

# Firmware Update via WPS CFW500-CETH2

**Technical Support Manual** 



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## CFW500-CETH2

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The information below describes the reviews made in this manual.

Version	Revision	Description
-	R00	First Edition.

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

Device	Device version	WPS version
CFW500-CETH2	V1.01 or higher	V3.10 or higher

## **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

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.





#### 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.

#### 2.2.1 CFW500-CETH2

NOTE!



This configuration (interface) is used exclusively to update the CFW500-CETH2 accessory.

For updating the firmware of the CFW500-CETH2 communication device, it is necessary to use a CAT5 Ethernet cable. However, the CFW500-CETH2 device must be connected to a CFW500/CFW503/MW500 frequency inverter, which will exercise as the power source for the device. Such interconnections are shown in Figure 2.2 on page 2-2.



#### **ATTENTION!**

Only turn-on the CFW500/CFW503/MW500 frequency inverter after completing all connections.



Figure 2.2: Interface between accessory CFW500-CETH2 and PC.

#### **3 WPS PLUGINS**

The page containing information and settings for the WPS plugins can be accessed through the menu "Tools" according to Figura 3.1 below:

File Edit Online	Tools Window He	lp		
1 1 1	Import Special \	Version	) 🕨 🔲 👹 🌳	
	Plugins			
	Options			
12				

Figure 3.1: Shortcut "Tools" -> "Plugins".

To activate the previously installed CFW500-CETH2 plug-in, follow the instructions according to the Figure 3.2 below:

					<u>S</u> earch:
elect	Name	Category	Active		
	WPS Resource Project ElexSlot EXDialogs	Drives and Controls	0	~	WPS Resource Project CFW500-CETH2
H	WPS Resource Project CEW-07 Extension	Drives and Controls	õ		Extension
H	WPS Resource Project MVW3000 EXDialogs	Drives and Controls	õ		
H	WPS Resource Project LDW900 Extension	Drives and Controls	ě		Version: 3.1.8.0
П	WPS Resource Project CFW900 Extension	Drives and Controls	õ		Source: WEG Programming Suite 3.10
Π	WPS Resource Project CFW-11-M-G2 Extension	Drives and Controls	Ø		20 0.00
П	WPS Resource Project CFW500 FXDialogs	Drives and Controls	Ø		Plugin Description
Π	WPS Resource Project WCW2200 Extension	Drives and Controls	Ø		
Ē	WPS Resource Project PLC200 Extension	Drives and Controls	0		http://updates.weg.net/WPS/301/release notes.tx
Ē	WPS Resource Project MVW3000 Special	Drives and Controls	0		
$\Box$	WPS Resource Project CFW701 Special	Drives and Controls	0		
	WPS Resource Project SRW01-ETH FXDialogs	Drives and Controls	0		
	WPS Resource Project BIW610 Extension	Drives and Controls	0		
$\sim$	WPS Resource Project CFW500-CETH2 Extension	Drives and Controls	۲		
	WPS Resource Project CFW320 Application	Drives and Controls	0		
	WPS Resource Project SCA700 Extension	Drives and Controls	0	1	
	WPS Resource Project SIW750 Extension	Drives and Controls	0		
	WPS Resource Project WCW5000 Extension	Drives and Controls	0		
	WPS Resource Project SSW900-CETH-W Extension	Drives and Controls	0		
	WPS Resource Project CFW320-CETH Extension	Drives and Controls	۲		
	WPS Resource Project MVW01 Extension	Drives and Controls	Q	~	

Figure 3.2: Activating installed plugins.



#### NOTE!

It is recommended to check all available updates following the indications in Figure 3.3. Select all updates and click "Update".

