



## Fronius Checkbox 500V

- DE** Installationsanleitung  
Anlagenüberwachung
- EN** Installations instructions  
System monitoring



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# General

## Fronius Check-box 500V

The Fronius Checkbox 500V connects the Fronius Symo Hybrid to an external battery. The inverter and battery must never be directly connected to each other, as an error could lead to surges that place the system in an unsafe state.

There are separate Installation Instructions for the battery and the Fronius Symo Hybrid. This document is concerned only with the specifics of establishing a connection to the Fronius Checkbox 500V. The remaining steps for installing the equipment can be found in the respective Installation Instructions. All Fronius documents are available at the following address: [www.fronius.com/energy-package-manuals](http://www.fronius.com/energy-package-manuals)

## Fronius Check-box 500V technical data

Environmental conditions		
Degree of protection	IP65	
Permissible ambient temperature	-25 °C - +60 °C	
Maximum altitude	2000 m	
Permitted humidity	0 - 100% (non-condensing)	
Electrical specifications		
Maximum input voltage		
Inverter side	Udc max in_INV	1000 V
Battery side	Udc max out_BAT	500 V
Maximum current	Idc max in / max out	16 A
Self-consumption	@ 450 V	1.9 W
Dimensions and weight		
Dimensions h x w x d (without packaging)	26 x 19 x 7.5 cm	
Weight (without packaging)	1.4 kg	
Dimensions h x w x d (with packaging)	36 x 30 x 13 cm	
Weight (with packaging)	1.9 kg	
Standards and directives		
Applicable standards and directives	LVD (2014/53/EU), IEC 62109-1	

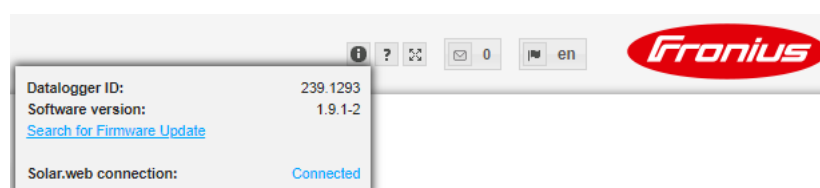
## Fronius Check-box 500V status LED



When the status LED lights up green, an electrical connection has been established between the inverter and the battery.

## Software version of the Fronius system monitoring

In order for the external battery to be supported, a software version of at least 1.9.x-x is required. Instructions for updating can be found at [www.fronius.com](http://www.fronius.com). The current version of the system monitoring can be seen via the info symbol:



# Installing the Fronius Checkbox

## Safety

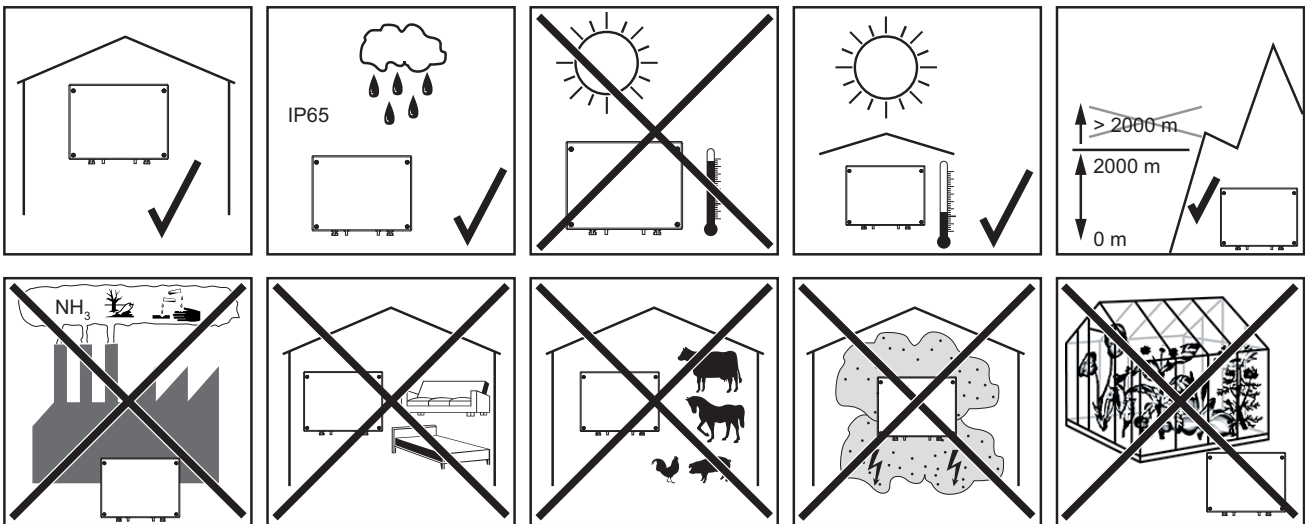


**WARNING!** Operating the equipment incorrectly or poor workmanship can cause serious injury or damage. Commissioning of the hybrid system may only be carried out by trained personnel in accordance with the technical regulations. Read the Installation Instructions and the Operating Instructions of the Fronius Symo Hybrid and the battery before carrying out any installation or commissioning work.

