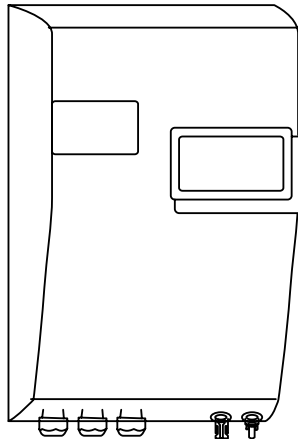


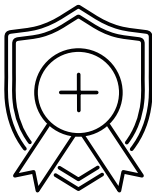


**quick guide  
next 3**



swiss made power





See more about our warranty conditions  
on our website [studer-innotec.com/studer-care](https://studer-innotec.com/studer-care)

designed and manufactured  
by studer in Switzerland



# Introduction

## **EN** Congratulations!

You are about to install and use a high-end equipment that will play a central role in the energy management of your battery-based system. The next3 is the first device of our new generation of smart battery inverter/charger with advanced functions. This next3 has been designed, manufactured, assembled and tested in our factory in Switzerland

## **FR** Félicitations!

Vous vous préparez à installer et à utiliser un appareil haut de gamme qui jouera un rôle central dans la gestion d'énergie de votre système avec stockage. Le next3 est le premier appareil de notre nouvelle génération d'onduleurs/chargeurs de batterie intelligents dotés de fonctions avancées. Ce next3 a été conçu, fabriqué, assemblé et testé dans notre usine en Suisse.

## **DE** Herzlichen Glückwunsch!

Wir freuen uns, dass Sie sich für eines High-Tech-Gerät entschieden haben, welches bei der Energie-management Ihrer Anlage entscheidende Rolle spielen wird. Der next3 ist das erste Gerät unserer neuen Generation von intelligenten Wechselrichtern / Batterieladern mit erweiterten Funktionen. Dieser next3 wurde in unserem Werk in der Schweiz entwickelt, hergestellt, montiert und getestet.

## **ES** ¡Enhorabuena!

Está a punto de instalar y de utilizar un equipo de alta gama que desempeñará una función esencial en la gestión de energía de su sistema con almacenamiento. El next3 es el primer equipo de nuestra nueva generación de inversores/cargadores de batería inteligentes con funciones avanzadas. Este next3 ha sido diseñado, fabricado, ensamblado y probado en nuestra fábrica en Suiza.

# General Information

## **EN Exclusion of liability**

Studer disclaims all responsibility and liability for damage, costs or losses resulting from an installation that does not comply with the instructions, a faulty operation or inadequate maintenance. The use of studer equipment is in any case under the responsibility of the customer.

Read carefully the safety and operation instructions / Installation must be entrusted to qualified personnel / Check the user manual online / Need help?



## **FR Exclusion de la responsabilité**

Studer décline toute responsabilité pour les dommages, les coûts ou les pertes résultant d'une installation non conforme aux prescriptions, d'un fonctionnement défectueux, ou d'un entretien déficient. L'utilisation des appareils studer relève dans tous les cas de la responsabilité du client.

Lisez attentivement les instructions de sécurité et d'utilisation / L'installation doit être confiée à du personnel qualifié / Consultez le manuel d'utilisation en ligne / Besoin d'aide ?



## **DE Haftungsausschluss**

Studer übernimmt keinerlei Verantwortung und Haftung für Schäden, Kosten oder Verluste, die sich aus unsachgemäßer Installation, unsachgemäßem Betrieb sowie fehlerhafter Wartung ergeben oder in irgendeiner Art und Weise damit zusammenhängen. Der Einsatz und Betrieb der studer-Geräte obliegt in jedem Fall der Verantwortung des Kunden.

Lesen Sie die Sicherheits- und Betriebsanweisungen sorgfältig durch / Die Installation muss qualifiziertem Personal anvertraut werden / Überprüfen Sie die Bedienungsanleitung online / Brauchen Sie Hilfe?



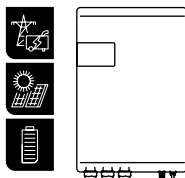
## **ES Exclusión de responsabilidad**

Studer declina cualquier responsabilidad por los daños, costes o pérdidas resultantes de una instalación no conforme con las recomendaciones, de un funcionamiento defectuoso o de un mantenimiento deficiente. El uso de equipos de studer es en cualquier caso responsabilidad del cliente.

