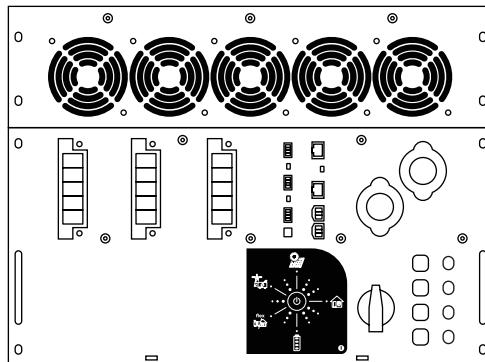




# quick guide

## next 3 rack



swiss made power





**10 + 5**

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. It is eligible for a warranty extension (10+5) with studercare+.

### **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. Il est éligible pour une extension de garantie (10+5) avec studercare+.

### **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. Mit studercare+ ist eine Garantieverlängerung (10+5) möglich.

### **ES** ¡Enhorabuena!

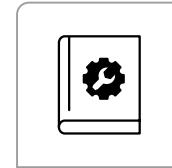
Está a punto de instalar y de utilizar un equipo de alta gama que desempeñará una función esencial en la gestión de energía de su sistema con almacenamiento. El next3 es el primer equipo de nuestra nueva generación de inversores/cargadores de batería inteligentes con funciones avanzadas. Este next3 ha sido diseñado, fabricado, ensamblado y probado en nuestra fábrica en Suiza. Es elegible para una extensión de garantía (10+5) con studentcare+.

# 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 ?



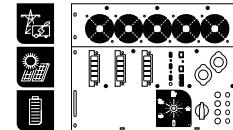
## ES Exclusión de responsabilidad

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.

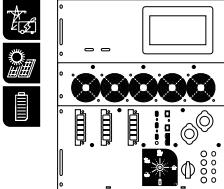
Lea atentamente las instrucciones de seguridad y funcionamiento / La instalación debe confiarse a personal cualificado / Consulte el manual de usuario en linea / ¿Necesitas ayuda?



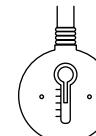
## Options & accessories:



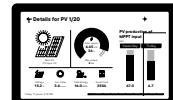
nx3 rack st  
next3 full option (standard)



nx3 rack sti  
next3 full option + interface



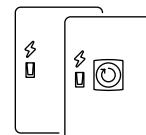
nx tempSensor  
next3 battery temperature sensor



