

Software Upgrade Procedure

Compack Controller



DISCLAIMER

Information in this document is believed to be accurate as of the date of publication and is subject to change without notice. This document and the information contained herein do not represent either a commitment or any guarantee on the part of *Eltek* regarding the reliability, fitness, or compatibility of the products and procedures described.

While every reasonable effort is made to ensure the accuracy and completeness of this document, *Eltek* assumes no responsibility or liability for any damages that may be directly or indirectly attributed to the use of the information contained within or to any errors or omissions.

No part of this document may be reproduced or transmitted in any form or by any means—electronic or mechanical, including photocopying and recording—for any purpose without the expressed consent of *Eltek*.

Copyright © 2014 - 2020 *Eltek, Inc.*



2925 E. Plano Parkway
Plano, TX 75074
USA

Phone: +1 (469) 330-9100
Fax: +1 (972) 424-0885

Technical Support
+1 (800) 435-4872
techsupport.us@deltaww.com

Doc. No. 370059.063, Issue 2, March 2020

Published 24 March 2020

Table of Contents

1. Introduction	4
Overview	4
Warnings	5
Additional Resources.....	5
2. Backing Up Your System Configuration	6
3. Upgrade Procedure for Compack Controller Using Eltek Network Utility	7
4. Upgrade Procedure for Compack Controller Using FTP	11
Verify Current Software Version	11
Transfer the File to Controller Using FTP	11
Appendix: Restoring a Configuration File.....	14

1. Introduction

This document describes the tasks required to upgrade the software of the Compact Control System in Eltek Power Systems. The procedures allow you to perform the upgrade on site or remotely.

The procedures describe the following upgrade methods:

- The free version of **Eltek Network Utility** (ENU), as a method to upgrade the Compact Controller only, when upgrading remotely. The ENU allows you to upgrade Compact controllers, one at a time.

Note: The licensed version of the ENU allows the upgrade of multiple controllers simultaneously.

- **FTP**, using a third-party FTP client, to transfer files to the Controller, in order to update the Compact. FTP is also used to make update(s) to CAN nodes.

Overview

A Compact may be the single controller in a system, or it may include additional nodes listed in Table 1. The table shows the list of file(s) that will be needed for upgrading a Controller.

Note: The software update files can be downloaded from the **Controller** section of the documents at **eltek.sharefile.com**.

Table 1 –Controllers and with Corresponding Software.

Controller- Node part number	Device name	SW part number	File name
242100.400	Compact	405002.009	405002.009_UPDATE_X.Y.Z_APP.s19* COMPACT.CRY* <small>*If updating from v. 2.6.2 or earlier, use the s19 file. If a secure update is required, use the encrypted .CRY file (requires 2.7.x or later).</small>

For additional documentation about the controller, refer to the “Additional Resources,” listed on page 5. Reference is made to these other documents within this procedure. If you do not have a copy of these documents handy, download them from **<https://eltek.sharefile.com>**.

Please be aware of the following recommendations:

- Make allowance for the necessary time for the upgrade process to be completed.

- Do not interrupt the upgrade process once it is initiated. Interrupting the process may cause adverse consequences to the system.
- Each controller is programmed individually.

Important Notes:

- ENU is a Windows-based utility. When using ENU for a remote update, download the current version from **<https://eltek.sharefile.com>**.
- The procedures in this document should not be used to downgrade the software in the controller. A software downgrade may cause incompatibility issues and or system damages; hence, Eltek does not recommend this practice, and shall not be held responsible for the loss of any data or system malfunction if the user chooses to do so.

Warnings

- The procedures described in this document are intended to upgrade an energized, live power system. Both AC and DC voltages as well as high currents are present.
- Eltek recommends upgrading the power system during programmed maintenance hours.
- Ensure that the power system is operating in normal conditions without active alarms.
- Observe all precautions and site rules to avoid contact with any voltage and current carrying conductor to prevent electrical shock.
- In the event unforeseen circumstances occur during the upgrade, Eltek is not responsible for the loss of any data.