Check <u>f</u> c	or Updates			Search:
odate	Name	Category	1	DS Recourse Design CEN/500 CETH2 Extension
$\checkmark$	WPS Resource Project CFW500-CETH2 Extension	Drives and Controls	~ ~	PS Resource Project CFW500-CETH2 Extension
	WPS Resource Project CFW320 Application WPS Resource Project SCA700 Extension WPS Resource Project W750 Extension WPS Resource Project WW500 Extension WPS Resource Project SSW900-CETH-W Extension WPS Resource Project MVW01 Extension WPS Resource Project CFW300 FXDialogs WPS Resource Project SCA04 Extension WPS Resource Project SW300 Extension WPS Resource Project WWE Extension WPS Resource Project SW900 Extension WPS Resource Project CFW300 Extension WPS Resource Project CFW300 Extension WPS Resource Project CFW300 Extension WPS Resource Project CFW301 FXDialogs WPS Resource Project CFW-11 Extension V5 WPS Resource Project CFW-11 Extension V6 WPS Resource Project CFW-11 Extension WPS Resource Project CFW-10 Extension WPS Resource Project CFW-08 Extension WPS Resource Project CFW-08 Extension WPS Resource Project CFW-300 FXDialogs WPS Resource Project CFW-300 FXDialogs WPS Resource Project CFW-300 Extension WPS Resource Project CFW-300 Extension	Drives and Controls Drives and Controls	V	talled version: 3.1.8.0 ailable version: 3.10.1.1 te: 5/6/24 urce: WPS Update Center agin Description p://updates.weg.net/WP5/301/release_notes.txt

Figure 3.3: Plugins update.



#### NOTE!

After updating the plugins, the WPS software will be restarted. If any plugins were previously enabled as shown in Figure 3.2, you will need to activate it again.

## **4 PROCEDURE**

NOTE!

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, open the WPS software and perform the procedures below.



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

#### 4.1 SHORTCUT FOR FIRMWARE DOWNLOAD

The device firmware update from WPS can be accessed through the "Online" menu. Check Figure 4.1 below:



Figure 4.1: Shortcut "Online" -> "Firmware download".

#### 4.2 COMMUNICATION CONFIGURATION

#### 4.2.1 Ethernet



This configuration (interface) is used exclusively to update the CFW500-CETH2 accessory.

To allow communication among the device and PC, they need to have an compatible IP address configuration. It means the IP address must be at the same range, according to netmask. To configure the IP address of PC on the Windows platform, go to "Network Connections", open "Properties" of the desired unit and use the settings below:

■ IP address: 192.168.0.2

NOTE!

Subnet mask: 255.255.255.0

📱 Local Area Connection Properties	Internet Protocol Version 4 (TCP/IP) 4) Properties
Networking	General
Connect using:          Intel(R) PR0/1000 MT Network Connection         Lonfigure         This connection uses the following items:	You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings. © Obtain an IP address automatically
<ul> <li>✓ ▲ Internet Protocol Version 6 (TCP/IPv6)</li> <li>✓ ▲ Internet Protocol Version 4 (TCP/IPv4)</li> <li>✓ ▲ Link-Layer Topology Discovery Mapper I/O Driver</li> <li>✓ ▲ Link-Layer Topology Discovery Responder</li> </ul>	IP address:         192 . 168 . 0 . 2           Subnet mask:         255 . 255 . 0           Default gateway:
Install     Uninstall     Properties      Description      Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.	Obtain DNS server address automatically     Obtain DNS server addresses:     Preferred DNS server:     Alternate DNS server:     Validate settions upon exit
OK Cancel	Advanced

Figure 4.2: PC IP Address Configuration.

The interface configuration setup indicated in the Figure 4.3 on page 4-3 must be in accordance with the parameters set on the device, where:

- IP address: "P0811.P0812.P0813.P0814"
- TCP port: "P0865"
- Unit ID: 254 (fixed value)



#### NOTE!

- These parameters allow you to program the IP address of the Ethernet interface and it is valid only if P0810 = 0 (Parameters).
- Subnet mask: P0815 = 24 (255.255.255.0).
- After changing this configuration, for the modification to be effective, the equipment must be turned off and then turned on again.

After performing the above procedures, click on "Test" and after identification (Online Device), click on "Next".