nx interface  
next3 user interface



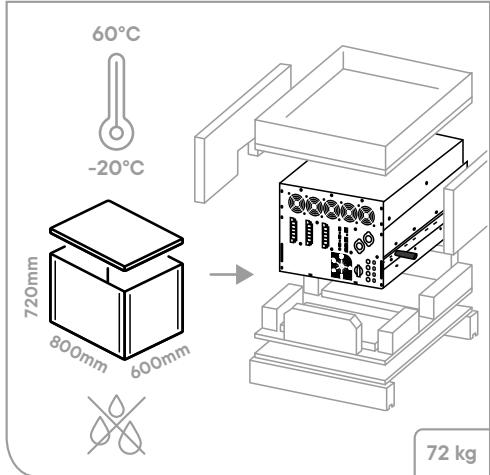
nx wifidongle



nx bypass box

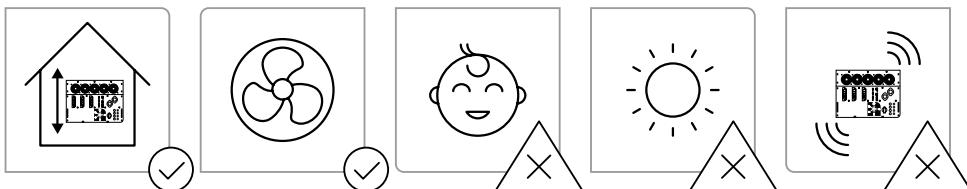
## Mounting and installation

### Storage and content

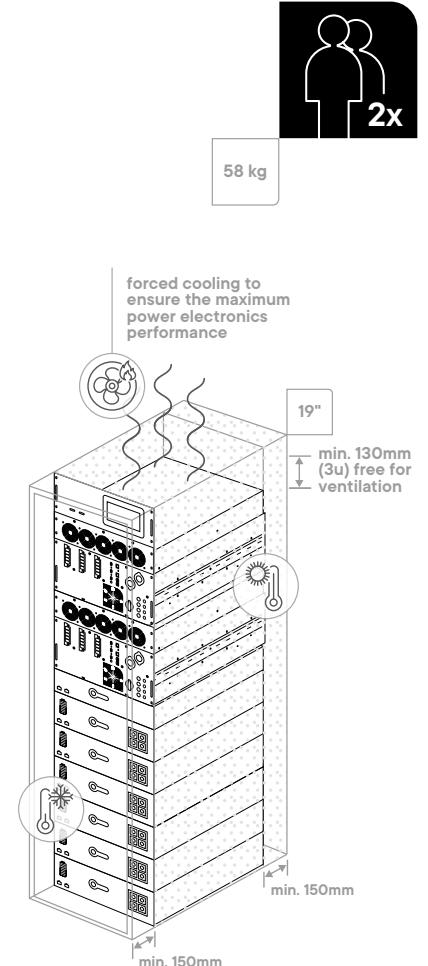
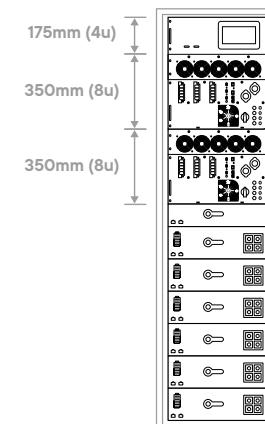
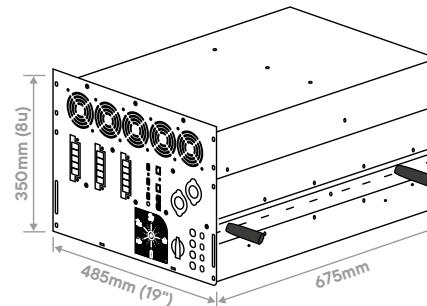


### Mounting place

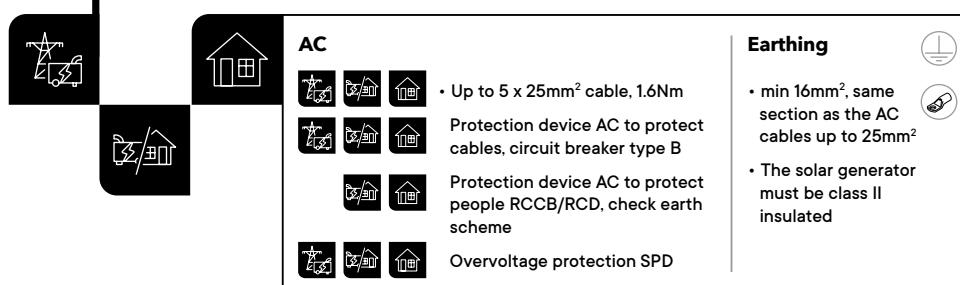
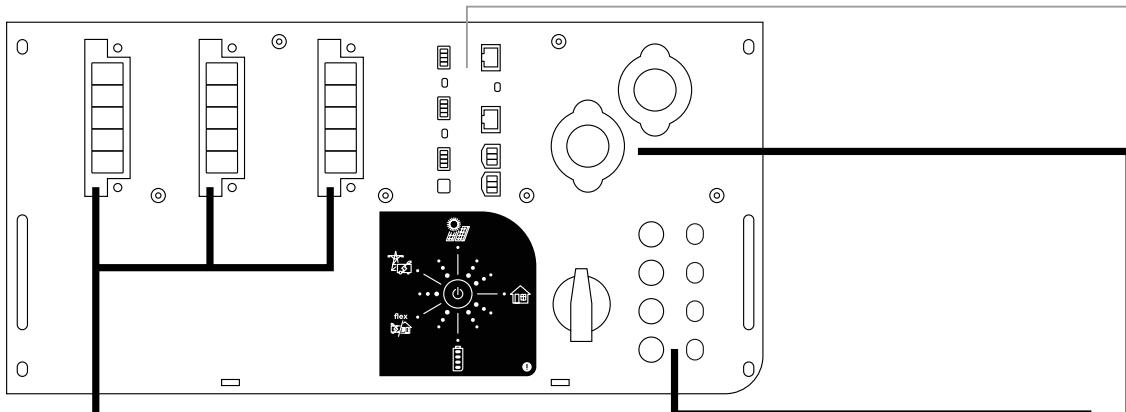
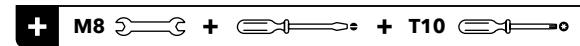
The next3 and the batteries should only be installed by qualified personnel.



