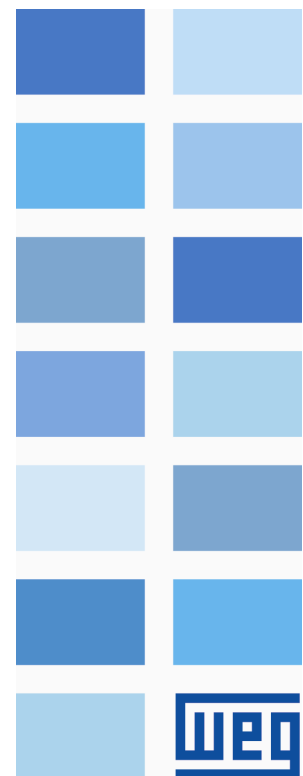


Firmware Update via WPS

CFW500

Technical Support Manual





Technical Support Manual

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SUMMARY OF REVISIONS

The information below describes the reviews made in this manual.

Revision	Description
R00	First edition.



The table below shows which firmware version of the device is available for updating via WPS.

Device	Device version	WPS version
CFW500	V3.50 or superior	2.60 or superior



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1 GENERAL INFORMATION

The purpose of this manual is to describe the procedures for updating the drive firmware and accessories (where applicable). This manual should be used in conjunction with the device manuals.

**DANGER!**

It is prohibited the reproduction of the contents of this manual, in whole or in part, without the written permission of the manufacturer.

1.1 TERMINOLOGY AND DEFINITIONS

1.1.1 Terms and Definitions Used

CO/DN/PB/ETH: Interface CANopen, DeviceNet, ProfibusDP or Ethernet.

HMI: human-machine interface; device which allows controlling the motor, viewing and changing the inverter parameters. It features keys to control the motor, navigation keys and graphic LCD display.

WPS: Programming Software “WEG Programming Suite”.

2 TOOLS

This chapter presents the materials used for the firmware update by the user.

2.1 SOFTWARE

2.1.1 WPS

It is necessary to have the WPS Programming Software (“ WEG Programming Suite ”) installed on your PC. This software is available for download on the website www.weg.net or through the link [downloadcenter/wps](#).

2.2 HARDWARE

The hardware interface required for the connection between the PC and the device to be updated (frequency inverter or accessory) depends on each device family.

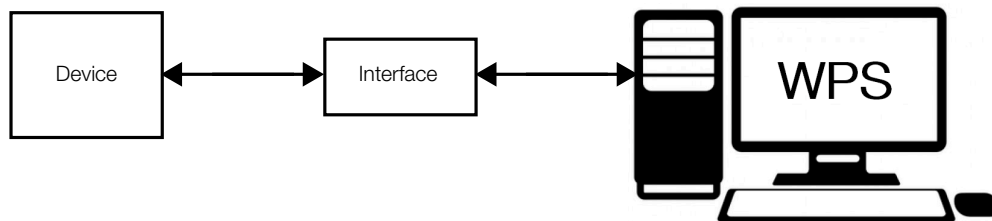


Figure 2.1: Interface between device and PC



WARNING!

It is recommended to keep the device turned off during setup (before making connections).

2.2.1 CFW500

The CFW500 frequency inverter could be updated by any plug-in, using the ModBus protocol and the serial interface 1, however a USB-RS485 interface converter is required. The inverter must be parameterized, and the connections made as shown in [Figure 2.2 on page 2-2](#).



NOTE!

For further details, see to the installation, configuration and operation guide of the corresponding expansion module, available for download on the website: www.weg.net.



WARNING!

Only turn-on the CFW500 inverter, after connecting the hardware interface elements.

