

Smappee Infinity

Introducing the next revolution
in smart energy technology.



Smappee, the world's smartest energy management system.

Smappee Infinity provides Energy Service Companies and OEM customers with the most comprehensive, future-proof, smart energy monitoring system on the market. The modular and global solution delivers increased energy efficiency thanks to detailed, real-time energy insights with not just one, but three methods of submetering for electricity. Add solar, gas and water for a complete overview of all your energy flows at a glance. Easy to install and to integrate with IoT services, Smappee Infinity features optimized self-consumption, delivering exceptional value for your residential and business customers.



Fast, accurate energy data tailored to your needs.

Smappee collects real-time production and consumption data down to the appliances level. By combining traditional submetering clamps, our smart Smappee Switch and our patented appliance recognition technology, Smappee offers the most complete and comprehensive set of submetering options available on the market. Not only does this provide a large amount of highly valuable, actionable data, providers and users can also access this data in multiple ways. There's an API for integration with EMS/BMS systems, a comprehensive professional dashboard for in-depth analyses, and a user-friendly app for consumers.

Low-cost, quick installation.

Featuring quick and easy installation and low maintenance costs, Smappee Infinity has a total cost of ownership that compares favorably with other competitive solutions. The compact plug-and-play system is robust and reliable, with hubs connecting current clamps (CT's). That way you spend less time on the set-up and more time on saving energy for you and your client.



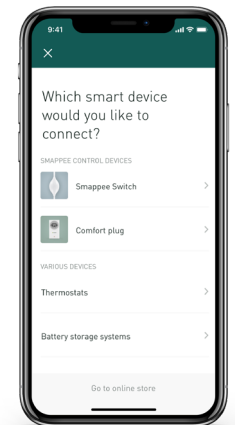
Modular and comprehensive.

We know every customer is different. So, we've developed Smappee Infinity with flexibility in mind. Our comprehensive offering means you can pick and choose the features and services you need in order to deliver a solution tailored to your customer's needs. Do you need more control, data or services over time? No problem! Thanks to the modularity of Smappee Infinity, you can always build on the existing solution to meet your changed needs.

Keep control and optimize self-consumption.

Smappee Infinity uses the MQTT smart home communication protocol and can easily pair with IoT products and platforms such as Nest and Amazon. Or simply add a Smappee Switch to control more appliances.

Our energy traffic control technology even directs energy to EV chargers and battery storage to provide additional efficiency and peace of mind for you and your customer.



The ingenuity of the Smappee technology.



1 Smappee CT Hub

The CT Hub is the main component of the monitoring system. You can connect up to 4 CT's or Rogowski coils to the CT Hub to measure different currents, ranging from 50A to 1000A. This allows for accurate submetering of (a group of) appliances. Daisy chain up to 7 CT Hubs to measure different installations up to a distance of 100 meters.