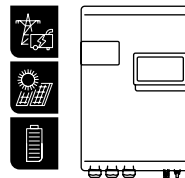
Lea atentamente las instrucciones de seguridad y funcionamiento / La instalación debe confiarse a personal cualificado / Consulte el manual de usuario en línea / ¿Necesitas ayuda?



Options &  
accessories:



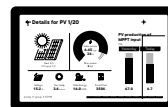
**nx3 st**  
next3 full option (standard)



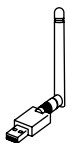
**nx3 sti**  
next3 full option + interface



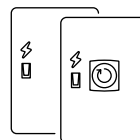
**nx tempSensor**  
next3 battery temperature sensor



**nx interface**  
next3 user interface



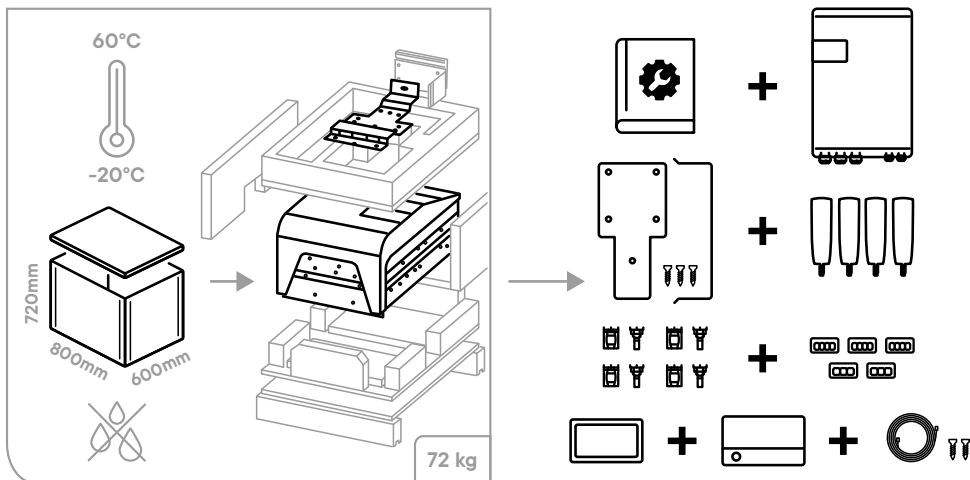
**nx wifidongle**  
dongle for wifi connection



**nx bypass box**  
AC cabinet with bypass 25. 40. 60, 80A

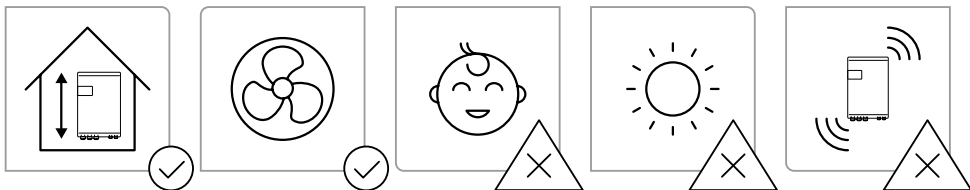
## Mounting and installation

### Storage and content



### Mounting place

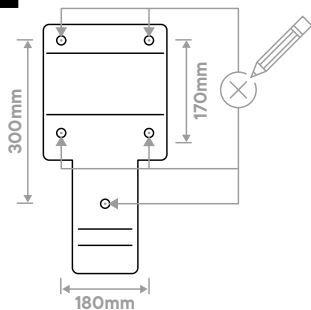
The next3 and batteries should only be installed by qualified personnel.



