

Series 2000
2455X Rev 1 Modem / Router
Wireless Firmware

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Firmware Version: 16.19.A01.04

CYBERTEC

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Contents

1	Introduction	1
2	Version	1
3	Applicability	1
4	Firmware Upgrade Procedure	2
4.1	Connect to the Web interface	2
4.2	Model and Firmware Version Check	3
4.3	Wireless Firmware Upgrade	4

1 Introduction

This document provides details of the wireless firmware and the firmware upgrade procedure for the Cybertec Series 2000 Model 2455X Rev 1 Modem / Router.

2 Version

The latest version of the Model 2455X Rev 1 wireless firmware is: 16.19.A01.04

The firmware upgrade file for the current release is: S2455X-Rev1-MFW-1619A0104.zip

The zip file contains two files, the upgrade file, for example S2455X-Rev1-MFW-1619A0104.upg and the MD5 hash of the upgrade file.

The upgrade file is the file to be used to upgrade the unit.

3 Applicability

The wireless firmware described in this document is only applicable for the Model 2455X Rev 1.

The firmware upgrade will fail for any other model.

4 Firmware Upgrade Procedure

The wireless firmware upgrade procedure for the Series 2000 Model 2455X Rev1 Modem / Router is described.

The procedure is similar to the standard firmware upgrade procedure. The standard firmware upgrade procedure is described in the Series 2000 firmware release notes, this document is referenced in the procedure following.

4.1 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.

4.2 Model and Firmware Version Check

Select **System** > **Information**. The System Information page will be displayed and will appear as shown in Figure 1, Figure 2 or Figure 3.

System Information

Series 2455X Information	
Model	2455X
Hardware Revision	1
Serial Number	000000
Application Version	1.8.1.0
Bootloader Version	3.00
Hardware Addresses	
LAN MAC	00:00:00:00:00:00
Wireless IMEI	0000000000000000
SIM 1 IMSI	
Wireless Software Version	15.63_ENG5001

Figure 1: The System Information page with no wireless firmware warning indicated.

System Information

14:31:32 03/02/2021

Series 2455X Information	
Model	2455X
Hardware Revision	1
Serial Number	000000
Application Version	1.8.4.0
Bootloader Version	3.00
Hardware Addresses	
LAN MAC	00:00:00:00:00:00
Wireless IMEI	0000000000000000
SIM 1 IMSI	
Wireless Software Version	15.63_ENG5001_A01.00 New firmware version available

Figure 2: The System Information page with wireless firmware upgrade warning indicated.

System Information

14:55:55 03/02/2021

Series 2455X Information	
Model	2455X
Hardware Revision	1
Serial Number	000000
Application Version	1.8.4.0
Bootloader Version	3.00
Hardware Addresses	
LAN MAC	00:00:00:00:00:00
Wireless IMEI	0000000000000000
SIM 1 IMSI	
Wireless Software Version	16.19,A01.04

Figure 3: The System Information page with wireless firmware upgraded.

4.2.1 Model Check

The model should be listed as 2455X and the Hardware Revision listed as 1.

If the model and hardware are not listed as “2455X” and “1” then do not proceed as the wireless firmware is not applicable for the unit.

The System Information pages shown in Figures 1, 2 and 3 are for Model 2455X Hardware Revision 1.

4.2.2 Application Firmware Version

The application firmware version should be listed as 1.8.4.0 or higher.

If the firmware version is not at least 1.8.4.0 then a firmware upgrade is required before proceeding further. For information on upgrading the unit to the latest version refer to the Series 2000 Firmware Release Notes (Document 0013-001-000632).

The System Information page shown in Figure 1 indicates an application firmware version of 1.8.1.0 so a firmware upgrade will be required before performing the wireless firmware upgrade. Whereas the System Information page shown in Figures 2 and 3 indicate an application firmware version of 1.8.4.0 so no application firmware is required before proceeding.

4.2.3 Wireless Firmware Version

The wireless firmware version may already be at the latest version of 16.19.A01.04 in which no warning message will be listed under the wireless firmware version. If this is the case then the wireless firmware is up to date and no further action is required.

If a later wireless firmware is available the message “New firmware version available” will be displayed under the Wireless Software Version.

The System Information page shown in Figure 2 indicates a new wireless firmware version is available so the wireless upgrade procedure should be followed to upgrade the firmware. Whereas the System Information page shown in Figure 3 does not have a message associated with the wireless firmware which indicates the wireless firmware is up to date so no further action is required.

