

A large, dark silhouette of a human hand is shown against a light blue sky. The hand is positioned as if holding the sun, which is visible as a bright, glowing orb between the thumb and index finger. The sun's light creates a lens flare effect across the palm of the hand.

# Join the solar autarky

The moment is now



## Home sweet home of autarky

### Your renewable energy available day and night, for both city and country life.

The energy transition is here, the energy business model is shifting. The moment has never been more propitious for ecological transition. With our next3 solution we propose our clients to join the solar autarky. The energy independency at home. Our contribution towards decarbonization. The time is now!



With conventional photovoltaic systems, most of the renewable energy is fed back into the electricity grid. Adding battery storage and intelligent energy management allows you to always have your renewable energy available and to choose how to use your self generated energy.

### Choose autonomy, go 24h solar



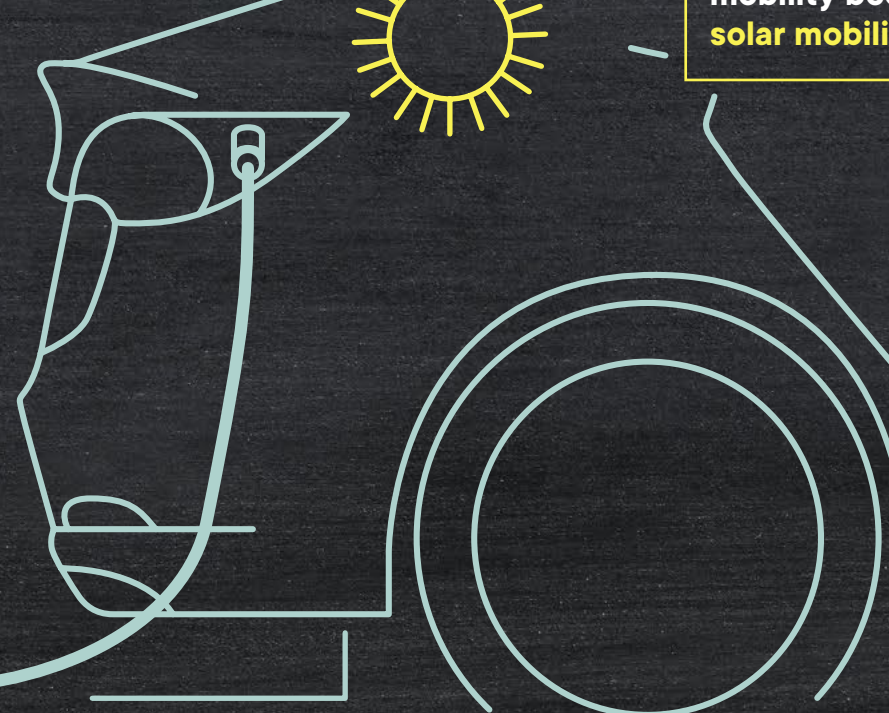
Renovation, electric heating and cooling, smart home automation, ... Electricity is and will always remain the heartbeat of our houses.

Technology is at our hand and we can benefit from it. With a next3 the energy solution is flexible to last for the next decades. Choosing to start with lower solar coverage and to gain autarky as the energy demand evolves is up to you. There is no limitation, the system matches your personal budget.

### You decide when to do it, not your system

### The electric mobility becomes solar mobility

The forecast of electrical car usage is very promising and will have a great impact in our day to day electric profile. Having the solar pump right at your home or industry is a real benefit. Furthermore, your solar pump being cheaper than any other source of electricity for your electric car is a game changer. With the next3 we propose solar mobility.





# Calling all pros, we got news for you

## Flexible solutions that do the job!

The system should match any client requirements, that's why there is a series of technical features turning the next3 as your best partner for your commercial and industrial applications.

### Phase balancing



3-phase systems are not simply 3 single phases synchronized with each other. Fixed phase distribution in the source for a complex 3-phase loads installation is the dreamed proposal for your grid operator.

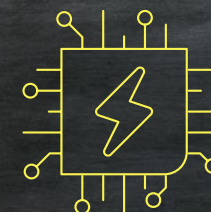
### Peak shaving and load shedding



Shaving is always good, especially in economic terms. Benefit from tariff negotiation with your power fixed term and in addition contribute to the stability of the infrastructure. A potential future service to the grid?