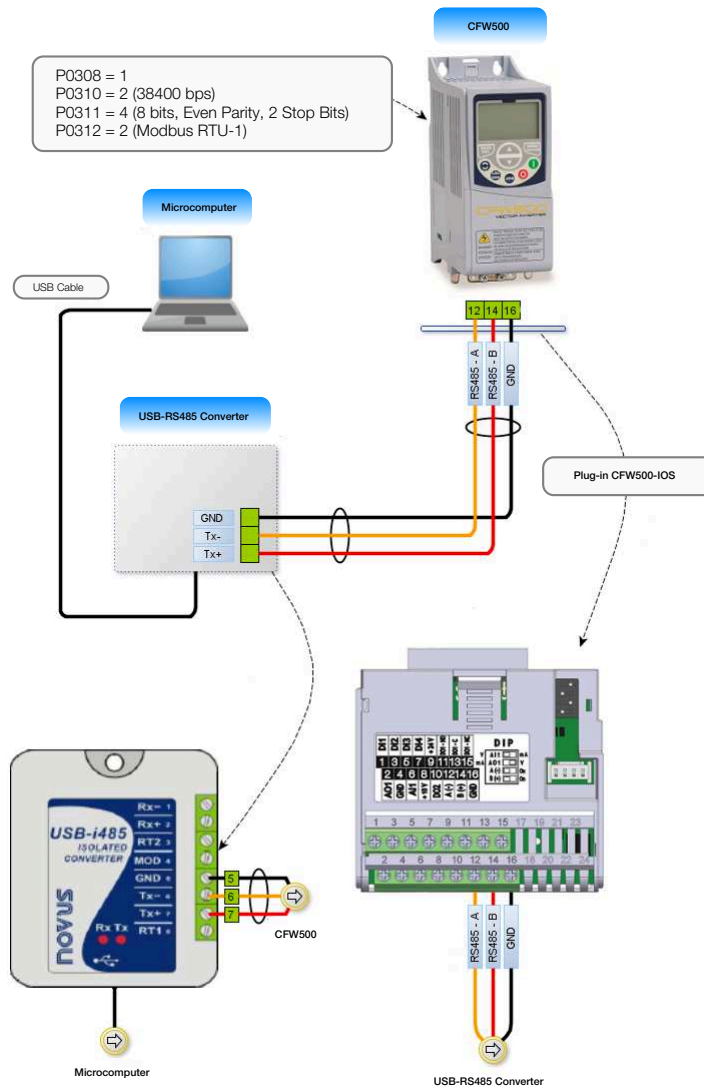


Figure 2.2: Interface available for CFW500

NOTE! The USB-RS485 converter does not necessarily have to be the model shown in the [Figure 2.2 on page 2-2](#). Any converter from any manufacturer can be used. However, it is recommended to use the USB-RS485 interface converter from Novus (item 11511558).

NOTE! If the remote HMI is connected to the product, it must be disconnected before realize the connection showed in [Figure 2.2 page 2-2](#)

3 PROCEDURE

This chapter presents the procedures for updating the firmware by the user. With the setup installed, according to [Figure 2.1 on page 2-1](#), and perform the procedures below.

3.1 SERIAL PORT CONFIGURATION

For the correct configuration of the serial port to be used in the communication, it is necessary to use the Windows Device Manager (indicates the serial port connected to the equipment). The computer name in the device manager is purposely unreadable. The [Figure 3.1](#) shows how to check the COM port used.