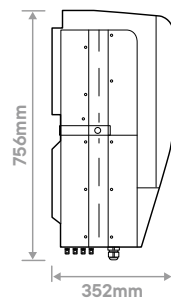
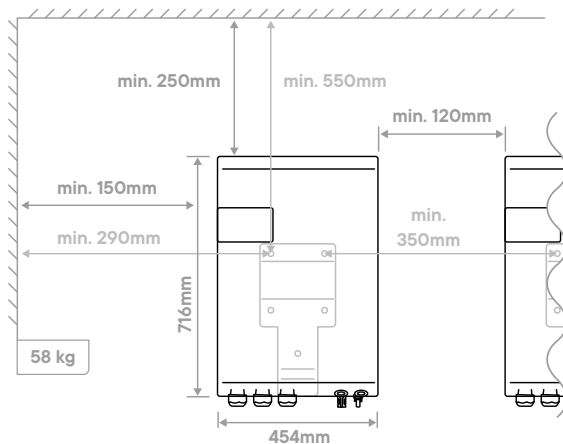
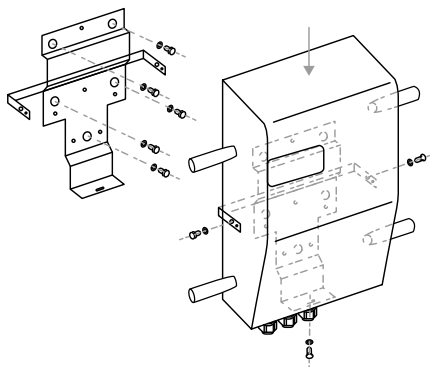
**+** 5x  **+** 

## Fixing and dimensions

**1**

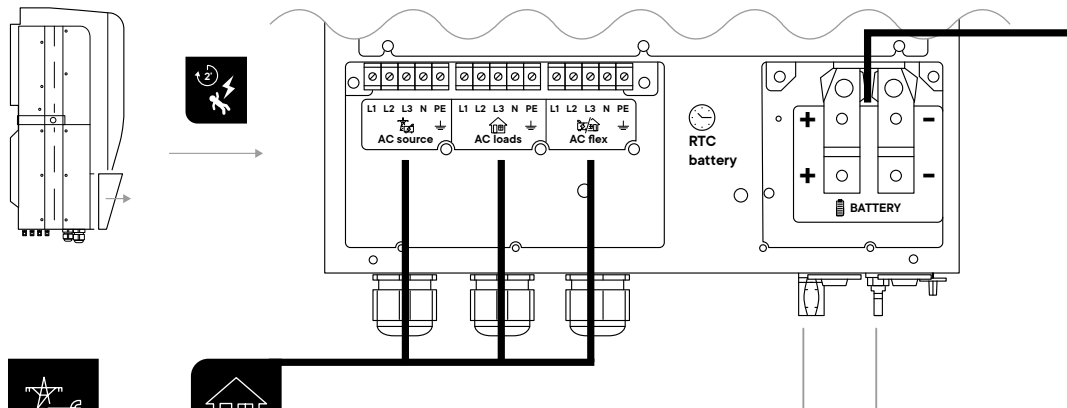


**2**



**3**

# Wiring



## AC



- Up to 5 x 25mm<sup>2</sup> cable, 1.6Nm
- Protection device AC to protect cables, circuit breaker type B
- Protection device AC to protect people RCCB/RCD, check earth scheme
- Overvoltage protection SPD

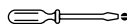
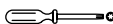
## Earthing



- min 16mm<sup>2</sup>, same section as the AC cables up to 25mm<sup>2</sup>
- The solar generator must be class II insulated



- EN** The device must be installed in accordance with local standards and regulations in force.
- FR** L'appareil doit être installé conformément aux normes et réglementations locales en vigueur.
- DE** Das Gerät muss gemäß den geltenden örtlichen Normen und Vorschriften installiert werden.
- ES** El dispositivo debe instalarse de acuerdo con las normas y regulaciones locales vigentes.

**M8****T10**

### Battery connection

- 4 x 70mm<sup>2</sup> cable M8, 10Nm  
(Up to 4x95mm<sup>2</sup> M8, 10Nm)

#### Protection device

(battery side)

- 400A



BAT+, M8



BAT-, M8



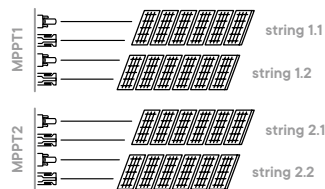
### Solar PV (MPPT 1, MPPT 2)

- 2.5-6mm<sup>2</sup> cable, Sunclix connector



#### Protection device (PV side)

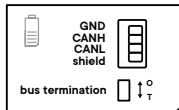
Overvoltage protection, SPD: 4x900Vdc (1 per input)