### Power flow dispatcher



Our core management is done by the power flow dispatcher®, a unique and outstanding control algorithm at the power electronic's level for quick reactions and with 1ms synchronization between the units.

### Not just another smart function



Our improved iconic smart boost function helps to relieve the grid power by using your solar and battery energy available in priority, opening a wide range of energy strategies at your hand.



Our open philosophy is meant to facilitate full control of the device to take the best out of it. Incorporated bidirectional Modbus communication allows professional integration for the highest added value professional solutions. With **open studer** we provide examples, libraries and we encourage you to go beyond the limits.

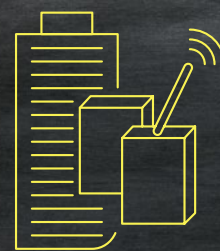


**Integration  
made easy**

**Advanced  
AC sources  
and loads  
management**



The unique AC flex interface allows to configure a second AC source or a second AC load with a swipe, with an integrated smart energy management simplifying complex installations.



**World-class  
communication:  
CAN BMS**

With communicating active lithium batteries, the integrated CAN BMS communication is plug&play. Select your battery model and configure your battery strategy quickly and easily.

**To grid or  
not to grid**



The next3 is a full grid interactive device following the EU LV directives and the respective country regulations. Select your country and turn your grid connection into a powerful and dynamic asset.

And all this to be incorporated in a 19" rack version, ready for a complete battery-based solution with all the advantages of the rack versatility.

**Yes,  
we rack!**







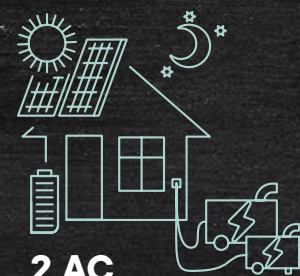
### Battery flexibility

The next3 provides the flexibility to work with different battery technologies.

### AC flex, second controlled load

Transform excess of energy in system assets or secure the supply of the critical loads with your battery backup to cover grid failures.

The next3 compiles a wide range of energy data to build an advanced energy management model. Use our tool for advanced energy management strategies.



### 2 AC backup sources

The demand can vary along the day and night, season periods and other variables. Combining two generators with different setups bring you all the flexibility your usage require.



### Integrated smart advanced energy strategies

## Manage your offgrid energy to the next level

**We go straightforward for more than 30 years. The next3 device is conceived to simplify installations keeping the highest reliability.**

Our smart inverter-charger comes with a reference voltage of 3x400Vac, includes 2 MPPT inputs with two 900Vdc strings per input. A powerful internal transfer with 80A per phase for backup generators and hybrid architectures. One AC flex interface for advanced automatic management of a second source or a second controlled load. Two additional fully configurable auxiliary contacts and 2 remote entries. Everything in one single device for the full management of a complex offgrid installation.

### Is there always room for one more?

Batteries, solar, 3 phase loads, 3 phase generator. Difficult logistics, challenging space usage, limited time planning.

Our objective is to simplify installations and we put ourselves into the installer shoes. This device replaces up to 6 in a typical solar offgrid 3-phase installation.

### Need more power?

Up to 3 devices can be installed in parallel.

A mountain hut of the Swiss Alpine Club lies at the Tracuit Pass at 3256masl located above Zinal in the canton of Valais. The hut is equipped with Studer devices.



Inverter + battery charger

|   |  |
|---|--|
| Continuous power 25°C                             | 15000 VA                                 |
| Power 30 min. 25°C                                | 16000 VA                                 |
| Power 5 sec. 25°C with solar / inverter / 1-phase | 30000 / 24000 / 10000 VA                 |
| Nominal output voltage, line to neutral           | pure sine wave 220 / 230 / 240 Vac (±1%) |
| Nominal output voltage, line to line              | pure sine wave 380 / 400 / 415 Vac (±1%) |
| Nominal output frequency                          | 50/60 Hz (±0.02%)                        |
| Nominal battery voltage (Input range)             | 48 Vdc                                   |
| Battery voltage range                             | 38 - 68 Vdc                              |
| Maximum charging current / power                  | 300 Adc / 15000 W                        |

Cos φ 0.1-1 | Harmonic distortion < 1 % | Charge characteristic 6 steps: bulk, absorption, floating, equalization, reduced floating, periodic absorption | Temperature compensation with nx tempsensor (included)