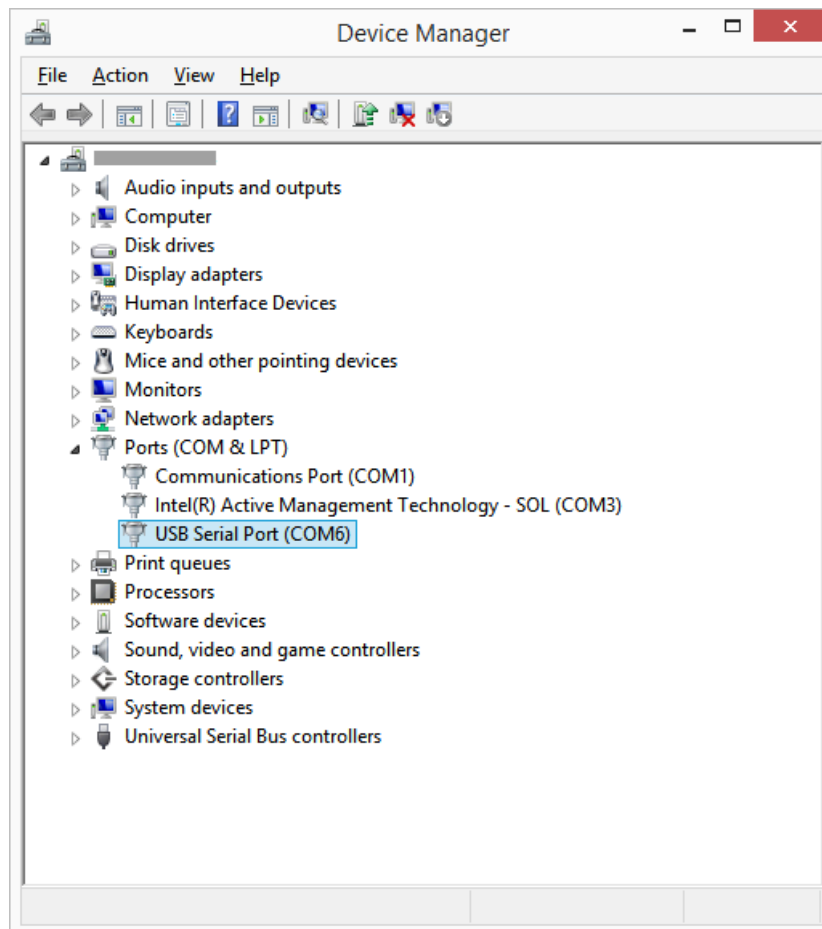


Figure 3.1: Device Manager (Windows)

3.2 SHORTCUT FOR FIRMWARE DOWNLOAD

The device firmware update from WPS can be accessed through the “Online” menu. Check [Figure 3.2](#) below:

NOTE!
Always verify the WPS updates, using the “Help’ menu.

NOTE!
It is not necessary to have a project or resource created for the device to be updated.

