

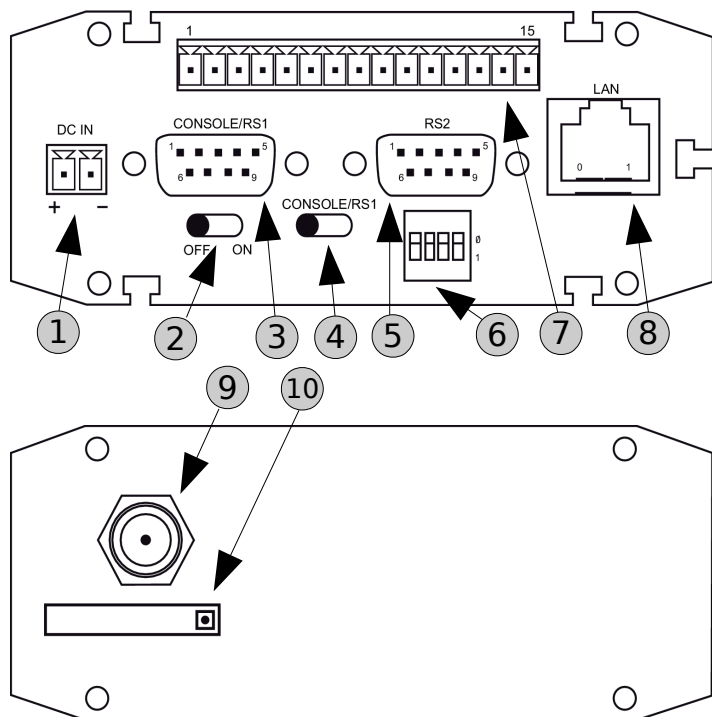
### User Documentation

Technical Manual and other documentation for RER601/603 are available at:  
<http://www.abb.com/substationautomation>

### Overview

This document is a short description of how to power up the Wireless Gateway RER601/603 product and how to get it operational. For further information consult the product Technical Manual.

### Physical connections and switches



Connector panel:

1. Power supply connector
2. Power switch
3. Console/application serial port (RS1)
4. Console/application port selection switch
5. Application serial port (RS2)
6. DIP switches (RS2 hardware settings)
7. I/O connector (only on RER603)
8. Ethernet connector

Antenna panel:

9. Antenna connector (FME)
10. SIM card slot

### Installing SIM card

**NOTE:** If you have PIN code querying enabled on your SIM card, do not install the card before setting the code. The SIM card could lock up if done otherwise. SIM card is not included.

1. Power off the RER601/603. It is recommended to turn power off while installing/removing the SIM card.
2. Push the yellow button in the SIM card slot to eject the SIM card tray.
3. Insert the SIM card to the tray and push the SIM card tray firmly and carefully back to its holder.

### Connecting the RER601/603 to an Ethernet network

There are two different ways to configure the network settings: via serial port or Web Browser interface. It is recommended to use the Web Browser to configure the network connection settings.

### Method 1: Setting IP Address Using Web Browser (Recommended)

1. Connect the cross-over Ethernet cable between the RER601/603 and your computer.
2. Configure your computer to use the same IP address space than the RER601/603 (laptop IP for example 10.10.10.11 with netmask 255.0.0.0). Check the connection to the RER601/603 with ping utility.
3. Connect to the RER601/603 using your web browser. The default IP address of the RER601/603 is 10.10.10.10 (netmask 255.0.0.0).
4. From the initial page click *Start configurator* and enter login information in the following page. Username is *root* and by default no password is set (just leave the field empty).
5. Navigate to *Network* page ① and from there to *Ethernet* subpage. ②
6. Enter the IP address and other network settings of your choice and click *Apply* ③ and then *Commit* ④ to store the settings.
7. Reboot the RER601/603 for the settings to take effect.