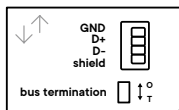
\*In parallel,  
similar strings  
with the same  
number of  
modules

### CAN BMS

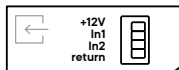
Communication with Lithium batteries

Connector included  
Check list

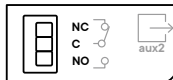
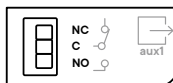
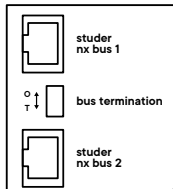
### RS485i

Modbus communication  
connector included

### Remote entries

2 remote inputs  
connector included

### nx tempensor

Temperature sensor for  
lead-acid batteries

### Communication

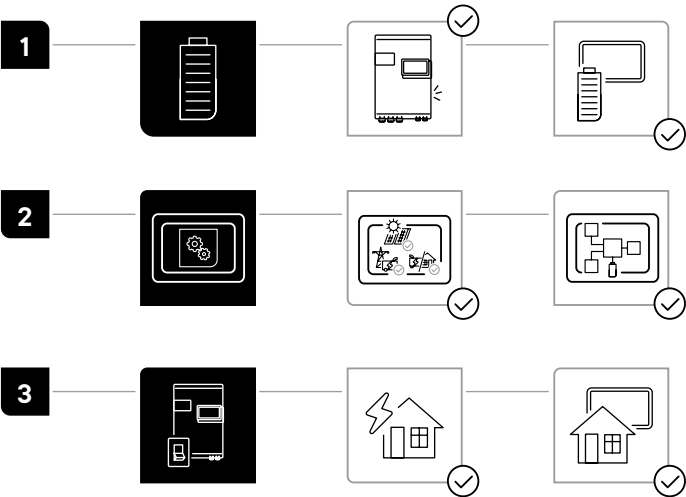
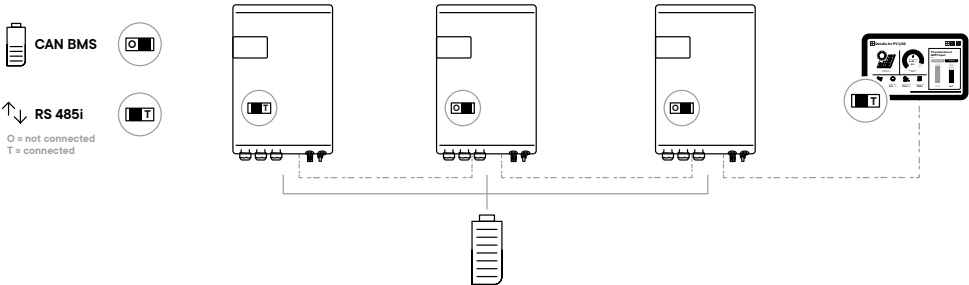
studer nx communication bus  
2x RJ45 black cable:

### Auxiliary contacts

2 auxiliary contacts (outputs)  
connectors included  
16A 250Vac/24Vdc  
3A 50Vdc