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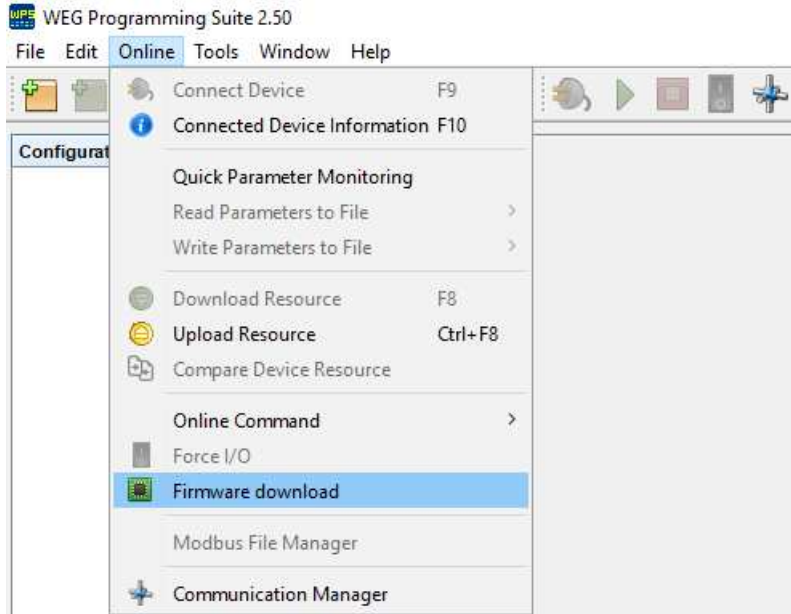
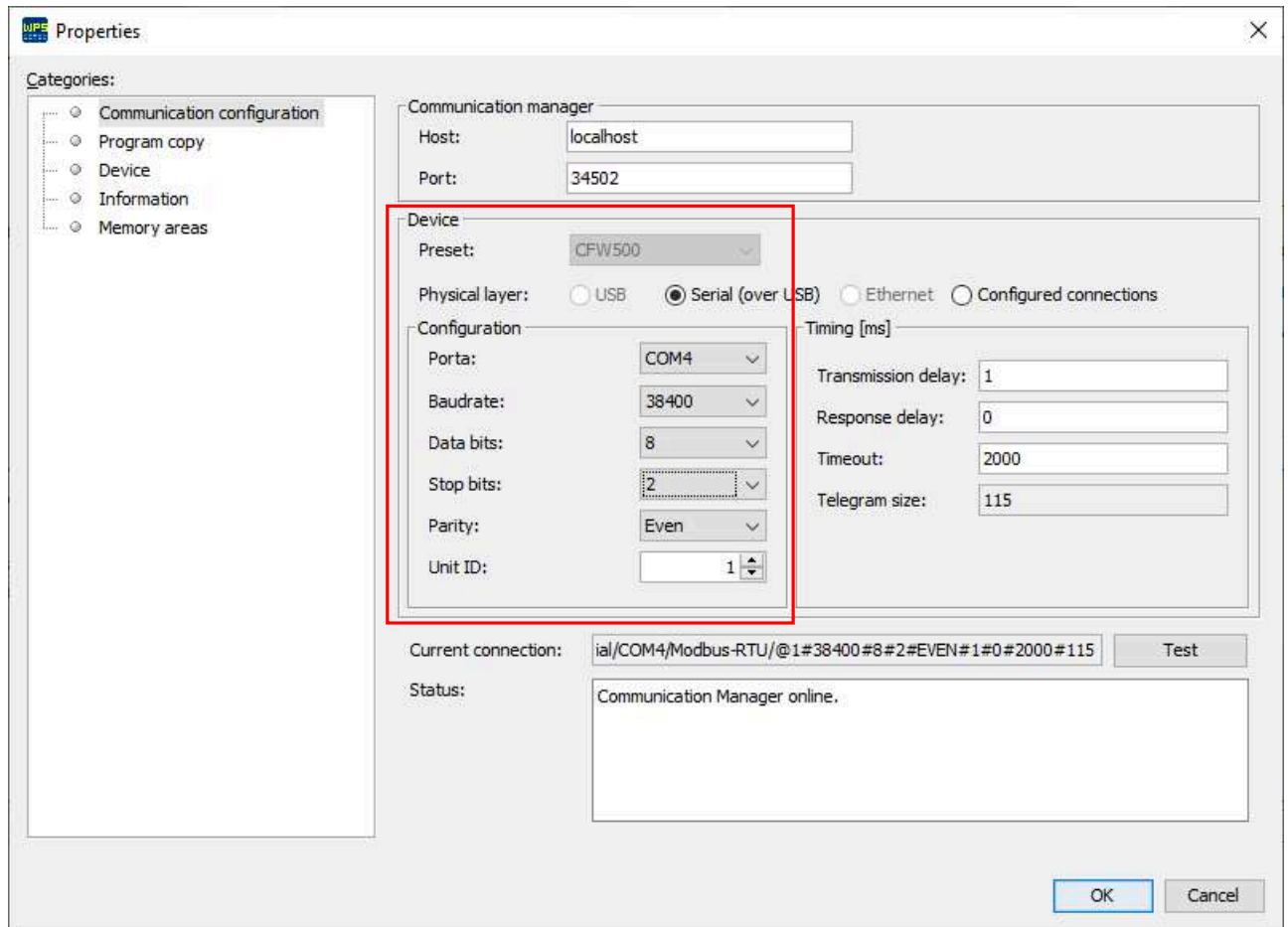


Figure 3.2: Shortcut "Online" -> "Firmware download"

3.3 COMUNICATION CONFIGURATION

Select the device to be updated. If you cannot find your device in the list, check if you already have the firmware update functionality via WPS through the [Compatibility Table on page 0-5](#).

