

LG CHEM STORAGE SYSTEM – SW UPDATE PROCESS DESCRIPTION

Update process for Fronius storage systems with LG Chem RESU7H / RESU10H battery

We would like inform you that it is imperative to ensure that both the LG Chem battery and the inverter have the most up-to-date software. In order to make this possible we will endeavor to provide as much support as we can. For the connection of the RESU7H / RESU10H battery a minimum Fronius firmware 1.9.1-x is required to be installed. Older inverters may require a two-step update.

We therefore ask you to register the relevant inverter on the Fronius Solar.web portal and to ensure a permanent internet connection. This allows us to perform necessary software updates as quickly as possible to keep system components up-to-date and automatically provide performance improvements.

Important recommendation:

Until 13th August 2018, the inverter update will be installed by the Fronius Technical Support Hotline. Depending on the connection, this can take up to 2 hours. Therefore, proceed in the following order:

- 1. Installation of the inverter (AC-side connection is sufficient for the update). After that:
- 2. Contact the Fronius Hotline for an update. And then:
- 3. Complete other installation work (for example, installation of external battery or PV modules)

An even more time efficient method:

If the relevant inverter is already registered on Solar.web, then the system can be updated by Fronius without having to visit on-site, even before installing the external battery. All you need to do is contact Fronius Technical Support and advise the Datalogger ID of the inverter to be updated.

If the relevant inverter is not yet registered on Solar.web, you will find the procedure description for the update on the following pages:

Commissioning before 13 August 2018: Page 2: Storage Upgrade (Inverter is already installed) Page 5: New installation

Commissioning after 13 August 2018: Page 8: Storage Upgrade (Inverter is already installed) Page 5: New Installation

Important: An internet connection to the inverter is mandatory.

/ Perfect Welding / Solar Energy / Perfect Charging



Commissioning system before 13th August 2018

Inverter is already installed (battery retrofit)

We recommend that you begin the firmware update before installing the battery because the update process can take up to two hours.

- 1) Set up internet connection to the inverter.
- 2) In the menu item "Settings \rightarrow Fronius Solar.web" please confirm of the following settings and click "save":

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This will ensure that the Datamanager is allowed to send data to Fronius Solar.web.

3) Add a system or register the inverter in the Fronius Solar.web portal.



LG Storage	Fronius	Current data
Firmware Update	✓ X	Current general view
Configuration C Automatic update search check now C allow automatic updates daily at 15 : 00		Services System information Network diagnostics Firmware update Start assistant
 Use proxy server for Web update Update Update via Web Update via LAN 		Contact Send feedback
Run update		🏟 Settings

5) Readout Datalogger ID (239.xxxx) and software version. These can be found as follows:

Firmware Update	Datalogger ID: Software version: Search for Firmware Update	239.1284 1.8.2-1	~	×	Current data Current general view
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6) If the software version lower than 1.7.2-5, please start the firmware update:



If the Software version is 1.7.2-5 or higher, no firmware update is necessary.

- 7) Contact Fronius Technical Support.
- 8) Notify them of Datalogger ID (239.xxxx)
- 9) The update is started by a Fronius employee and runs automatically. Meanwhile, make sure the power is not interrupted during the update process.
- 10) Install the LG Chem RESU7H or RESU10H battery according to the LG installation manual.
- 11) The DC wiring of the battery (connection to the wall bracket of the inverter) can be performed after the successful update.
- 12) The LG Chem RESU7H or RESU10H battery can now be configured and put into operation according to the manual "Fronius Symo Hybrid with external battery".



New Installation

We recommend starting with the installation of the inverter first during a new installation since the update process can take up to two hours.

- 1) Install the inverter according to the operating instructions.
- 2) Regardless of the DC cabling, the inverter can be commissioned with just the AC connected. Configuration and update can be done in advance to save time.
- 3) Start the commissioning of the inverter according to the manual "Fronius Symo Hybrid with external battery".
- 4) Commissioning has been successfully completed and the inverter has been configured (battery is not selected yet).
- 5) Set up internet connection to the inverter
- 6) In the menu item "Settings Fronius Solar.web" please make the following settings and click save:

LG Storage	0 ? X = 0 v en Franius	Current data
Settings		Current general view
GENERAL PASSWORDS NETWORK FRONIUS SOLÂR WEB	Fronius Solar.web	Services System information Network diagnostics Firmware update Start assistant
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MODBUS ENERGY MANAGEMENT SYSTEM OVERVIEW METER	Send current data to Fronius Solar.web ◎ No ● Yes Send archive data to Fronius Solar.web ◎ never ◎ daily ● hourly	O Settings
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	register at Solar.web	

This will ensure that the data manager is allowed to send data to Fronius Solar.web.

7) Register or register the inverter in the Fronius Solar.web.