5	Communication confi	guration
Communication	Communication mar	lager
configuration	Host:	localhost
riniware download data	Port:	34502
	Device	
	Preset:	CFW500-CETH2 ~
	Diversed lawon	
	Friysical layer.	Juse Considered connections
	Configuration	
	IP address:	192.168.0.14 Transmission delay: 0
	TCP port:	502 🜩 Response delay: 0
	Unit ID:	254 Timeout: 5000
		Telegram size: 40
	Current connection	Ethernet/Modbus-TCP/192.168.0.14:502/@254#0#0#5000#40
	Status:	Communication Manager online.
		Device online. IWEG_CEW500-CETH2_V1.011
		A second decision of a version of a 1 2 2 2 2 2 2

Figure 4.3: Ethernet Communication configuration.



#### NOTE!

For more information on configuring the ethernet interface (parameters P0810 to P0815 and P0865), refer to the Ethernet user manual for the corresponding device, available on the website: www.weg.net.

#### 4.3 SELECTION OF FIRMWARE FILE



#### NOTE!

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

Select the firmware file with the desired version. Use the recommendations of the Figure 4.4 on page 4-4 to search for the firmware. Once selected, click on "Next".

eps	Firmware downlo	ad data		
Communication	Device			
configuration Firmware download data	Model:	CFW500-CETH2	NED.	
	Version:	1.01		
	- New firmware			
	🔘 Select a	version available on WPS	Hi wante	
			¥	
	1 OUpload a	a file from system directory	The CFW500-CETH2 Access	ory (CFW50x & MW500
	cfw500-	ceth2-v1_01-r7418-d5.bin	compatible)	
	Binary files			
	cfw500-ceth2-	v1_01-r7418-d5.bin - 2024/04/1	8 12:45:57	
		👐 Open		
			1 27/232 - 1727 S	
		Look in:	cfw500_ceth2_fw	🗾 🗖 🔄 🛄
		Cfw500-ce	th2-v1_01-r7418-d5.bin	
	<		5	
		File <u>n</u> ame:	cfw500-ceth2-v1_01-r7418-d5.bin	
		Files of type:	Firmware files	
				Open Cancel

Figure 4.4: Select a firmware file.

After confirming the data, click "Finish" to close the wizard and start the firmware download.

The firmware download starts, wait for the process to complete. The informations are presented in the "Output" window and status bar as the Figure 4.5 on page 4-4:

Web Programming Suite
<u>File Edit Online Tools Window H</u> elp
1 🔁 🛍 🏠 🔚 🦫 🖻 🥙 🛍 😁 😂 🕪 🕨 🔲 🐰 🍁
Welcome ×
Output - Default output x
06 May 2024 14:39:35.580 [INFO] Firmware download started
06 May 2024 14:39:35.581 [INFO] Downloading file (1/1) cfw500-ceth2-v1_01-r7418-d5.bin
Download Program: cfw500-ceth2-v1_01-r7418-d5 📕 8%

Figure 4.5: Firmware download started

After completing the download process, a message in the "Output" window is displayed and a device reset occurs. Depending on the device, it is necessary to configure the communication parameters to communicate with the WPS again.

wes WEG Programming Suite				
Eile Edit Online Tools Window Help				
1 🔁 🛍 🖀 🔚 🦉 1 🏟 🥥 🖉 1 🛍 \ominus \ominus 1 🌒 🕨 🔳 🐰 🧚				
Welcome x				
Output - Default output x				
06 May 2024 14:39:35.580 [INFO] Firmware download started				
06 May 2024 14:39:35.581 [INFO] Downloading file (1/1) cfw500-ceth2-v1_01-r7418-d5.bin				
06 May 2024 14:42:15.926 [INFO] Firmware download successful				

Figure 4.6: Firmware download successfully



#### NOTE!

- It is recommended before downloading the firmware:
- Confirm the data in the "Selection of firmware file" window;
- Check if the SoftPLC application is stopped (set P1001 = 0, if necessary);
- Make sure the device is not in operation (motor running).



#### NOTE!

After completing the step indicated in Figure 4.6 on page 4-5, it is recommended to check the corresponding parameter (P0023 or P0025) 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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