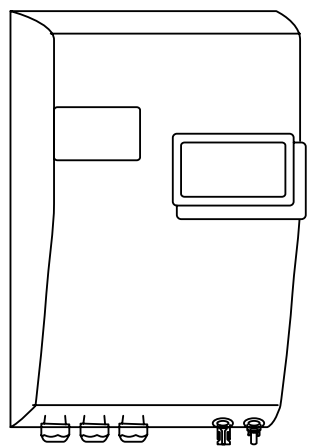
quick guide next 3



swiss made power

See more about our warranty conditions
on our website 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.

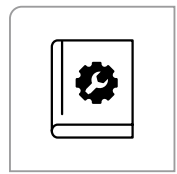
DE Herzlichen Glückwunsch!
Wir freuen uns, dass Sie sich für eines High-Tech-Gerät entschieden haben, welches bei der Energie-management Ihrer Anlage entscheidende Rolle spielen wird. Der next3 ist das erste Gerät unserer neuen Generation von intelligenten Wechselrichtern / Batterieladern mit erweiterten Funktionen. Dieser next3 wurder 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.

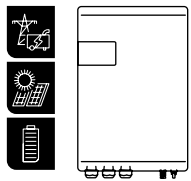
Lesen Sie die Sicherheits- und Betriebsanweisungen sorgfältig durch / Die Installation muss qualifiziertem Personal anvertraut werden / Überprüfen Sie die Bedienungsanleitung online / Brauchen Sie Hilfe?

ES Exclusión de responsabilidad

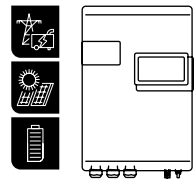
Studer declina cualquier responsabilidad por los daños, costes o pérdidas resultantes de una instalación no conforme con las recomendaciones, de un funcionamiento fefectuoso o de un mantenimiento deficiente. El uso de equipos de studer es en cualquier caso responsabilidad del cliente.

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

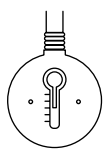
Options & accessories:



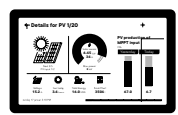
nx3 st
next3 full option (standard)



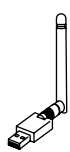
nx3 sti
next3 full option + interface



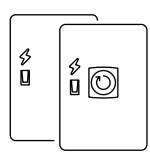
nx tempSensor
next3 battery temperature sensor



nx interface
next3 user interface



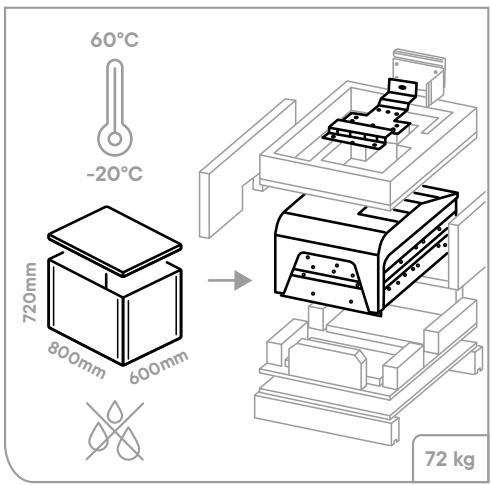
nx wifidongle
dongle for wifi connection

