

# **SMM**

## **3G Modem**

### **Firmware Release Notes**

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**CYBERTEC**

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# Contents

<b>1</b>	<b>Introduction</b>	<b>5</b>
<b>2</b>	<b>Version</b>	<b>5</b>
<b>3</b>	<b>Applicability</b>	<b>5</b>
<b>4</b>	<b>Version 1.0.0.11 (16/11/2016)</b>	<b>6</b>
4.1	General . . . . .	6
4.2	New Features . . . . .	6
4.3	Enhancements . . . . .	6
4.4	Bug Fixes . . . . .	6
4.5	Known Issues . . . . .	6
<b>5</b>	<b>Version 1.0.0.10 (25/11/2015)</b>	<b>7</b>
5.1	General . . . . .	7
5.2	New Features . . . . .	7
5.3	Enhancements . . . . .	7
5.4	Bug Fixes . . . . .	7
5.5	Known Issues . . . . .	7
<b>6</b>	<b>Version 1.0.0.9 (22/10/2015)</b>	<b>8</b>
6.1	General . . . . .	8
6.2	New Features . . . . .	8
6.3	Enhancements . . . . .	8
6.4	Bug Fixes . . . . .	8
6.5	Known Issues . . . . .	8
<b>7</b>	<b>Version 1.0.0.8 (11/06/2015)</b>	<b>9</b>
7.1	General . . . . .	9
7.2	New Features . . . . .	9
7.3	Enhancements . . . . .	9
7.4	Bug Fixes . . . . .	9
7.5	Known Issues . . . . .	9
<b>8</b>	<b>Version 1.0.0.7 (26/11/2013)</b>	<b>10</b>
8.1	General . . . . .	10
8.2	New Features . . . . .	10
8.3	Enhancements . . . . .	10
8.4	Bug Fixes . . . . .	10
8.5	Known Issues . . . . .	10

<b>9</b>	<b>Version 1.0.0.6 (25/11/2013)</b>	<b>11</b>
9.1	General . . . . .	11
9.2	New Features . . . . .	11
9.3	Enhancements . . . . .	11
9.4	Bug Fixes . . . . .	11
9.5	Known Issues . . . . .	11
<b>10</b>	<b>Version 1.0.0.5 (15/11/2013)</b>	<b>12</b>
10.1	General . . . . .	12
10.2	New Features . . . . .	12
10.3	Enhancements . . . . .	12
10.4	Bug Fixes . . . . .	12
10.5	Known Issues . . . . .	12
<b>11</b>	<b>Version 1.0.0.4 (21/10/2013)</b>	<b>13</b>
11.1	General . . . . .	13
11.2	New Features . . . . .	13
11.3	Enhancements . . . . .	13
11.4	Bug Fixes . . . . .	13
11.5	Known Issues . . . . .	13
<b>12</b>	<b>Version 1.0.0.3 (02/09/2013)</b>	<b>14</b>
12.1	General . . . . .	14
12.2	New Features . . . . .	14
12.3	Enhancements . . . . .	14
12.4	Bug Fixes . . . . .	14
12.5	Known Issues . . . . .	14
<b>13</b>	<b>Version 1.0.0.2 (27/08/2013)</b>	<b>15</b>
13.1	General . . . . .	15
13.2	New Features . . . . .	15
13.3	Enhancements . . . . .	15
13.4	Bug Fixes . . . . .	15
13.5	Known Issues . . . . .	15
<b>14</b>	<b>Version 1.0.0.1 (15/08/2013)</b>	<b>16</b>
14.1	General . . . . .	16
14.2	New Features . . . . .	16
14.3	Enhancements . . . . .	16
14.4	Bug Fixes . . . . .	16
14.5	Known Issues . . . . .	16

<b>15 Version 1.0.0.0 (07/08/2013)</b>	<b>17</b>
15.1 General . . . . .	17
15.2 New Features . . . . .	17
15.3 Enhancements . . . . .	17
15.4 Bug Fixes . . . . .	17
15.5 Known Issues . . . . .	17
<b>16 Firmware Upgrade Procedure</b>	<b>18</b>
16.1 Connect to the Web interface . . . . .	18
16.2 System Backup and Upgrade . . . . .	19

## 1 Introduction

This document provides a summary of the firmware changes and details the firmware upgrade procedure for the Cybertec SMM Series 3G Modems.