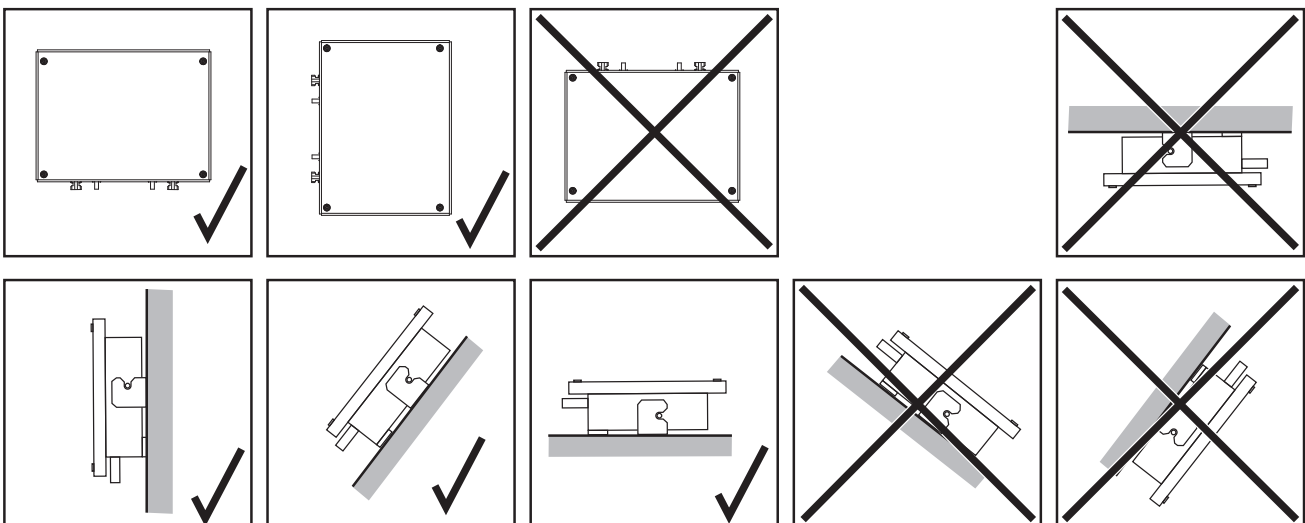


**WARNING!** An electric shock can be fatal. Danger due to DC voltage from the inverter and the battery.

- Always make sure the inverter is disconnected and de-energised before carrying out any connection work.
- Check that the battery is de-energised. The battery should be de-energised when it is delivered.
- Only an authorised electrical engineer is permitted to connect this equipment to the public grid.



## Possible assembly positions when using outdoors:



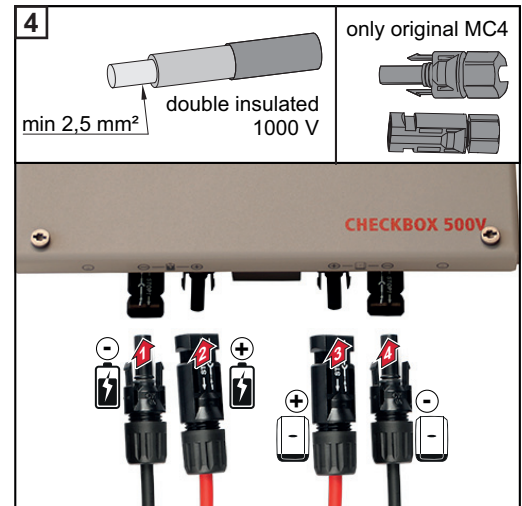
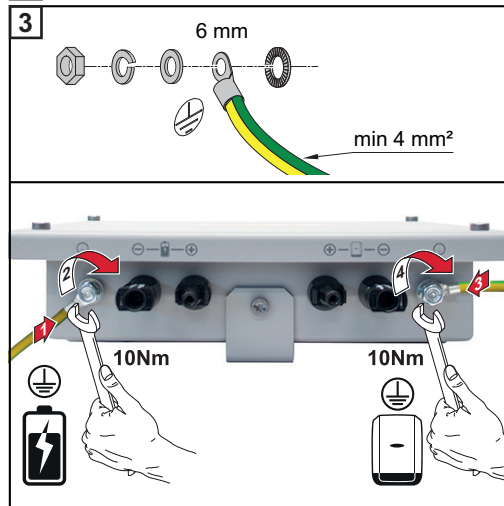
## Mounting and connecting up the Fronius Checkbox 500V



**NOTE!** Risk of damage to the device. Do not mix up the DC connections of the battery and the inverter.

Observe the enclosed complete circuit diagram when connecting up the Fronius checkbox.

- 1 Mount the supplied mounting bracket to the wall using suitable screws and wall plugs
- 2 Attach the Fronius Checkbox, push it down, and secure using the screw supplied



## Installing the ferrite ring for the data line

The data line between the inverter and the battery must be fitted with a ferrite ring as close as possible to each of the two terminal connections in order to avoid electromagnetic interference.

One ferrite ring is supplied with the Fronius Symo Hybrid and one is supplied with the Fronius Checkbox (Würth ferrite ring - item number: 74271132S).

- 1 Fit a ferrite core to the data line ahead of the terminal connection in the inverter
- 2 Remove the insulation from the data line ahead of the battery terminal connection and loop the line through the ferrite core twice

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