Additional Resources

In addition to this upgrade document, you may also consult the *Configuration Guide: Eltek Controllers* (Document number 370013.063). Be sure to obtain this document before beginning upgrade procedures. Copies of Eltek documents can be downloaded from <https://eltek.sharefile.com>.

2. Backing Up Your System Configuration

System configuration is preserved through the software update, and controllers do not need to be reconfigured unless otherwise noted. Nevertheless, should a controller fail, a backup can be used to restore the previous state of the controller.

For instructions about how to create a backup of your system configuration, follow the procedure given in the chapter on “Configuration Backup,” in the *Configuration Guide: Eltek Controllers*, Doc. No. 370013.063.

IMPORTANT NOTE: The backup files are valid ONLY for the system and software version USED TO create THE BACKUP. Never use the backup on another system OR different software version.

3. Upgrade Procedure for Compack Controller Using Eltek Network Utility

The Eltek Network Utility (ENU) program allows local and remote upgrade of the Compack controller.

The free version of the ENU allows you to upgrade Compack controllers one at a time. The licensed version of the ENU allows the upgrade of multiple controllers simultaneously.

Note: If you are unable to use ENU, refer to “Upgrade Procedure for Compack Controller Using FTP,” on page 11

This chapter explains how to upgrade the Compack Controller ONLY, and requires the latest version of the ENU installed on your computer. The correct version of the upgrade software file, “**405002.009_UPDATE_X.Y.Z_APP.s19**”, must be available on the local hard drive, or on other media accessible by the computer. For secure updates, use **COMPACT.CRY** (updating from rev. 2.7.x or later).

Note: These instructions assume that your controller is already on a network. If your controller is not on a network, you must connect your computer directly to the controller’s Ethernet port.

Note: When using an s19 file for update, insecure updates must be enabled. To verify this setting, use the web browser interface; and go to **System Conf. > Device Settings > Network Settings > TCP/IP [Security]**. Confirm that **Allow insecure FW Update from ENU** is enabled (checked).

To upgrade a Compack Controller:

1. Open **Eltek Network Utility (ENU)**.
2. Choose the magnifying glass icon on the upper left corner of the window. The program will query for any Eltek controllers that are connected to the Local Area Network (LAN). The main window of the ENU will populate and list any controllers connected to the same network.



Figure 1 – ENU Main Window

- From the list of controllers on the window, highlight the Compact Controller to upgrade.

Note: Verify the existing software version (**SW** column) installed on the controller. If you already have the latest version, a software upgrade is not necessary.

- From the buttons along the bottom border, choose **SW upgrade**.

5. On the next window choose **Open file**. You will be prompted to locate the **.S19** upgrade file, or the **.CRY** file for encrypted upgrade (ver. 2.7.x or later).

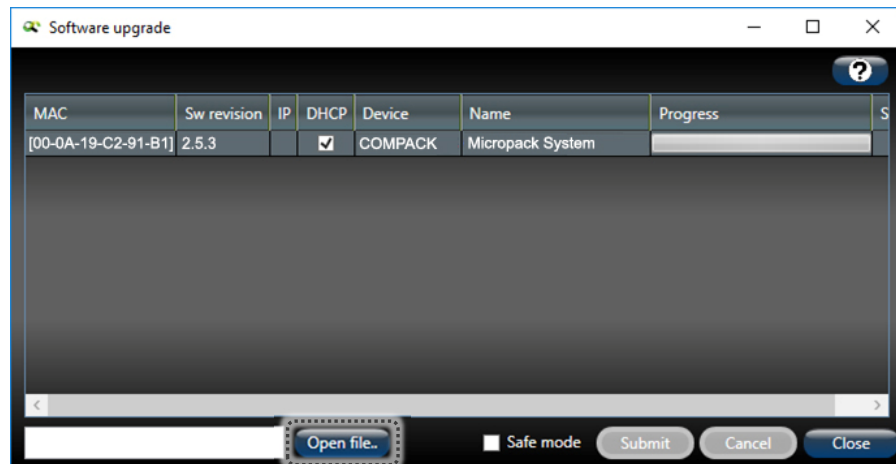


Figure 2 – ENU Open File

6. On the file browser window, highlight the correct file with the correct extension, for example **405002.009_UPDATE_X.Y.Z_APP.s19** and choose **Open**. The window will close.