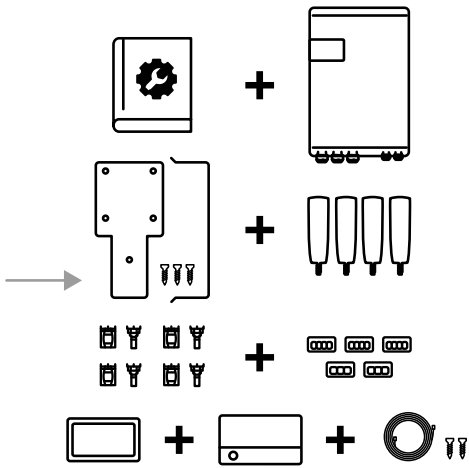


nx bypass box
AC cabinet with bypass 25. 40. 60, 80A

Mounting and installation

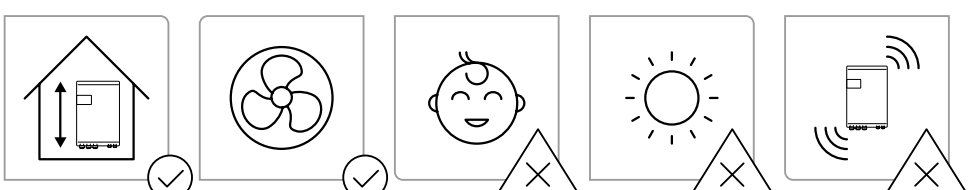
Storage and content

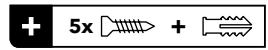




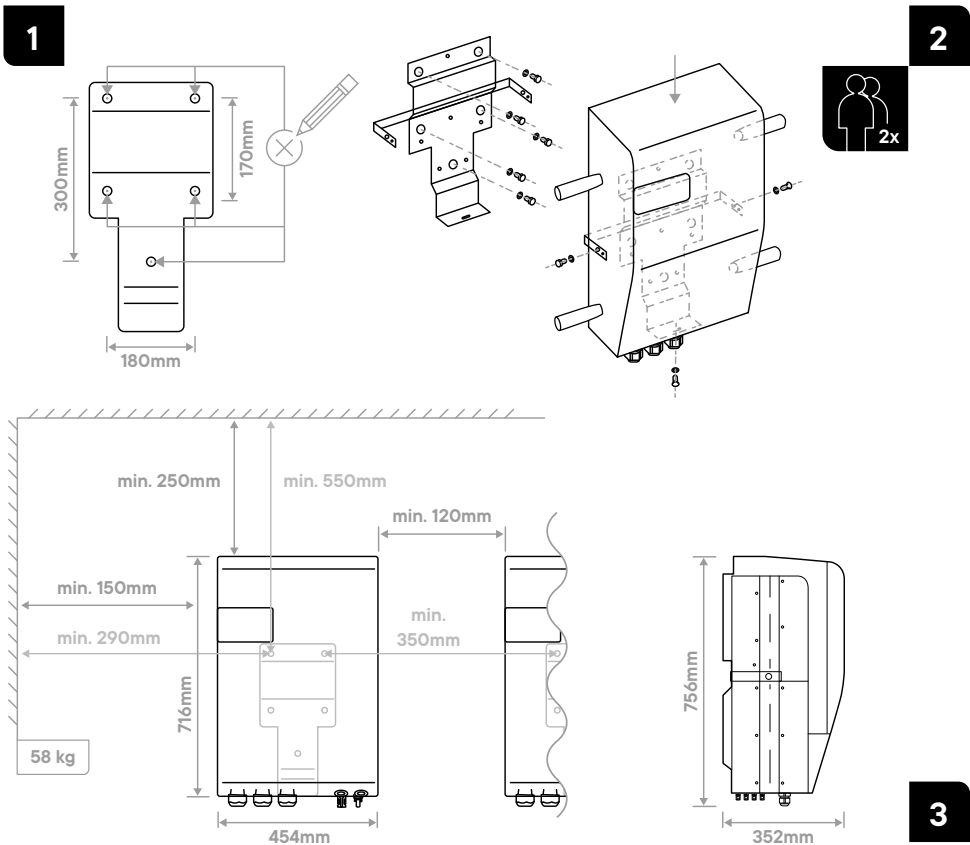
Mounting place

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

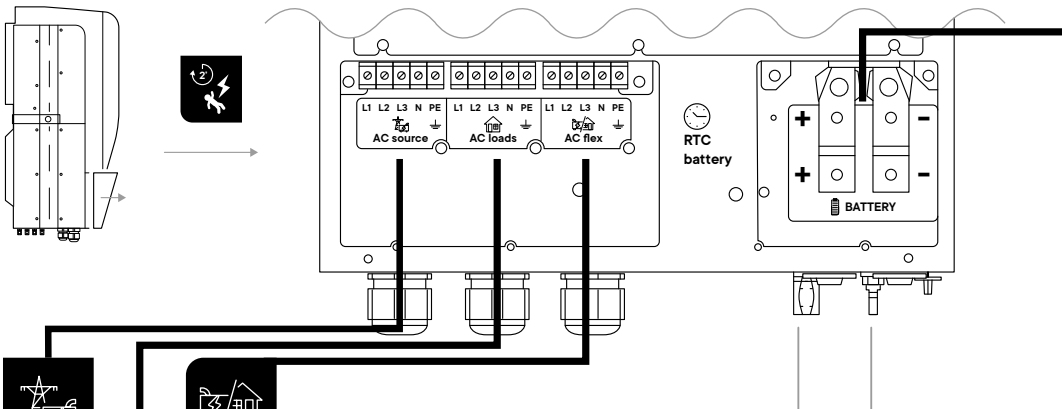




Fixing and dimensions



Wiring



AC

- Up to 5 x 25mm² cable, 1.6Nm

Protection device AC to protect cables, circuit breaker type B

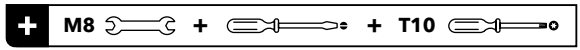
Protection device AC to protect people RCCB/RCD, check earth scheme

Overvoltage protection SPD

Earthing

- min 16mm², same section as the AC cables up to 25mm²
- 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.