The interface configuration setup shown in [Figure 2.2 on page 2-2](#) must be in accordance with parameters P0308, P0310, P0311 and P0312 adjusted on the device. Click on "Test" and after identification (Online device), click on "Next".



3

Figure 3.3: Serial Communication configuration



NOTE!

Never change the values of parameters P0308, P0310, P0311 and P0312 during a connection. Changing these parameters causes an instant communication loss between the PC and the equipment.



NOTE!

For more information on configuring the serial interface (parameters P0308, P0310, P0311 e P0312), refer to CFW500 Programming Manual, available on site: www.weg.net.

3.4 SELECTION OF FIRMWARE FILE

Select the firmware file with the desired version. Once selected, click on “Finish”.

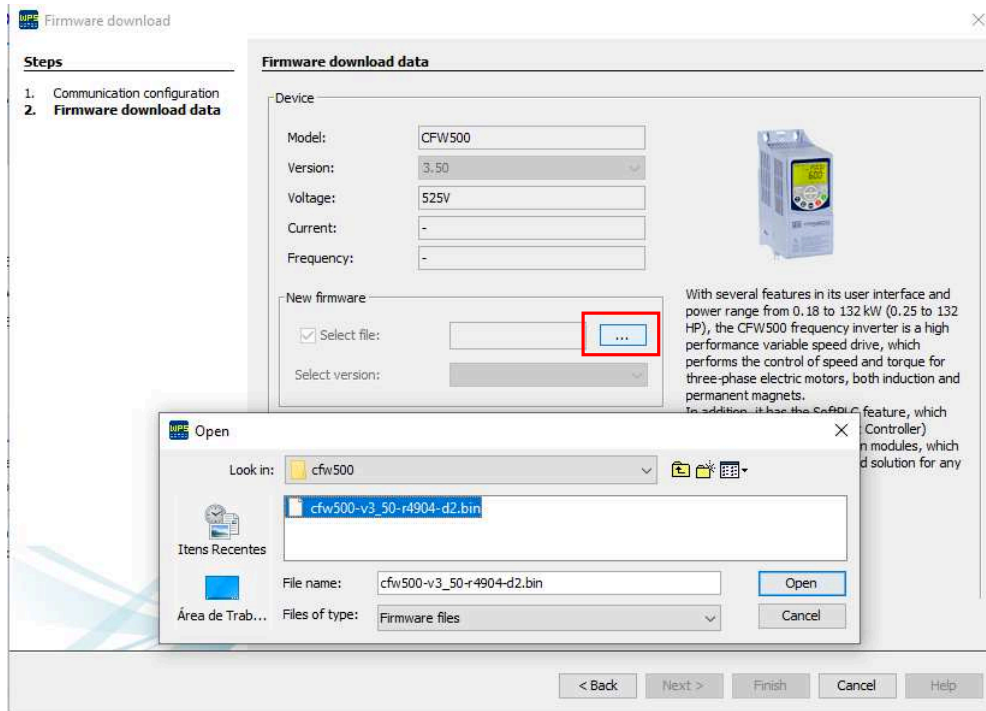


Figure 3.4: Select a firmware file



NOTE!

The firmware file (binary) for download must be obtained, in advance, from the supplier / technical assistance.



NOTE!

It is not necessary to know the values of the voltage and current fields of the device. It is recommended to keep the data preloaded.

3.5 FIRMWARE DOWNLOAD DATA



NOTE!

It is recommended before downloading the firmware:

- Check if the SoftPLC application is stopped (set P1001 = 0, if necessary);
- Make sure the device is not in operation (motor running).