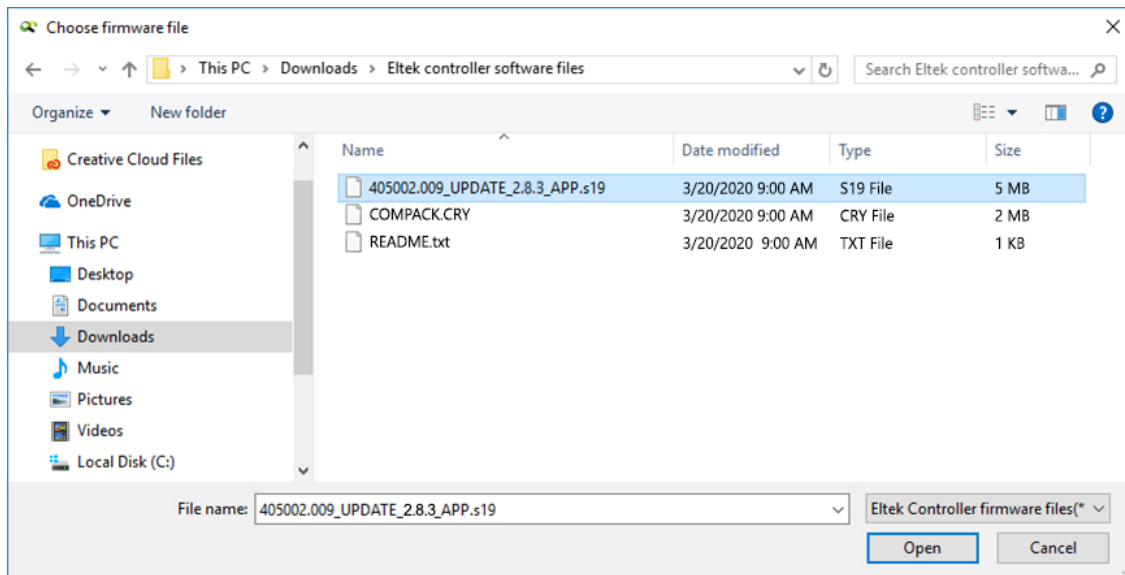


Figure 3 – Selecting the Update File

7. Returning to the **Software upgrade** window, click the **Submit** button.

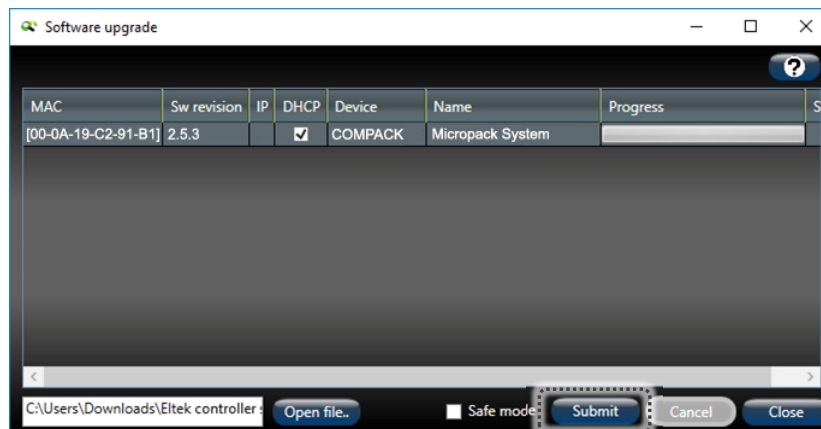


Figure 4 – ENU File Dialog Window

8. On the **Are you sure?** dialog box, click **Yes** to proceed with the upgrade. The software upload begins; you can see the status of the process on the **progress bar** that follows.