Solar PV

|  |               |
|--|---------------|
| Number of MPPT inputs                                | 2             |
| Max PV short circuit current per PV input            | 22 Adc        |
| Maximum PV open voltage (Voc)                        | 900 Vdc       |
| Start up voltage / Shut off voltage                  | 350 / 100 Vdc |
| Maximum solar power produced (electronic limitation) | 2 x 8000 W    |
| Maximum solar power recommended (@STC)               | 2 x 12000 W   |
| MPP voltage range recommended                        | 300 - 700 Vdc |

Max. efficiency solar to grid / EU / CEC 97 / 92 / 93% | MPP efficiency static / dynamic > 99 / 99% | Max. efficiency solar to battery 95 %

Transfer

|   |                                   |
|---|-----------------------------------|
| AC source (Grid or Genset)  |                                   |
| Maximum rated current   | 3 x 80 Aac                        |
| Operating voltage range, line to neutral  | 176 - 288 Vac                     |
| Nominal voltage, line to neutral / line to line   | 220, 230, 240 / 380, 400, 415 Vac |
| Nominal frequency   | 50 / 60 Hz                        |
| Overvoltage category (OVC)  | III                               |
| Grid code compliance  |                                   |
| EU Commission Regulation 2016/631 (NC RfG), EN 50549-1:2019, VDE-AR-N 4105:2018, IEC 62116, IEC 61727 |                                   |

|  |                                   |
|--|-----------------------------------|
| AC flex (Controlled 2 <sup>nd</sup> AC load or Genset) |                                   |
| Maximum rated current                                  | 3 x 80 Aac                        |
| Operating voltage range, line to neutral               | 176 - 288 Vac                     |
| Nominal voltage, line to neutral / line to line        | 220, 230, 240 / 380, 400, 415 Vac |
| Nominal frequency                                      | 50 / 60 Hz                        |

General data

|                                     |  |
|-------------------------------------|--|
| Dimensions h / w / l                | 320 / 450 / 760 mm                             |
| Weight                              | 58 kg  |
| Self consumption OFF / standby / ON | 6 / 7 / 41 W (+5 W with nx interface)          |
| Multifunction I/O contacts          | 2 x Input, 2 x Output, rating 16 A each        |
| Safety conformity (CE marking)      | EU Low Voltage Directive (LVD) 2014/35/EU      |
| EMC conformity (CE marking)         | EU Electromagnetic Compliance (EMC) 2014/30/EU |

Ingress protection according to IEC60529 IP30 | Operating ambient temperature range -20 to 55°C | Relative humidity operation range 5 to 95 % (non condensing) | Mounting location Indoor, unconditioned

Data may change without any notice. Some features are not available in the gamma version.

An all-rounder matching any project requirement

- All-in-one compact and versatile solution customized according to project needs
- Outstanding performance and integration of every energy source: solar, grid, generator
- 3-phase input (AC source), 3-phase output (AC loads) and 3-phase AC flex, configurable as a second input or second controlled output
- Smart energy management with AI models
- Smooth operation with all battery technologies. Lithium-ready, integrated CAN communication with lithium batteries BMS
- Unique modular hardware combination with optional solar and transfer modules
- Multiple combination possibilities: parallel operation with one internal transfer, multi-unit and multi-battery system
- Remote monitoring and control with studer professional portal

Options & accesories

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

**nx3 t**  
next3 without solar

**nx3 s**  
next3 without transfer

**nx3**  
next3 without solar, without transfer

**nx3 sti**  
next3 full option + interface

**nx tempSensor**  
next3 battery temperature sensor

**nx interface**  
The new intuitive smart platform to configure, control and analyze your system. Making life easier for both professional installers and final users.

Hello family

The next3 is the first device of a series of devices that are transforming the energy management model.

We are currently working on different products that will complete the next series in the upcoming months.



Next3 series, our versatile and powerful three-phase product range



Next1 series, our versatile and powerful single-phase product range

NextUL series  
@120Vac/60Hz for the North American market



Rack version, the next series in 19" rack version for simple battery-based cabinet solutions

Features coming soon

**AC coupling**

Your existing solar inverter working smoothly with the next3.