The firmware download starts, wait for the process to complete, typically between 4 and 5 minutes. The informations are presented in the Output window and status bar as the figure below:

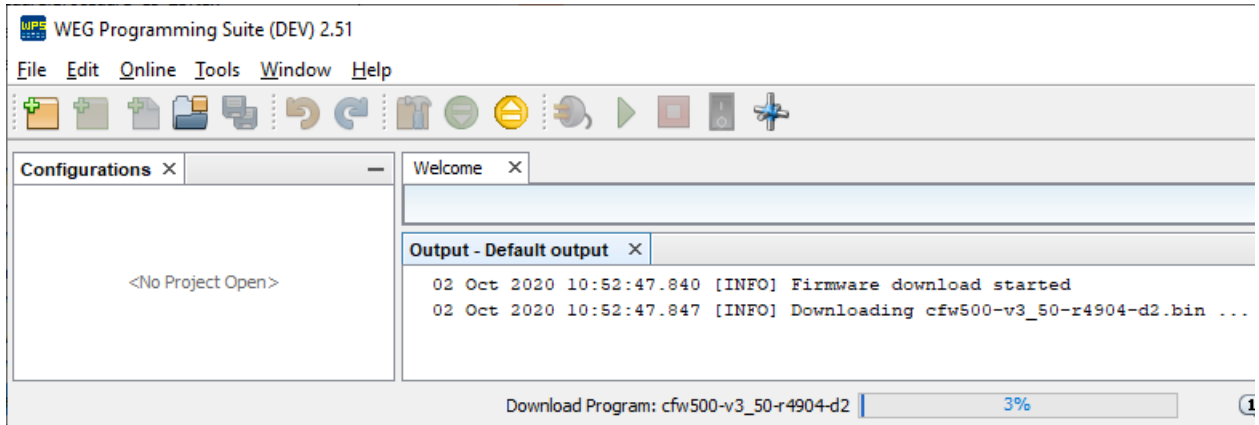


Figure 3.5: Firmware download started

NOTE! The firmware update process can also be followed by the product’s HMI.

NOTE! If a fault occurs during the firmware update process, the fault F0081 will be shown on the product’s HMI, and the update will be aborted.

After completing the download process, a message in the Output window is displayed and a device reset occurs.

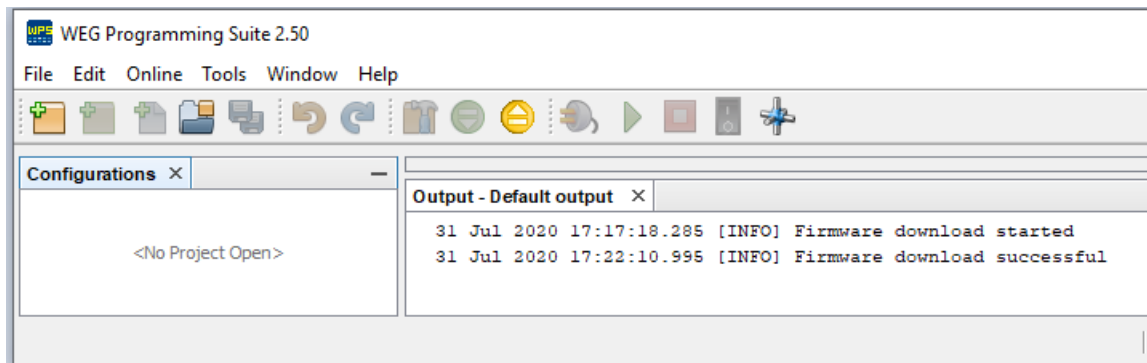


Figure 3.6: Firmware download successfully

NOTE! After completing the step indicated in [Figure 3.6 on page 3-5](#), it is recommended to check the corresponding parameter (P0023) to verify that the firmware version has been updated correctly.

NOTE! The firmware update process will not be completed if the binary file is incompatible or corrupted.



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