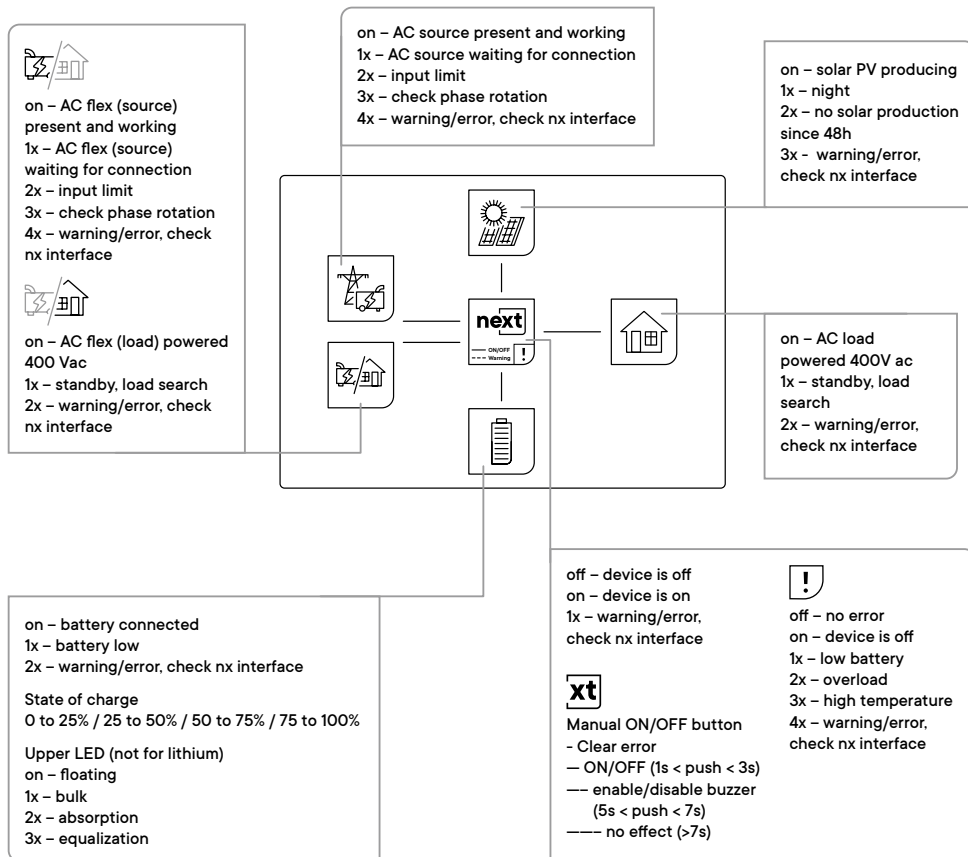
# Communication and power up

## 1 nx interface required in the communication bus



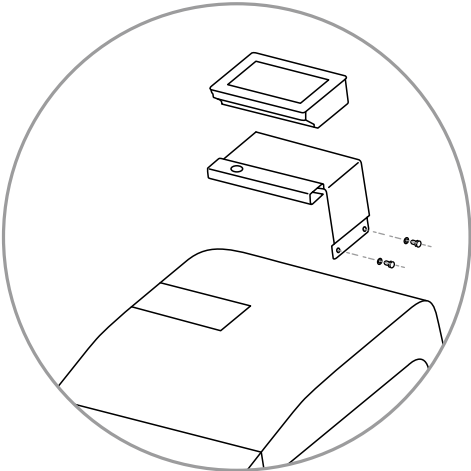
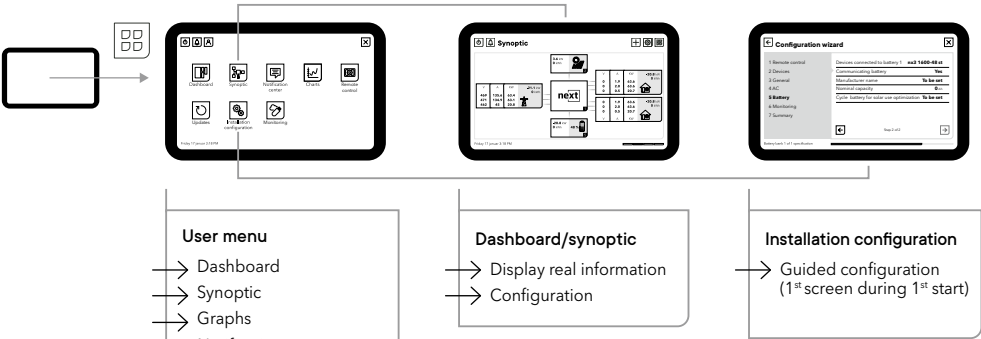
# Display

## Display system



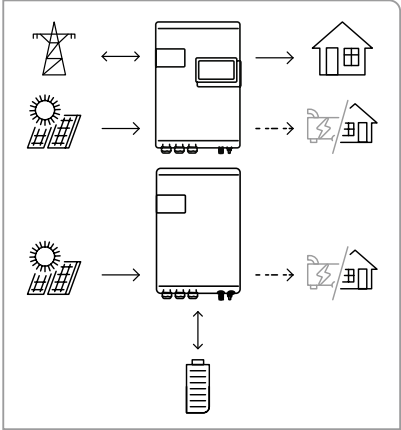
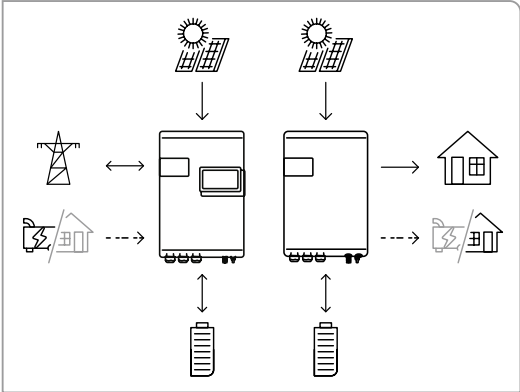
# Configuring the next