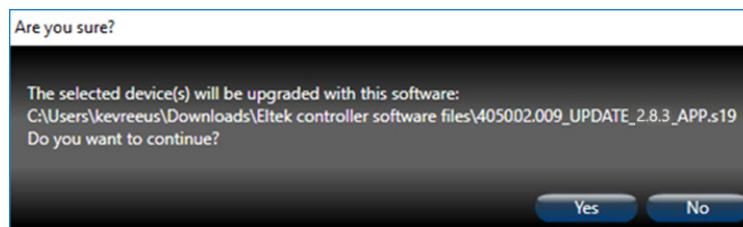


Figure 5 – ENU Confirmation Message

9. After the upload is complete, the controller performs an automatic reboot, and the message **Complete** will appear on the right end of the **progress bar**.

Note: There is a lag time between the ENU progress bar on the computer screen and the operation within controller. To verify that the upgrade is complete, log into the controller using the web browser interface; the software version is displayed on the home page.

10. **Close** the window. The upgrade of the Compact controller is complete.
11. Exit the **Eltek Network Utility** program.

This concludes the upgrade of the Compact Controller through the ENU program.

4. Upgrade Procedure for Compack Controller Using FTP

If you are unable to use ENU to update the Compack controller, and you already have software version 2.7.x or later, you can use FTP as an alternate method of performing the update. (For the ENU update procedure, see Chapter 3, on page 7.)

Note: When using FTP, verify whether FTPS is enabled or disabled. To verify FTP settings, use the web browser interface; and go to **System Conf. > Device Settings > Network Settings > TCP/IP [Security]**. If enabled, use port 990; if disabled, use port 21.

Note: If you are unfamiliar with the web browser interface, see the *Configuration Guide: Eltek Controllers*, Doc. No. 370013.063.

Verify Current Software Version

Before performing the software upgrade, verify the current software version of the controller, using the following steps.

1. Using the web browser interface, go to the home page, and verify the software version listed in the upper right corner of the browser window.



Figure 6 – Verifying Current Software Version

2. Compare the software version for your controller with the current version listed in the **README.txt** file included with the latest software update files.

Note: The **README.txt** file, as well as software update files, can be downloaded from the **Controller** section of the documents at **eltek.sharefile.com**.

3. Copy the **COMPACT.CRY** file to your computer, so that you can transfer it remotely to the controller using FTP.

Transfer the File to Controller Using FTP

In order to upgrade using FTP, you must have an FTP client application installed on your computer. The following example uses **Filezilla**, but other applications can be used to transfer FTP files.

To transfer the upgrade files using FTP:

1. Launch **Filezilla**, or other FTP application.
2. Locate the directory on your computer where the **COMPACK.CRY** upgrade file resides.