Battery connection

BAT+, M8

BAT-, M8

- 4 x 70mm² cable M8, 10Nm
  (Up to 4x95mm² M8, 10Nm

Protection device
(battery side)

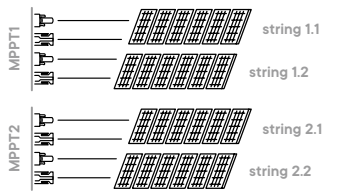
- 400A

Solar PV (MPPT 1, MPPT 2)

- 2.5-6mm² cable, Sunclix connector

Protection device (PV side)

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



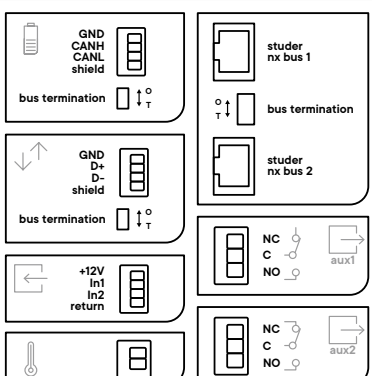
*In parallel, similar strings with the same number of modules

CAN BMS
Communication with Lithium batteries
Connector included
Check list

RS485i
Modbus communication connector included

Remote entries
2 remote inputs
connector included

nx tempsensor
Temperature sensor for lead-acid batteries



Communication
studer nx communication bus
2x RJ45 black cable:

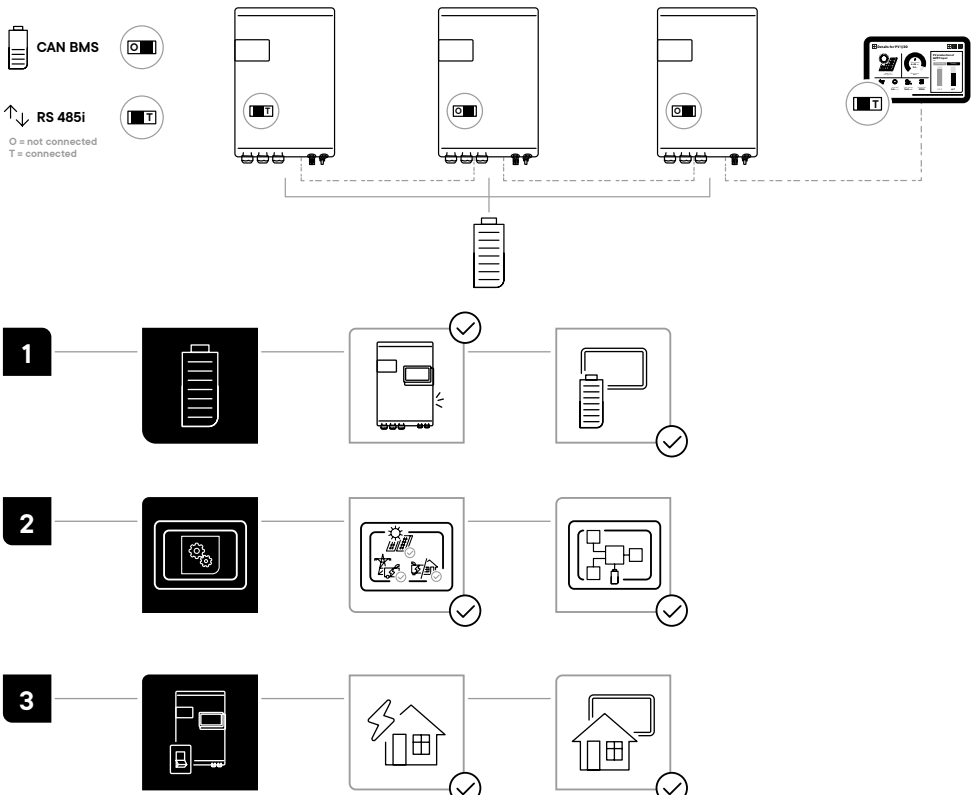
nx interface

multi-units

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

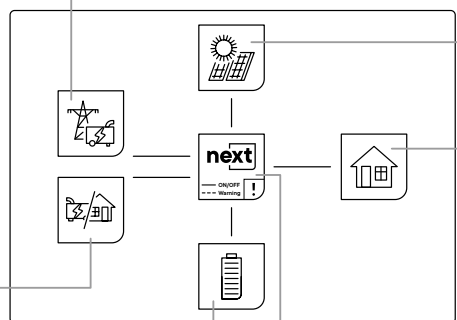
Communication and power up

1 nx interface required in the communication bus



Display

Display system



on – AC flex (source) present and working
1x – AC flex (source) waiting for connection
2x – input limit
3x – check phase rotation
4x – warning/error, check nx interface

on – AC flex (load) powered 400 Vac
1x – standby, load search
2x – warning/error, check nx interface

on – AC source present and working
1x – AC source waiting for connection
2x – input limit
3x – check phase rotation
4x – warning/error, check nx interface

on – solar PV producing
1x – night
2x – no solar production since 48h
3x - warning/error, check nx interface

on – AC load powered 400V ac
1x – standby, load search
2x – warning/error, check nx interface

on – battery connected
1x – battery low
2x – warning/error, check nx interface

State of charge
0 to 25% / 25 to 50% / 50 to 75% / 75 to 100%

Upper LED (not for lithium)
on – floating
1x – bulk
2x – absorption
3x – equalization