**Smart energy strategies**

Evolving with the installation thanks to artificial intelligence and data processing

**Multi-unit, multi-battery**

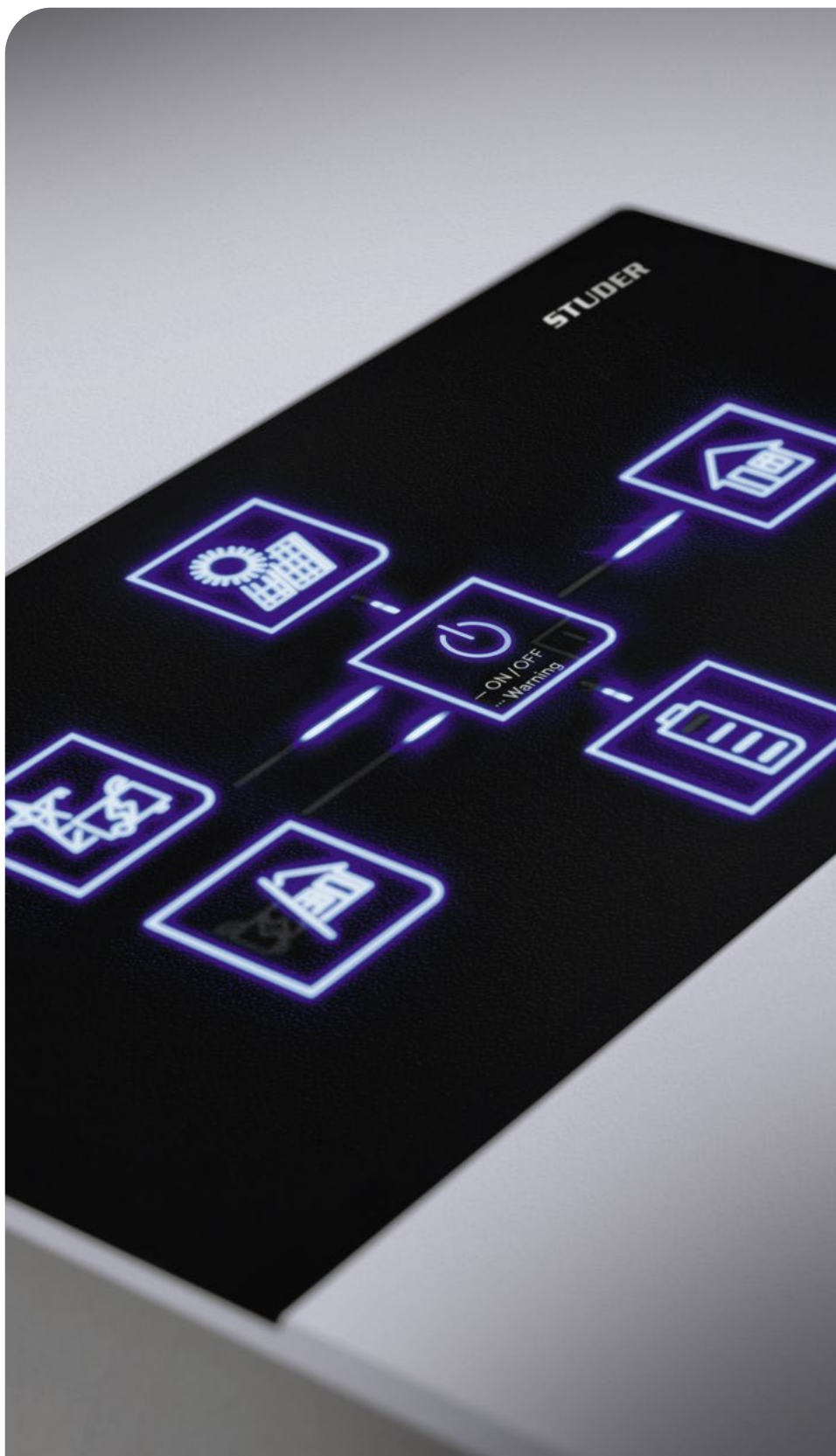
Bigger power requirements with no power or battery limitations

**A new era of distributed electrification**

Grid-tied residential minigrids with simplified management, district batteries.

All the devices from the next series will work with nextOS, a limitless energy management platform. New functionalities and features will be published and made available through regular software upgrades.





Call our specialists **+41 27 205 60 80** or  
visit **[studer-innotec.com/next3](https://studer-innotec.com/next3)**.

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All our products include a  
12-year warranty (6+6).

ISO certified factory  
9001:2020/14001:2020.