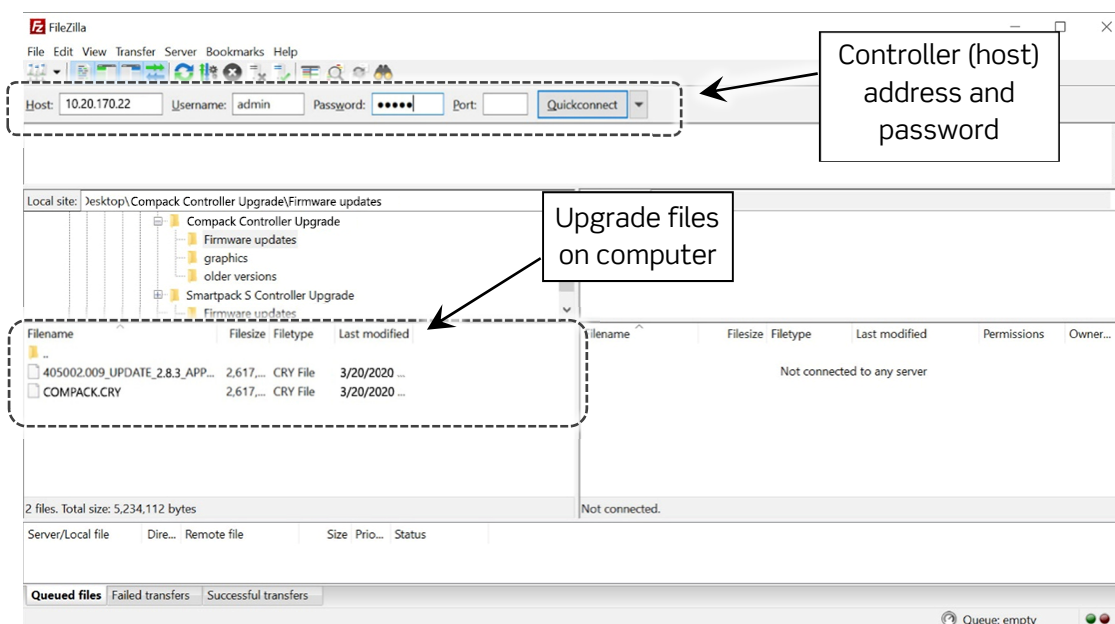


Figure 7 – Launching Filezilla

3. Enter the **Host** address, **Username**, and **Password** for the **Compack Controller (Host)** for your system, and log in using FTP.
4. Choose the **COMPACK.CRY** file on your computer to be transferred to the controller, then drag and drop it (or right-click and choose **Upload**), to copy it to the controller (see Figure 8).

Note: Copy the file to the root directory on the controller.

After the file is copied, the upgrade starts automatically. The entire process takes several minutes. During the update, the LEDs on the controller will turn off and the yellow LED indicators on the rectifiers activate. Once complete, the LEDs on the controller turn back on and the yellow LED on the rectifier will turn off.

Also, once the file has been copied, the FTP client indicates that it has been disconnected.