### Fixing and dimensions



# Wiring



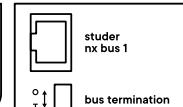
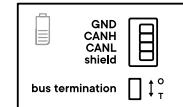
**EN** The device must be installed in accordance with local standards and regulations in force.  
**FR** L'appareil doit être installé conformément aux normes et réglementations locales en vigueur.  
**DE** Das Gerät muss gemäß den geltenden örtlichen Normen und Vorschriften installiert werden.  
**ES**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

**CAN BMS**  
Communication with Lithium batteries  
Connector included  
Check list

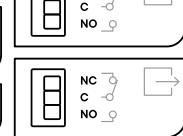
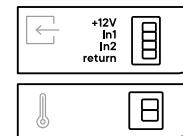
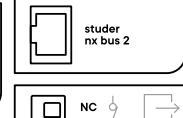
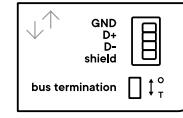
**RS485**  
Modbus communication connector included

**Remote entries**  
2 remote inputs connector included

**nx tempsensor**  
Temperature sensor for lead-acid batteries



**Communication**  
studer nx communication bus  
2x RJ45 black cable:  
nx interface  
multi-units



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



## Battery connection

- 2 x 70mm<sup>2</sup> cable M8, 10Nm (Up to 2x95 mm<sup>2</sup> cable M8, 10Nm)



Protection device (battery side)

• 400A

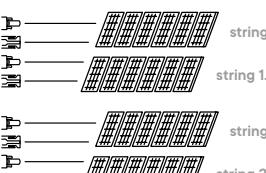
## Solar PV (MPPT 1, MPPT 2)

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



Protection device (PV side)

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

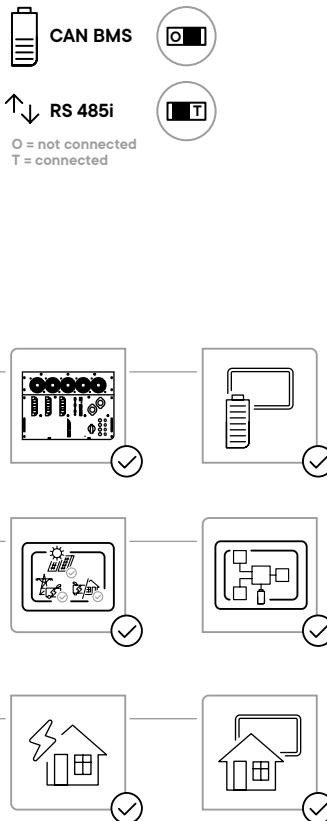
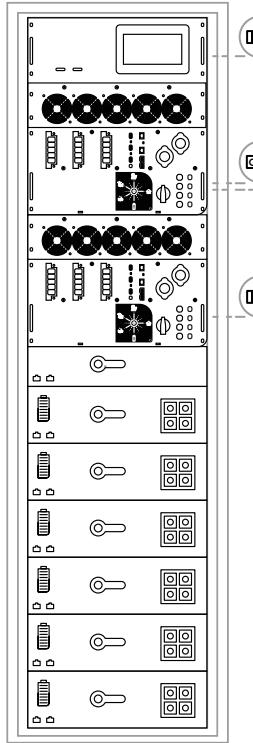