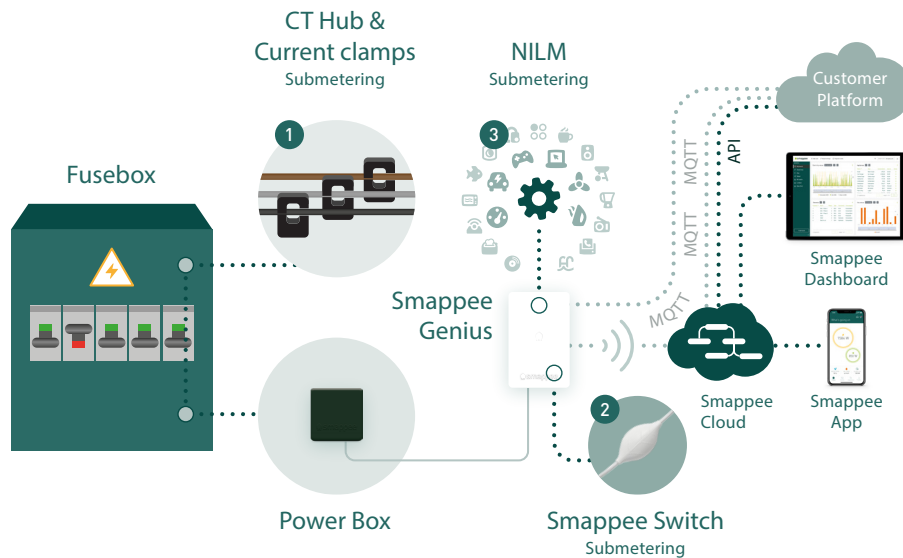
2 Smappee Power Box

The Power Box is the heart of the monitoring system as it provides power to all components. It measures the line voltage of the different connected phases and transfers the data via RS 485.

3 Smappee Genius

The Genius is the gateway between the monitoring system and the Smappee Cloud, ensuring secure data storage from different components. It also interacts with 3rd party components, Smappee Gas & Water and Smappee Switch. Thanks to these various options, Smappee Genius allows Smappee Infinity to take on the role of a Home or Building Energy Management System (HEMS & BMS) and guarantee optimized self-consumption.

The infinite possibilities of the Smappee architecture.



Access complete submetering.

Smappee offers the most complete and comprehensive set of submetering options available on the market allowing your company to lock in the level of accuracy, installation requirements and budget that best fits your specific needs.

- 1 Submeter right at the source: attach current clamps to the distribution panel. Depending on your electrical installation, you can measure up to 32 sub-circuits that consist of certain appliances or a group of appliances separately. Gather the most accurate energy data down to appliance level and find out more about appliances with a variable capacity, such as a heat pump or an EV charger.
- 2 Supplement the Smappee Infinity with the Smappee Switch. Besides remotely control appliances, Smappee Switch, our genuinely intelligent smart plug, submeters from the socket. Just connect the Switch between the socket and the appliance or a power strip. It accurately measures the energy consumption of the connected appliance or group of appliances separately (up to 16A).
- 3 Submeter via patented NILM (Non-Intrusive Load Monitoring). By attaching a clamp to your power cable, Smappee can use patented NILM technology to detect appliances and their estimated consumption. This load disaggregation technology records the energy signal from a building and separates it into data that can be assigned to specific appliances. This functionality is turned off by default.

Plug and play.

The installation of Smappee Infinity usually takes a professional installer 1,5 hours. Thanks to the compactness of the hardware, it easily fits into any fuse box. Once the system is up and running, the maintenance requires little effort, resulting in a low TCO. The installation is twofold with physical installation in the fusebox and configuration via the step-by-step installation wizard in the Smappee App or Dashboard. Prepare the set-up before you go to your customer for the physical installation to gain extra time.



Tailored data access and visualization.

Smappee offers a full range of interfacing options, with visualization of your data tailored to your needs.



Dashboard for professionals

This comprehensive web-based tool is fit for in-depth data analysis both graphically and numerically and offers the data in 5-minute, hourly, daily and monthly intervals. Add the cards to visualize the data for each site according to your preference, easily compare results and export the data you want to .csv format via a download button. The Dashboard includes first line support functionality, allowing you to help your clients remotely.

Mobile App

Our user-friendly consumer app is available for iOS and Android. It visualizes real-time energy data and graphs with historic overviews per day, week, month and year. Consumers can discover always-on power, energy guzzlers and learn more about their energy use and how much it costs. The app also allows control over connected appliances and to set scenes to automate energy flows to optimize energy efficiency. The app offers different levels of branding and customized message options for our partners.

API

Our well-documented API enables the easy integration with other EMS/BMS systems. This allows ESCO's and OEM's to combine Smappee data with other data, creating added value for their business and their customers.

Interoperability with IoT products.

Smappee continuously expands its ecosystem with compatible 3rd party products and services that you can also use to enrich your offer. Smappee is also open for partners to include our technology in their products or services. We work with the MQTT communication protocol to quickly develop new use cases and speed up integration.



Energy traffic control for optimized energy efficiency and auto-consumption.