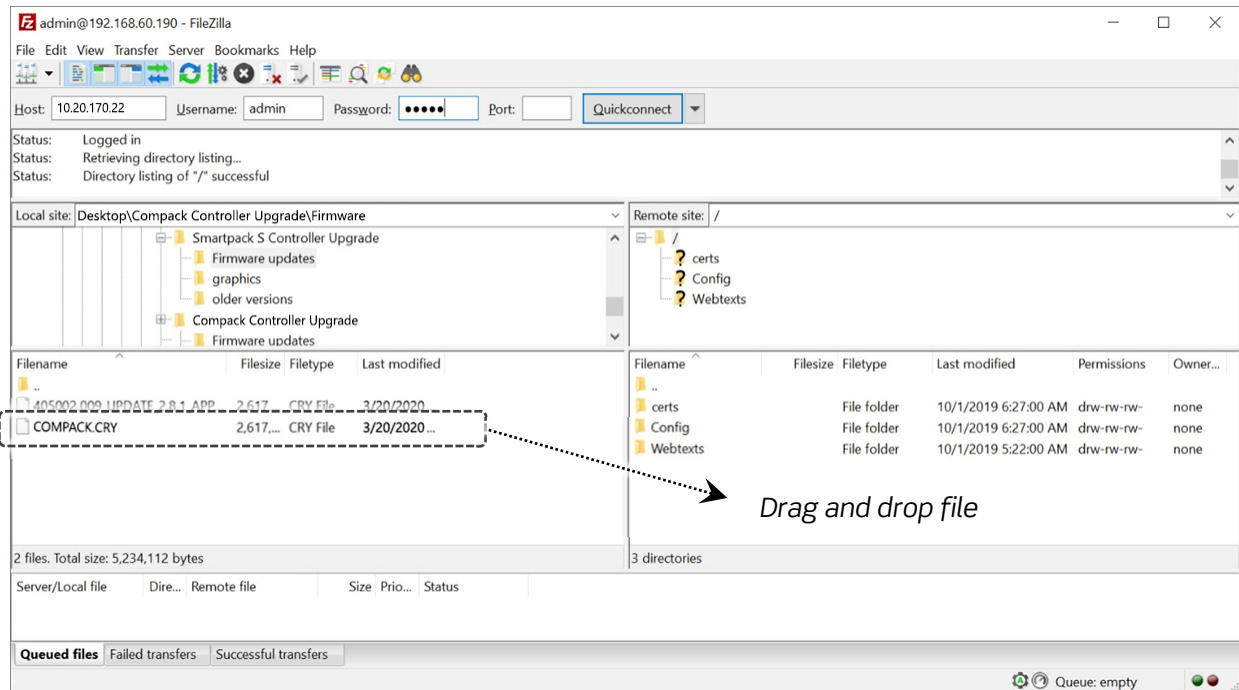


Figure 8 – Copying Upgrade File

5. Verify that update has been installed by returning to the web browser window and confirming that the new version is displayed in the upper right corner.



Figure 9 – Verifying Software Revision

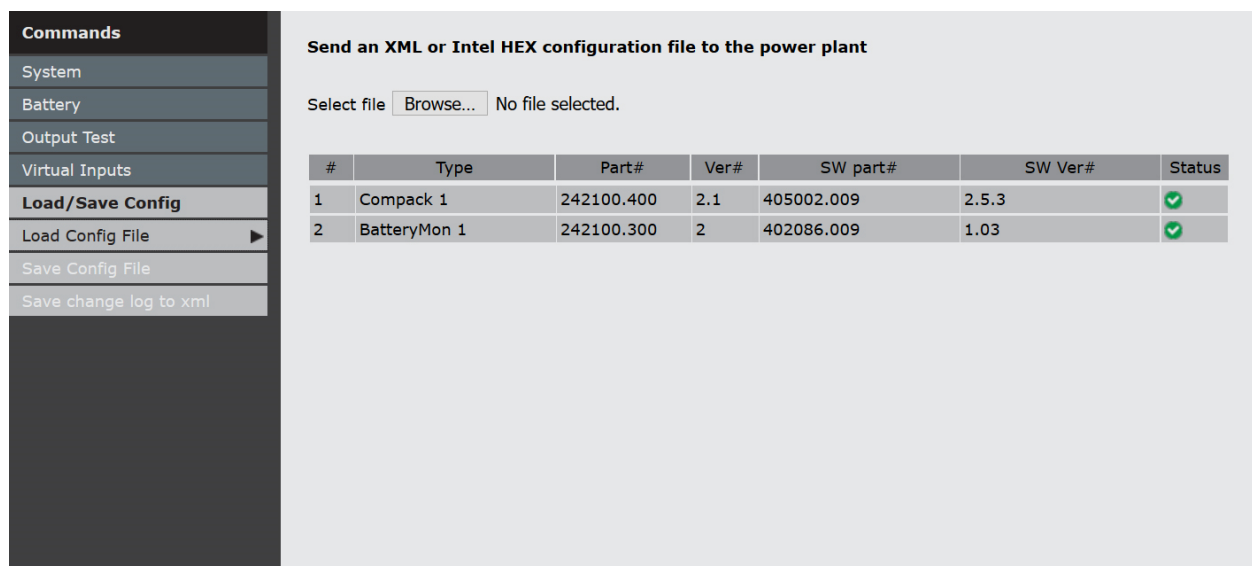
Appendix: Restoring a Configuration File

If a controller or CAN node fails during an upgrade, you can import to a replacement controller, the configuration file that you created in “Backing Up Your System Configuration,” on page 6.

IMPORTANT NOTE: The backup files are valid ONLY for the system and software version USED TO create THE BACKUP. If the replacement controller is a different version from the failed controller, contact Technical Support for assistance, before proceeding with the restoration procedure.

To import the configuration file using the web interface:

1. Launch **your** browser, and **Login** to the web interface.
2. From the home page, choose **Commands > Load/Save Config > Load Config File**.