## nx interface



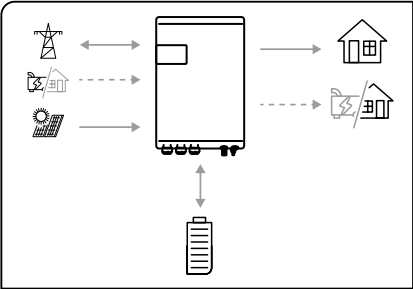
# Multi units

Up to 2x nx3 in parallel  
1 internal transfer, common battery  
Separate solar inputs  
Separate AC flex  
Common AC source  
Common AC loads



Up to 2x nx3 in parallel  
1 internal transfer, multi-battery  
Separate solar inputs  
Separate AC flex  
Common AC source  
Common AC loads

# Technical data



|                          |                                                |
|--------------------------|------------------------------------------------|
| <b>inverter</b>          | <b>nx3 16000-48 st</b>                         |
| Continuous Power         | 15000 VA                                       |
| Power 30min              | 16000 VA                                       |
| Power 5sec               | 30000 VA                                       |
| AC output voltage        | 230V Phase to Neutral /<br>400V Phase to Phase |
| AC output frequency      | 50/60Hz                                        |
| <b>solar</b>             |                                                |
| Solar MPPT inputs        | 2                                              |
| PV input voltage         | 100 – 900 Vdc                                  |
| PV input startup voltage | 200 Vdc                                        |
| PV max current (@STC)    | 2 x 27 Adc                                     |
| PV power                 | 2 x 8 kW                                       |
| <b>transfer</b>          |                                                |
| Max rated current        | 3 x 80 Aac                                     |
| Phase to neutral voltage | 230 Vac                                        |
| Phase to phase voltage   | 400 Vac                                        |
| Frequency                | 50/60 Hz                                       |

|                                             |
|---------------------------------------------|
| Battery nominal voltage<br>48Vdc (38-68Vdc) |
| Battery charge current<br>300 Adc           |

IP 30

Protection Class I

CE

**RoHS**  
COMPLIANT



## Maintenance and recycling

### **EN Maintenance and recycling**

Except for the periodic check of the connections (tightening, general condition), the next does not require any particular maintenance.

To dispose of this product, please use the service for the collection of electrical waste and observe all obligations in force in the place of purchase.

### **FR Entretien et recyclage**

À l'exception du contrôle périodique des branchements (serrage, état général), le next ne nécessite pas d'entretien particulier. Pour vous débarrasser de ce produit, veuillez utiliser les services de collecte des déchets électriques et observer toutes les obligations en vigueur selon le lieu d'achat.

### **DE Wartung und Recycling**

Abgesehen von der regelmäßigen Kontrolle der Anschlüsse (Fixierung, allgemeiner Zustand) bedarf der next keinerlei besonderer Wartungsarbeiten. Beachten Sie bei der Entsorgung dieses Gerätes die geltenden örtlichen Vorschriften und nutzen Sie die Sammeldienste/-stellen für Elektro-/Elektronik-Altgeräte.

### **ES Mantenimiento y reciclaje**

A excepción del control periódico de las conexiones (apriete, estado general), el next no requiere un mantenimiento particular. Para la eliminación del producto, acuda a los servicios de recogida de residuos eléctricos y cumpla todas las obligaciones vigentes en el lugar de compra.

Serial Number:

Installed by:

Date:

Signature:

Call our specialists **+41 27 205 60 80**  
or visit **[studer-innotec.com/support](https://studer-innotec.com/support)**

Studer Innotec SA  
rue des Casernes 57  
1950 Sion, Switzerland

[info@studer-innotec.com](mailto:info@studer-innotec.com)