaker for the MRG at the main or sub panel.

**Issue: Multiple missing microinverters**

## **Troubleshooting**

- This may be because the MRG is located too far from the microinverters/solar subpanel or different kinds of interferences are present at the site. Try to relocate the MRG closer to the solar subpanel or the mainpanel.
- Please double check if all microinverter serial numbers are entered correctly into the MRG.

**Issue: Problem still presents even after relocation of the MRG**

## **Troubleshooting**

- Check the status of the microinverter LED located in the middle of the microinverter nameplate. There are three LED conditions as follows,

### **Status 1: standby**

The LED light is on by 2 seconds, and off by 2 seconds

### **Status 2: producing power**

The LED light is on by 1 second, and off by 1 second

### **Status 3: producing power and communicating with MRG**

The LED light is on by 0.5 second, and off by 0.5 second

- If the LEDs are blinking as described in standby mode please check the AC branch circuit interconnection harness between all the microinverters and verify that each inverter is energized by the utility grid. Re-connect the AC connectors and then watch the LED blinking condition. Also, check the DC connections between the microinverters and the PV module. If the problem persists, please contact ReneSola customer support for further assistance.

## **IMPORTANT**

- Please do not connect the MRG to a power strip, surge protector or GFI outlets as they may weaken the communication. To ensure a reliable data communication between the MRG and microinverter isolate or disconnect any source of power line communication interference and attenuation and do not plug other devices on the same circuit with the MRG unit. Distance of MRG and electrical panel should not exceed 24 meters to avoid communication issues between microinverters and MRG.

**If you need any assistance to troubleshoot MRG, please feel free to contact ReneSola at  
Email: [america@renesola.com](mailto:america@renesola.com) or 415-852-7432**