## 2 Version

The latest version of the SMM firmware is: v1.0.0.11.

The firmware file for the current release is: SMM200-V1.0.0.11.upg

The downloaded file is a zip archive called SMM200-V1.0.0.11.zip, this archive contains :

- the upgrade file SMM200-V1.0.0.11.upg and
- the MD5 Checksum of the file SMM200-V1.0.0.11.upg.md5

## 3 Applicability

The firmware described in this document is applicable for the following models:

- SMM-200

The firmware upgrade will fail for any model not listed above.

## **4 Version 1.0.0.11 (16/11/2016)**

### **4.1 General**

- This is an enhancement release.

### **4.2 New Features**

- No new features.

### **4.3 Enhancements**

- Updated to Dynamic DNS to improve reliability.
- Improved upgrade procedure.
- Improved RADIUS user interaction.

### **4.4 Bug Fixes**

- No bug fixes.

### **4.5 Known Issues**

- No known issues.

## **5 Version 1.0.0.10 (25/11/2015)**

### **5.1 General**

- This is an enhancement release.

### **5.2 New Features**

- No new features.

### **5.3 Enhancements**

- Support for new Ethernet Phy Hardware.

### **5.4 Bug Fixes**

- No bug fixes.

### **5.5 Known Issues**

- No known issues.



## **6 Version 1.0.0.9 (22/10/2015)**

### **6.1 General**

- This is a bug fix release.

### **6.2 New Features**

- No new features.

### **6.3 Enhancements**

- No enhancements

### **6.4 Bug Fixes**

- Fixed issue with CHAP authentication.

### **6.5 Known Issues**

- No known issues.

## **7 Version 1.0.0.8 (11/06/2015)**

### **7.1 General**

- This is an enhancement release.

### **7.2 New Features**

- No new features.

### **7.3 Enhancements**

- Added support for new hardware devices.

### **7.4 Bug Fixes**

- No bug fixes

### **7.5 Known Issues**

- No known issues.

## **8 Version 1.0.0.7 (26/11/2013)**

### **8.1 General**

- This is an enhancement release.

### **8.2 New Features**

- No new features.

### **8.3 Enhancements**

- Guest user is now disabled by default.

### **8.4 Bug Fixes**

- No bug fixes.

### **8.5 Known Issues**

- No known issues.

## **9 Version 1.0.0.6 (25/11/2013)**

### **9.1 General**

- This is an enhancement and bug fix release.

### **9.2 New Features**

- No new features.

### **9.3 Enhancements**

- Improved handling of SMS
- Improved the power on procedure of wireless hardware.

### **9.4 Bug Fixes**

- Fixed web page typos.
- Fixed web page formatting
- Fixed issue with configuration reset.
- Fixed issue where by invalid DHCP static leases stopped DHCP functionality.

### **9.5 Known Issues**

- No known issues.

## **10 Version 1.0.0.5 (15/11/2013)**

### **10.1 General**

- This is a feature and enhancement fix release.

### **10.2 New Features**

- Connection management.

### **10.3 Enhancements**

- Improved hardware monitoring.
- Improved management of wireless hardware.
- Added support for revised hardware.

### **10.4 Bug Fixes**

- No bug fixes.

### **10.5 Known Issues**

- No known issues.

## **11 Version 1.0.0.4 (21/10/2013)**

### **11.1 General**

- This is a bug fix release.

### **11.2 New Features**

- No new features.

### **11.3 Enhancements**

- No enhancements

### **11.4 Bug Fixes**

- Web Interface
  - Fixed issue where password changes were not accepted.
- Logging
  - RSSI changes only logged. Previously SNR changes were logged generating significant noise in the log.
  - Time changes only logged when delta is greater than 5 seconds.

### **11.5 Known Issues**

- No known issues.