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9) Readout Datalogger ID (239.xxxx) und Software version. This can be found as follows:

irmware Update	Datalogger ID: Software version: Search for Firmware Update	239.1284 1.8.2-1	 Image: A start of the start of	Current da Current gen	
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Update				Send feedba	ack
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10) If the software version is lower than 1.7.2-5, please start the firmware update:

LG Storage	Froi	nius	Current data
Firmware Update	\checkmark	×	Current general view
Configuration			Services System information Network diagnostics Firmware update Start assistant
Use proxy server for Web update			Contact Send feedback
 Update via Web Update via LAN Run update 			🔅 Settings

No firmware update is necessary if the software version is greater than or equal to 1.7.2-5

- 11) Contact Fronius Technical Support.
- 12) Notify them of Datalogger ID (239.xxxx)
- 13) The update is started by a Fronius employee and runs automatically. Meanwhile, make sure the power is not interrupted during the update process.
- 14) Install the LG Chem RESU7H or RESU10H battery and the Fronius Checkbox 500V accourding to the installation manuals.
- 15) The DC wiring of the battery between battery, Checkbox and inverter can be performed after the successful update.
- 16) The LG Chem RESU7H or RESU10H battery can now be configured and put into operation according tot he manual "Fronius Symo Hybrid with external battery".



Commissioning system after 13th August 2018

Inverter is already installed (battery retrofit)

We recommend that you begin the firmware update before installing the battery because the update process can take up to two hours.

- 1) Set up internet connection at the inverter
- 2) In the menu item "Settings Fronius Solar.web" please make the following settings and click save:

LG Storage	0 ? X @ 0 N en Franius	
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	Fronius Solar.web	Services
PASSWORDS	✓ ×	System information Network diagnostics
NETWORK		Firmware update
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PRONIOS SOLAR.WEB	Query cycle inverter 5 Minutes	
IO MAPPING	delete logged data	
LOAD MANAGEMENT	Send the service messages to Fronius Solar.web immediately	Contact Send feedback
	O No 🖲 Yes	Cond Roublance
PUSH SERVICE	Note: Due to the activation of this setting, service messages will be send to Fronius Solar.web immediately.	
MODBUS	If you have a limited data connection this can lead to additional costs.	Settings
ENERGY MANAGEMENT	Send current data to Fronius Solar.web	
	O No 🖲 Yes	
SYSTEM OVERVIEW	Send archive data to Fronius Solar.web	
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BATTERY	₽ 08:00 ₽ 09:00 ₽ 10:00 ₽ 11:00 ₽ 12:00 ₽ 13:00 ₽ 14:00 ₽ 15:00	
-	₽ 16:00 ₽ 17:00 ₽ 18:00 ₽ 19:00 ₽ 20:00 ₽ 21:00 ₽ 22:00 ₽ 23:00	
	register at Solar.web	

This will ensure that the Datamanager is allowed to send data to Fronius Solar.web.

3) Add a system or register the inverter in the Fronius Solar.web portal.



LG Storage	Fronius	Current data
Firmware Update	✓ X	Current general view
Configuration C Automatic update search check now C allow automatic updates daily at 15 : 00		Services System information Network diagnostics Firmware update Start assistant
 Use proxy server for Web update Update Update via Web Update via LAN 		Contact Send feedback
Run update		🏟 Settings

5) Readout Datalogger ID (239.xxxx) and software version. These can be found as follows:



- 6) The update will run automatically. Meanwhile, please ensure AC power is not interrupted during the update.
- 7) Install the LG Chem RESU7H or RESU10H battery according to the LG installation manual.
- 8) The DC wiring of the battery (connection to the wall bracket of the inverter) can be performed after the successful update.
- 9) The LG Chem RESU7H or RESU10H memory can now be configured and put into operation according to the manual "Fronius Symo Hybrid with external battery".



New installation

We recommend starting with the installation of the inverter during a new installation since the update process can take up to two hours.

- 1) Install the inverter according to the operating instructions.
- 2) Regardless of the DC cabling, the inverter can already be commissioned on the AC side. Configuration and update can be done in advance to save time.
- 3) Start the commissioning of the inverter according to the manual "Fronius Symo Hybrid with external battery".
- 4) Commissioning has been successfully completed and the inverter has been configured (battery is not selected yet).
- 5) Set up internet connection at the inverter
- 6) In the menu item "Settings Fronius Solar.web" please make the following settings and click save:

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Settings		Current data
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NETWORK	Datalogging settings	Firmware update
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IO MAPPING	delete logged data	Contact
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PUSH SERVICE	Note: Due to the activation of this setting, service messages will be send to Fronius Solar.web immediately. If you have a limited data connection this can lead to additional costs.	
MODBUS	If you have a limited data connection this can lead to additional costs.	🔅 Settings
ENERGY MANAGEMENT	Send current data to Fronius Solar.web	
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SYSTEM OVERVIEW	Send archive data to Fronius Solar.web	
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	register at Solar.web	

This will ensure that the Datamanager is allowed to send data to Fronius Solar.web.

7) Add a system or register the inverter in the Fronius Solar.web portal.



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Configuration C Automatic update search check now C allow automatic updates daily at 15 : 00				Services System information Network diagnostics Firmware update Start assistant
Use proxy server for Web update				Contact Send feedback
 Update via Web Update via LAN Run update 				Settings

5) Readout Datalogger ID (239.xxxx) and software version. These can be found as follows:



- 6) The update will run automatically. Meanwhile, please ensure AC power is not interrupted during the update.
- 7) Install the LG Chem RESU7H or RESU10H battery according to the LG installation manual.
- 8) The DC wiring of the battery (connection to the wall bracket of the inverter) can be performed after the successful update.
- The LG Chem RESU7H or RESU10H memory can now be configured and put into operation according to the manual "Fronius Symo Hybrid with external battery".