4.3 Wireless Firmware Upgrade

Navigate to the System > Backup & Upgrade. The System Backup & Upgrade page will be displayed. In the section “Upgrade Firmware” click the Browse button then browse to and select the wireless firmware upgrade file. Figure 4 shows the Backup & Upgrade page with the wireless firmware upgrade file selected.

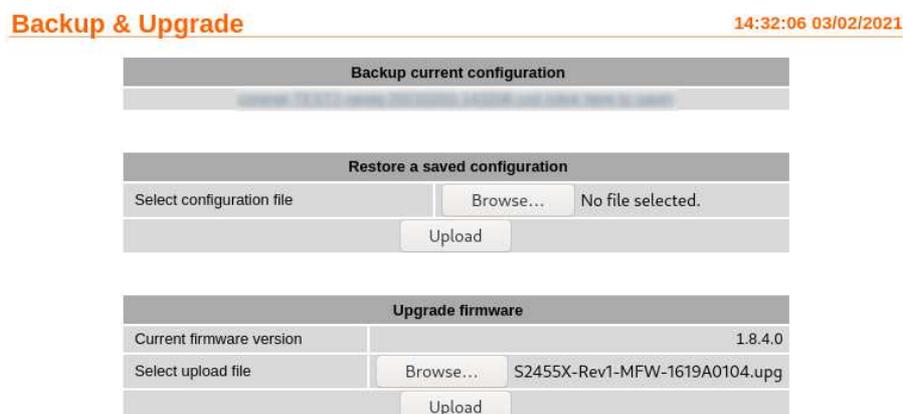


Figure 4: The System Backup & Upgrade page with the wireless firmware upgrade file loaded.

Click the Upload button to start the upload of the file. The file will be uploaded to the unit, when it is complete the page will appear like that shown in Figure 5

Backup & Upgrade 14:37:51 03/02/2021

Backup current configuration

Restore a saved configuration

Select configuration file No file selected.

Upgrade firmware

Status of uploaded file	Passed
Filename	S2455X-Rev1-MFW-1619A0104.img
Release	V1.8.4.0.B01186
Build date	01/02/2021

Figure 5: Wireless firmware upgrade file uploaded.

Click the Upgrade button to start the upgrade process. The page will change to that shown in Figure 6. Note the upgrade can be cancelled at this point by clicking the Cancel Upgrade button.

Backup & Upgrade 14:38:38 03/02/2021

Backup current configuration

Restore a saved configuration

Select configuration file No file selected.

Upgrade firmware

The upgrade is now starting.

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: Wireless firmware upgrade in progress.

The unit will now go off-line for a period of time and when it comes back it should automatically start doing the upgrade.



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

```
Feb 1 15:15:30 msp: Sending packet #: 4000
Feb 1 15:15:54 msp: Sending packet #: 5000
Feb 1 15:16:15 msp: Sending packet #: 6000
Feb 1 15:16:38 msp: Sending packet #: 7000
Feb 1 15:16:59 msp: Sending packet #: 8000
Feb 1 15:17:20 msp: Sending packet #: 9000
Feb 1 15:17:44 msp: Sending packet #: 10000
Feb 1 15:18:04 msp: Sending packet #: 11000
Feb 1 15:18:29 msp: Sending packet #: 12000
Feb 1 15:18:49 msp: Sending packet #: 13000
Feb 1 15:19:12 msp: Sending packet #: 14000
Feb 1 15:19:33 msp: Sending packet #: 15000
Feb 1 15:19:54 msp: Sending packet #: 16000
Feb 1 15:20:18 msp: Sending packet #: 17000
Feb 1 15:20:39 msp: Sending packet #: 18000
Feb 1 15:21:03 msp: Sending packet #: 19000
Feb 1 15:21:23 msp: Sending packet #: 20000
Feb 1 15:21:46 msp: Sending packet #: 21000
Feb 1 15:22:08 msp: Sending packet #: 22000
```

The RF hardware will now be re-started, then messages similar to the following will be seen in the log:

```
Feb 1 15:23:47 msp: Module Firmware Patch available
Feb 1 15:23:48 msp: Starting module firmware upgrade
Feb 1 15:24:15 msp: Sending packet #: 1000
```

The RF Hardware will again re-start.

The upgrade is now complete, the System Information page will now show the upgraded wireless firmware version and the upgrade message will no longer be shown.

System Information

14:55:55 03/02/2021

Series 2455X Information	
Model	2455X
Hardware Revision	1
Serial Number	
Application Version	1.8.4.0
Bootloader Version	3.00
Hardware Addresses	
LAN MAC	
Wireless IMEI	
SIM 1 IMSI	
Wireless Software Version	16.19,A01.04

Figure 9: The System Information page after the upgrade.

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