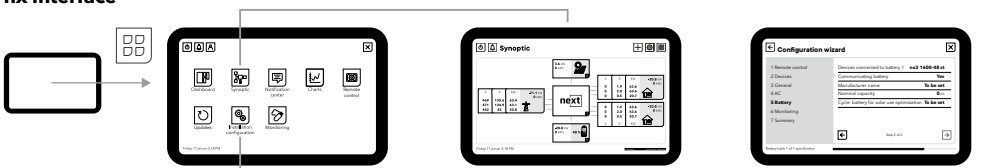
off – device is off
on – device is on
1x – warning/error, check nx interface

xt
Manual ON/OFF button
- Clear error
— ON/OFF (1s < push < 3s)
—– enable/disable buzzer (5s < push < 7s)
——– no effect (>7s)

!
off – no error
on – device is off
1x – low battery
2x – overload
3x – high temperature
4x – warning/error, check nx interface

Configuring the next

nx interface



User menu

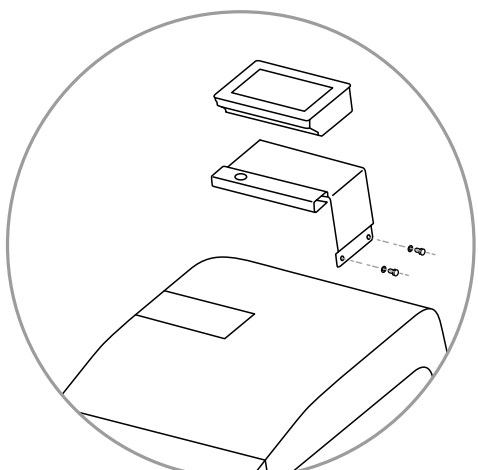
- Dashboard
- Synoptic
- Graphs
- Notification center
- Remote control
- Update
- Installation configuration
- Monitoring

Dashboard/synoptic

- Display real information
- Configuration

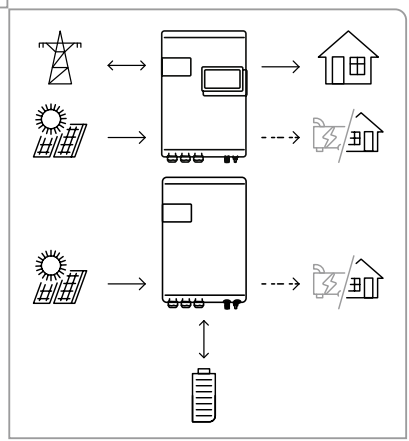
Installation configuration

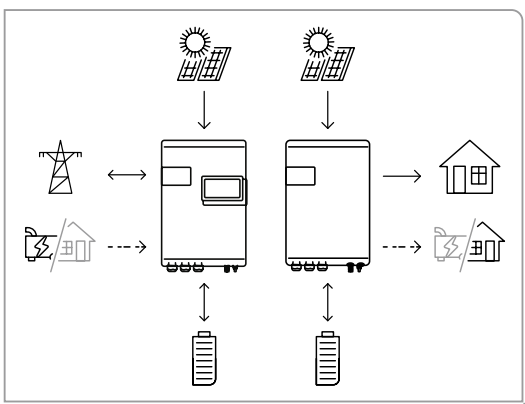
- Guided configuration (1st screen during 1st start)



Multi units

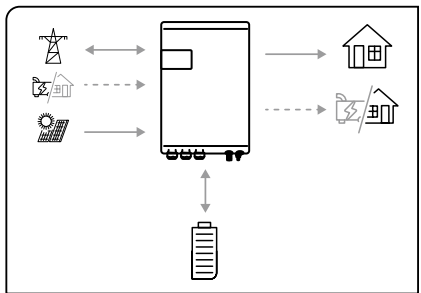
Up to 2x nx3 in parallel
1 internal transfer, common battery
Separate solar inputs
Separate AC flex
Common AC source
Common AC loads





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	nx3 16000-48 st
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 input startup voltage	200 Vdc
PV max current (@STC)	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

Battery nominal voltage
48Vdc (38-68Vdc)

Battery charge current
300 Adc

IP 30

Protection
Class I

CE

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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