A growing number of people have or are considering solar panels, EV, heat pumps and other environmentally friendly investments. These investments add complexity to energy installations and ask for an energy management system that manages your energy flows. Smappee can take on the role of energy traffic controller. It automatically manages the energy flows in the best possible way thanks to Smappee Switch or custom-created scenes. For example, why not use your solar power for your heat pump instead of sending it back to the grid or store it in your home battery for later? Automatically send less power to the charging station of your electric car when you start cooking so you do not risk blowing your fuses. This control over your energy flows enables optimized energy efficiency and auto-consumption, turning your home into a smart, decentralized power hub.

Specifications



Smappee CT Hub

Dimensions: 70 × 31 × 23 mm

Weight: 29 g

Working temperature:
-10 °C to 70 °C

Storage temperature:
-20 °C to 90 °C

Relative humidity:
0% - 95% non-condensing

EMC: IEC-61326-1,
FCC 47 part 15

Connectivity:
• Infinity loop compatible (RJ10 connector)
• 4 inputs for Smappee split core CT's (50 A, 100 A, 200 A, 400 A, 800 A) and Rogowski coils (1000 A)

Included accessories:
• RJ10 cable 40 cm



Smappee Power Box

Dimensions: 55 × 55 × 26.6 mm

Weight: 44 g

Working temperature:
-10 °C to 50 °C (Higher working temperatures possible depending on connected loads)

Storage temperature:
-20 °C to 90 °C

Relative humidity:
0% - 95% non-condensing

EMC: IEC-61326-1,
FCC 47 part 15

Power supply input:
90 – 264V AC

Power consumption: 5 W

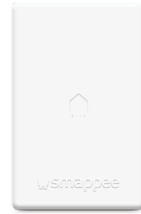
Voltage measurement inputs:
L1, L2, L3, N

Topology and maximum nominal ranges:
• Single phase: 240 Vrms
• Split phase: 120/240 Vrms
• 3 phase 3 wires: 240 Vrms
• 3 phase 4 wires: 240/415 Vrms

Frequency: 50/60 Hz

Connectivity:
• Modbus RS485 interface

Included accessories:
• Mounting plate (DIN or wall)
• Power cable 90 cm open-ended



Smappee Genius

Dimensions: 108 × 69 × 25 mm

Weight: 119 g

Working temperature:
-10 °C to 60 °C

Storage temperature:
-20 °C to 90 °C

Relative humidity:
0% - 95% non-condensing

EMC: IEC-61326-1,
FCC 47 part 15

Connectivity:
• Ethernet 100 BASE-T
• WiFi 2.4 GHz
• Bluetooth 5 (optional)
• 2G/3G/4G (USB Dongle)
• RF433 MHz/915 MHz

Included accessories:
• Mounting plate (DIN or wall)
• RJ10 cable 150 cm

Accessories



Smappee Switch

Functionalities:
• Remotely control appliances
• Measure exact use of appliance or group of appliances

Dimensions: 600 mm

Working temperature:
5 °C to 40 °C

Storage temperature:
-10 °C to 60 °C

Relative humidity:
0 to 80%, 5 °C to 40 °C

Protection class IP20

Connectivity:
RF433 MHz or 915 MHz (US)

Switching up to 16 A (country-specific)

Fitted with the most frequently used plugs (B, E, F, G,I, J, L, M) or open-ended

Configure up to 20 Switches with 1 Smappee Genius



Smappee Gas & Water


Functionalities:
• Track gas and water consumption
• Receive alerts about abnormal use or leaks

Power:
2 AA batteries

Connectivity:
• RF433 MHz (range 20-30 m without obstacles)
• Bluetooth 4.0 (range up to 7 m)

2 inputs for 2 sensors

Included accessories:
• 1 magnetic sensor (cable-length 1 m)
• 1 optical sensor (cable-length 1 m)



Save money for your clients
and grow your business
with one single system.

- Save energy and money for you and your clients
- Optimize auto-consumption
- Verify the impact of energy-saving measures
- Interoperable with IoT products
- Easy installation, low maintenance
- Tailored dashboard with real-time and historical data
- Protects your data and your privacy
- Modular, future-proof solution

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