'In parallel,  
similar strings  
with the same  
number of  
modules



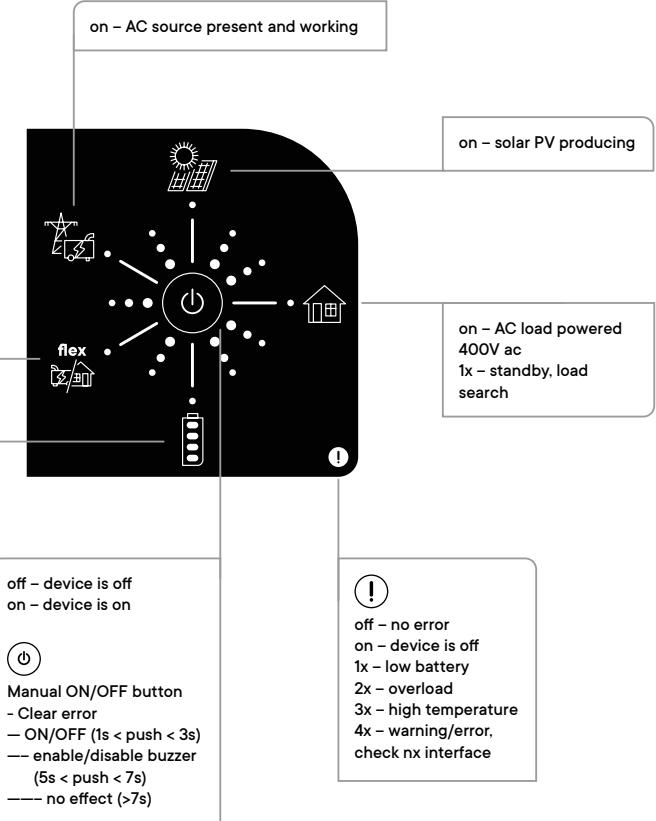
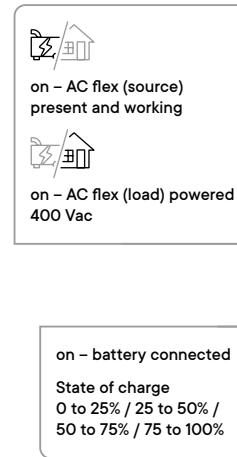
## Communication and power up