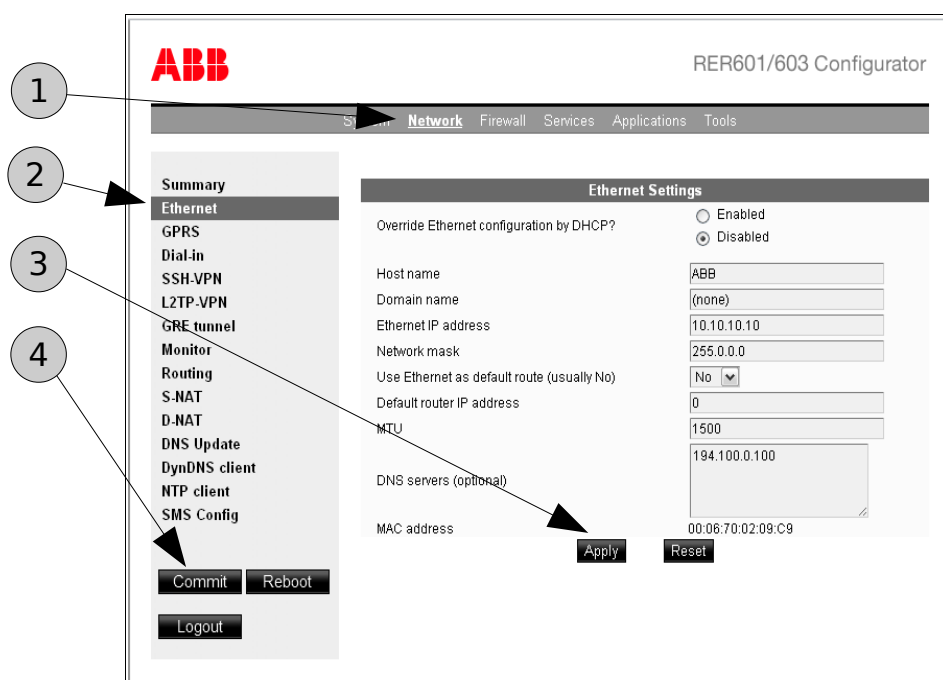


Figure 1. RER601/603 Configurator screen, Ethernet settings

**NOTE:** You can check the current network status from the Network-->Summary subpage.

### Method 2: Using serial console

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1. Switch off the RER601/603 if necessary
2. Connect a null modem serial cable to console serial connector (RS1)
3. Open a terminal connection to the RER601/603 using the following serial communication settings: 19200-8-N-1, no flow control.
4. Switch on the RER601/603 by turning the power switch to ON position
5. Wait for the text "Hit any key to stop autoboot" and press enter before the counter goes to zero. If you missed it, just reboot and try again.
6. You are now supposed to be on the PPCBoot console. Figure 2 shows how it looks like.
7. Now enter the following commands to the console, parameter fields substituted with your parameters (see figure 2 for example):
 

```
setenv ipaddr your_IP_address
setenv netmask your_netmask
setenv gatewayip 0 (By default, GPRS or SSH-VPN is defined as default Gateway)
```
8. Check that the configuration was entered properly by issuing command `printenv`.
9. If everything is correct, save the setting with command `savenv`.
10. Reboot the RER601/603 for the settings to take effect.

```
.
.
.
DRAM: 32 MB
FLASH: 8 MB
In: serial
Out: serial
Err: serial
Net: 00:06:70:01:02:23
Hit any key to stop autoboot: 0
abbrer> setenv ipaddr 192.168.0.50
abbrer> setenv netmask 255.255.0.0
abbrer> setenv gatewayip 0
abbrer> printenv
baudrate=19200
loadaddr=0x20000
...
ipaddr=192.168.0.50
netmask=255.255.0.0
gatewayip=0

Environment size: 407/4092 bytes
Disabling watchdog
abbrer> savenv
Saving Enviroment to EEPROM...
abbrer>
```

Figure 2. Network parameter configuration using serial console

### GPRS Network Settings

1. Login to the RER601/603 Configurator (for instructions, see page 2).
2. Navigate to *Network* page ① and from there navigate to *GPRS* subpage. ②
3. Set access point name appropriately (usually *INTERNET*). ③
4. Set GPRS network username and password ④ appropriately if your GPRS service requires authentication. Enable “Default Route” setting.
5. Optionally set the PIN code, PPP idle timeout and ICMP Echo settings (Network-->Monitor menu) to meet your requirements.
  - If your SIM card has PIN code set, type the code to the PIN code field.
  - PPP idle timeout defines the time in seconds how after the RER601/603 resets the GPRS connection if the connection is idle.
1. Finally click *Apply* and then *Commit* ⑤ to store the settings.
2. *Reboot* the RER601/603 for the settings to take effect.

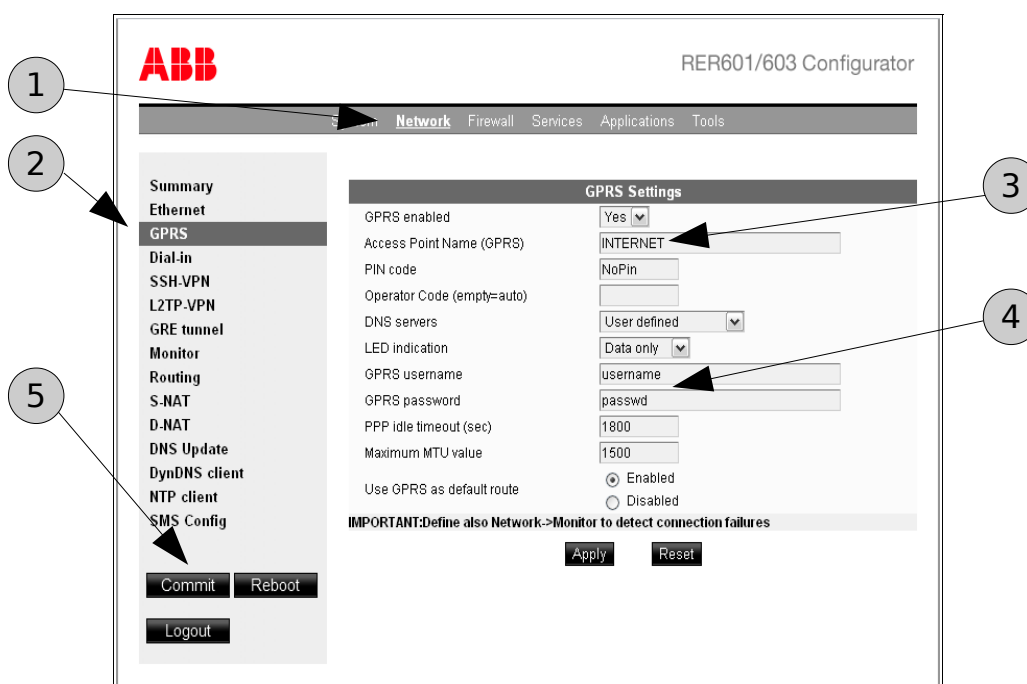


Figure 3: GPRS Network Settings

### Using the RER601/603 as Wireless Access Point

1. Set your Ethernet device to use the IP address of the RER601/603 as its default gateway.
2. Configure your Ethernet device to be in the same network as the RER601/603.
3. Check GPRS Settings. Note that “**Default Route**” needs to be enabled in GPRS settings.

### Final words

It is highly recommended that the product's Technical Manual be used as reference for optimal use of this device.