## **12 Version 1.0.0.3 (02/09/2013)**

### **12.1 General**

- This is a bug fix release.

### **12.2 New Features**

- No new features.

### **12.3 Enhancements**

- No Enhancements.

### **12.4 Bug Fixes**

- 3G Interface enabled by default.

### **12.5 Known Issues**

- No known issues.

## **13 Version 1.0.0.2 (27/08/2013)**

### **13.1 General**

- This firmware contains new features, enhancements and bug fixes.

### **13.2 New Features**

- Added support for DynDNS.
- Added support for Network time.

### **13.3 Enhancements**

- Report wireless SNR via AT+CSQ command.
- Wireless SNR reported in system log.
- Improved 3G connection time from boot.
- AT command AT+CCLK added.

### **13.4 Bug Fixes**

- Removed redundant information from Status / Wireless web page.

### **13.5 Known Issues**

- No known issues.



## **14 Version 1.0.0.1 (15/08/2013)**

### **14.1 General**

- This is a bug fix release.

### **14.2 New Features**

- No new features.

### **14.3 Enhancements**

- Simplified band selection page.

### **14.4 Bug Fixes**

- Fixed error where RSSI was incorrectly reported as -1.
- Improved 3G re-start messages.
- Improved responsiveness when SIM not ready error detected.
- AT Commands
  - Added support for AT+CBST

### **14.5 Known Issues**

- No known issues.

## **15 Version 1.0.0.0 (07/08/2013)**

### **15.1 General**

- Initial SMM firmware release.

### **15.2 New Features**

- No new features

### **15.3 Enhancements**

- No Enhancements

### **15.4 Bug Fixes**

- No bug fixes

### **15.5 Known Issues**

- No known issues.

## 16 Firmware Upgrade Procedure

The firmware upgrade procedure for the SMM 3G Modem is described. The same procedure can be used for all models in the product range.

### 16.1 Connect to the Web interface

- Connect to the Web interface of the modem either via the Ethernet interface or the wireless interface if web access is enabled.
- If connecting via the Ethernet interface:
  - Connect an Ethernet cable between the modem and the PC which will be used for the upgrade.
  - Open a web browser on the PC and enter the IP address of the LAN address of the modem. Note: The IP address of the modem may be configured differently for each installation. The default IP address is 10.10.10.10
- If connecting via the wireless interface:
  - Open a web browser on the PC and enter the IP address of the wireless interface.
- When prompted supply the user-name and password.
- The main status page should now be displayed.
- If the main page is not shown check:
  - If using the Ethernet interface:
    - The Ethernet cable is connected correctly to the modem and the PC.
    - The IP address of the modem is correct.
    - The Ethernet ports are enabled.
  - If using the wireless interface:
    - The wireless IP address is correct and is publicly accessible.
    - The firewall rules have been set to allow wireless web access.

## 16.2 System Backup and Upgrade

- Select System ▸ Backup & Upgrade. The System Backup & Upgrade page will be displayed as shown in Figure 1.