1 nx interface required in the communication bus



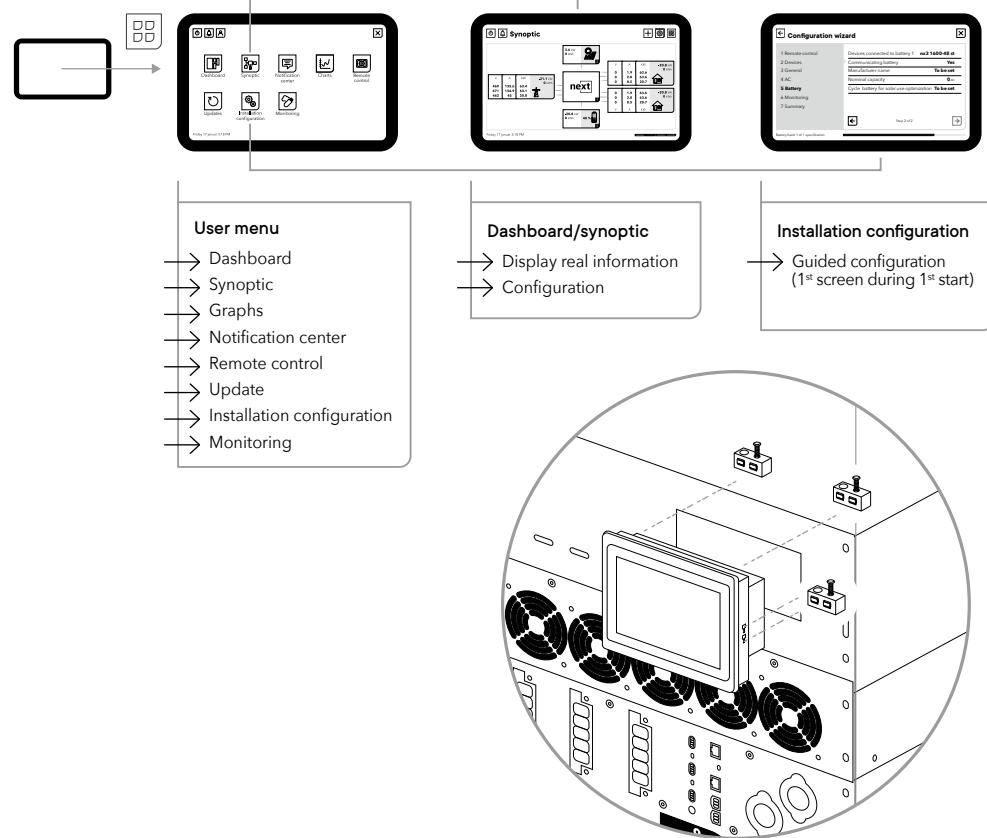
## Display

Display system



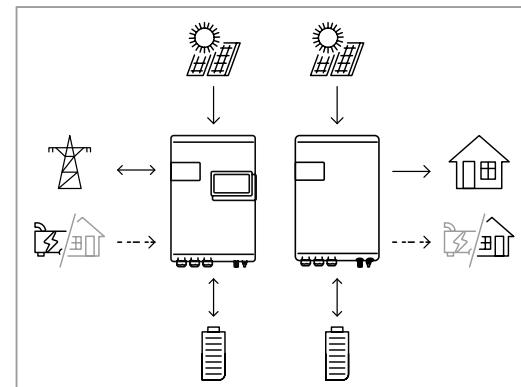
## Configuring the next

### nx interface

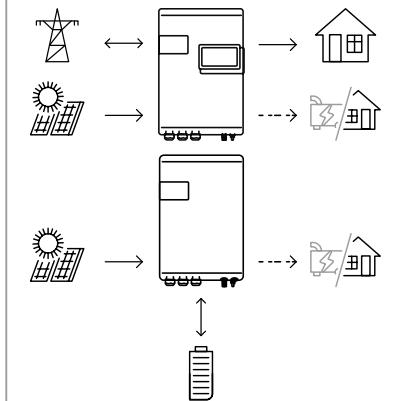


## Multi units

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

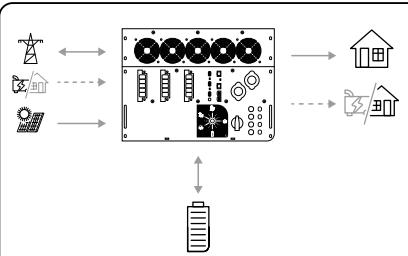


Up to 2x nx3 in parallel  
1 internal transfer, multi-battery  
Separate solar inputs  
Separate AC flex  
Common AC source  
Common AC loads



## Technical data

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



IP 30  
Protection Class I

Battery nominal voltage
48Vdc (38–68Vdc)
Battery charge current
300 Adc



## 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**

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rue des Casernes 57  
1950 Sion, Switzerland

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