Commands

- System
- Battery
- Output Test
- Virtual Inputs
- Load/Save Config**
- Load Config File
- Save Config File
- Save change log to xml

Send an XML or Intel HEX configuration file to the power plant

Select file No file selected.

#	Type	Part#	Ver#	SW part#	SW Ver#	Status
1	Compack 1	242100.400	2.1	405002.009	2.5.3	✓
2	BatteryMon 1	242100.300	2	402086.009	1.03	✓

Figure 10 – Load Config Page

3. Choose **Browse**, and follow the prompts to select your configuration file.

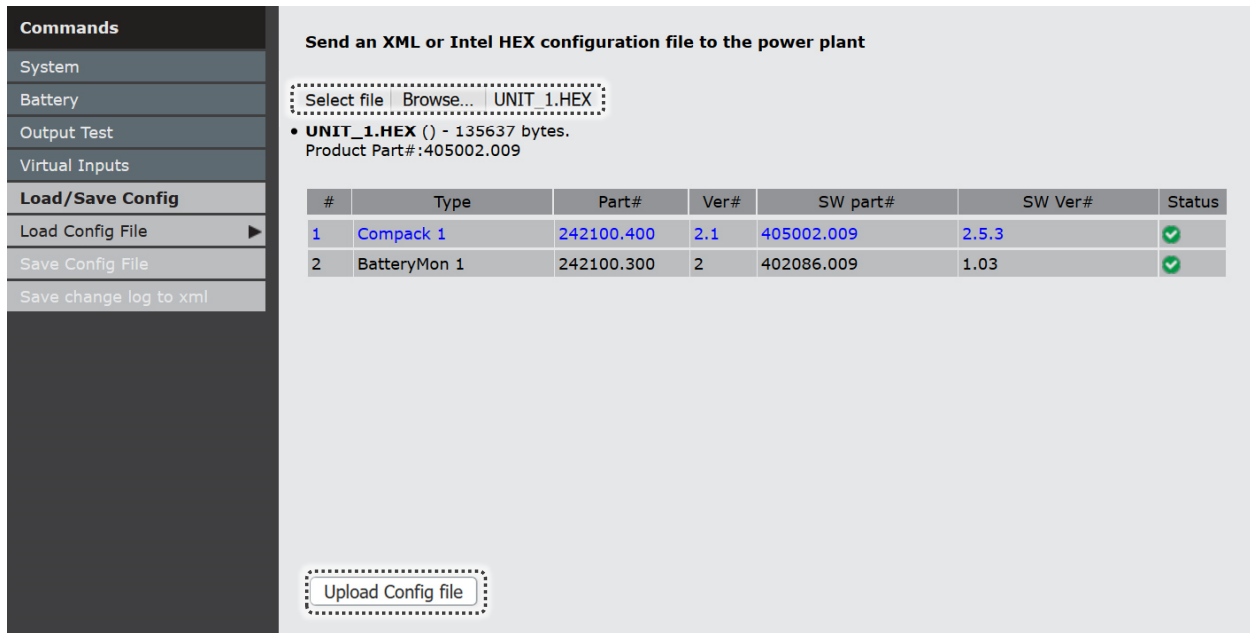


Figure 11 – Browse for Config File

4. In the web browser interface, click the **Upload Config file** button to begin uploading the configuration. A progress bar indicates the status of the process.
5. Return to applicable upgrade procedure.

This concludes the procedure to import a configuration file.

For assistance with technical questions and solutions, please contact Technical Support by email at techsupport.us@deltaww.com or by phone at 1-800-435-4872.



Ordering information: sales.us@deltaww.com, (469) 330-9100



www.eltek.com

US Office:
Eltek, Inc.
2925 E Plano Pkwy, Plano, TX 75074, USA
Phone: +1 (469) 330-9100 Fax: +1 (469) 330-9101

International:
Eltek AS
Gråterudv. 8, Pb 2340 Strømsø, 3003 Drammen, Norway
Phone: +47 32 20 32 00 Fax: +47 32 20 32 10