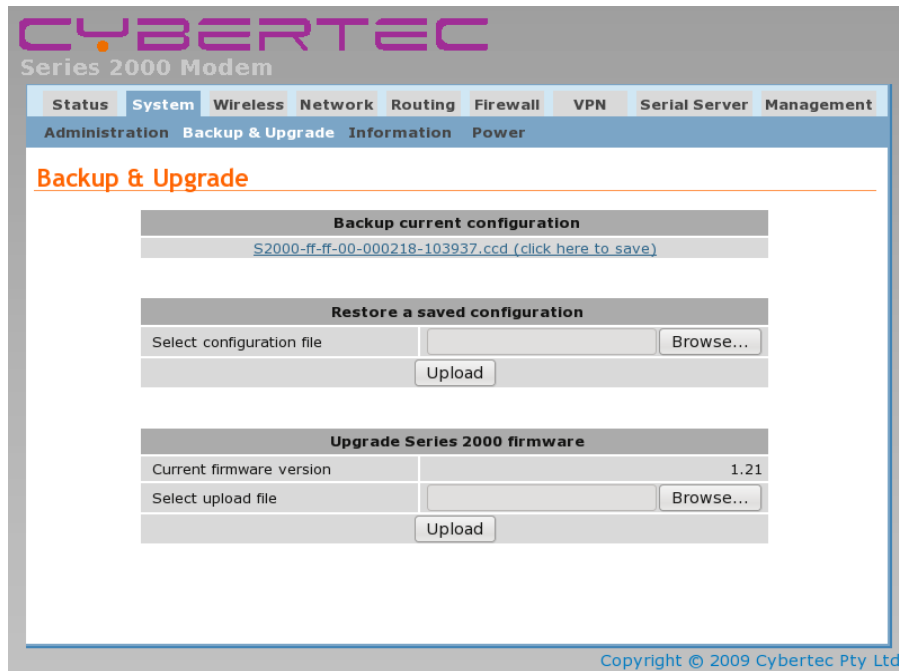


Figure 1: The System Backup & Upgrade page.

### 16.2.1 Backup Configuration

- It is recommended to save the current configuration file.
- The configuration of the modem is forward compatible. This means the configuration of the modem will still be correct after a firmware upgrade to a later version even though the format used to store the configuration may be changed.
- The configuration of the modem is not always backward compatible. This means that if the modem firmware is replaced with an earlier version the configuration file may not be readable by the earlier version of firmware and so the configuration will revert to the default settings. If the configuration file from the earlier version was saved prior to the upgrade then this configuration can be loaded into the modem to restore the previous settings after reverting to the earlier revision of firmware.
- To save the configuration click the link in the section titled “Backup current configuration” as shown in Figure 2 and save the file to the local machine.



Figure 2: System configuration backup.

- To restore a configuration click the Browse button in the section title “Restore a saved configuration” as shown in Figure 3 then click the Upload button.

Restore a saved configuration	
Select configuration file	<input type="text"/> Browse...
Upload	

Figure 3: System configuration restore.

### 16.2.2 Firmware Upgrade

- In the section titled “Upgrade SMM firmware” click the Browse button and navigate to and select the upgrade file appropriate for the modem being upgraded as shown in Figure 4. Refer to Section 2 on page 5 for the firmware file name and version number details.
- If the incorrect file is selected the upload will fail and report an error.

Upgrade Series 2000 firmware	
Current firmware version	1.21
Select upload file	<input type="text" value="00-images/S2000-v140.upg"/> Browse...
Upload	

Figure 4: Select the upgrade file.

- Click the Upload button. The file will now be transferred to the modem.
- When the upload is complete the Upgrade section of the page will change to be similar to that shown in Figure 5.

Upgrade Series 2000 firmware	
Status of uploaded file	Passed
Filename	series-2000-v140.img
Release	1.40
Build date	24/04/2010
Upgrade	Cancel Upgrade

Figure 5: File has been uploaded to the modem.

- Check that the information shown is correct.
- If the data is correct click the “Upgrade” button.



Once the Upgrade has started power must be maintained to the modem to prevent corruption of the Flash memory.

- The Upgrade section of the page will now show a message as shown in Figure 6.

Upgrade Series 2000 firmware
The Series 2000 is now starting the upgrade.
The upgrade will take several minutes to complete and the modem will be offline during this time.
The modem will reboot once the upgrade is complete.

Figure 6: The Upgrade page.

- During the upgrade:
  - the top two front panel LEDs will flash alternatively Red then Green.
  - the modem will disconnect from the wireless network.
  - the modem will not respond to any network traffic.
  - the modem will re-boot when the upgrade has completed
- When the Upgrade has completed and the modem has re-booted the new firmware version can be checked in the System Information page. Figure 7 is an example of the System Information page after the upgrade has completed. Note only the Application Version is shown.

Series 2000 Information	
Model	2000
Serial Number	XXXXXXXXXX
Application Version	1.40
Bootloader Version	1.00

Hardware Addresses	
LAN MAC	XXXXXXXXXX
Wireless IMEI	XXXXXXXXXX
Wireless IMSI	XXXXXXXXXX
Wireless Software Version	1.40

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Figure 7: The System Information page after the upgrade.

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