

Addition for your wallbox

KeContact E10 Smart Energy Meter

The intelligent energy meter for optimised excess PV charging.



The KeContact E10 Smart Energy Meter measures the entire energy flow in your house bidirectionally and makes any excess solar power from your photovoltaic (PV) system available to your electric vehicle first, if possible, before it is fed into the grid. This is controlled via an interface between KeContact E10 and the KeContact P30 wallbox and ensures that your solar power is primarily consumed by your vehicle.

Making efficient use of your solar power

KeContact E10 enables intelligent monitoring for dynamic load management and excess PV charging.

Want to charge your electric vehicle in an uncomplicated and climate-neutral way with electricity from your own PV system? KEBA has the perfect solution with the KeContact P30 PV EDITION wallbox in combination with the KeContact E10 Smart Energy Meter. The KeContact P30 PV EDITION is specially designed to optimise the use of self-produced solar power for your electric car. Optimised excess PV charging is only possible through constant communication between the KeContact E10 energy meter and the wallbox. This results in dynamic, smart control – the difference between the current household demand and the current PV power is always made available in full to the electric car.

The advantages at a glance

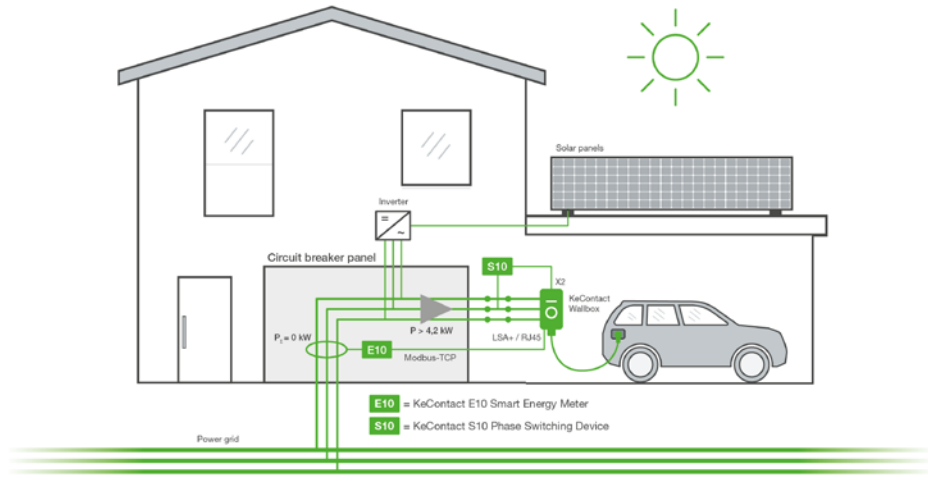
- // Measures the power consumption of the whole household
- // Fast charging when power is available
- // Enables efficient excess PV charging
- // Protection against overload
- // Reduction of grid connection fees
- // Easy installation and commissioning
- // High connectivity through standard interfaces

Product details

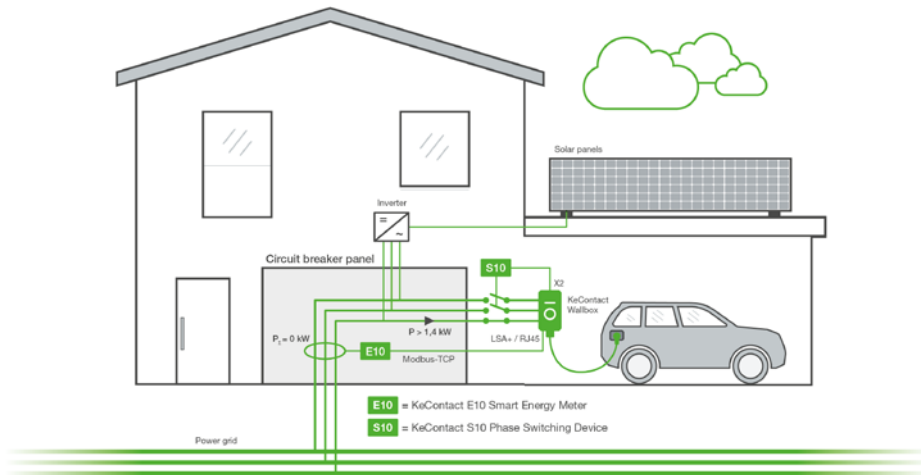
- // High connectivity through standard interfaces
- // Compact design (2 TE)
- // Power measurement of 1- or 3-phase consumers/ generators
 - Current, power factor
 - Voltage
 - Frequency
 - Active, reactive, apparent power
 - Active, reactive, apparent energy
 - Measuring accuracy 1% for active power and energy
 - max. measurable current per phase: 63 A
- // Measurement by means of current transformer (CT)
- // 4 quadrant counter
- // Interfaces/protocols: Modbus TCP
- // Measurement interval: 200 ms
- // Approved for use in the sub-distributor

KeContact E10

In practice



The KeContact E10 energy meter measures the power consumption of the whole household. When the sun shines, however, the PV system produces more power than is being consumed in the household. This is what is known as excess PV power. If this is above 4.2 kW*, the excess PV power is used to charge the electric vehicle with the KeContact P30 wallbox and is not fed back into the grid. With the optional KeContact S10 phase switching device from KEBA, the 4.2 kW* threshold can be lowered to 1.4 kW*!



As soon as clouds gather, the solar power to the wallbox is less than 4.2 kW in total*. The remaining excess, if any, is then no longer used for charging but fed back into the grid. If there is no more excess, electricity is drawn from the grid again. With the optional KeContact S10 phase switching device from KEBA, the 4.2 kW* threshold can be lowered to 1.4 kW*!

*Current electric vehicles require a minimum current of 6 A per phase to start a charging process, which corresponds to 1.4 kW in 1 phase and 4.2 kW in 3 phases.

Product designation	Phase	max. measurable current	Communication interface	LAN	Item number
KeContact E10 Smart Energy Meter Basic (1 phase)	1-phase	63 A	Modbus TCP	●	126 807
KeContact E10 Smart Energy Meter Basic (3 phase)	3-phase	3 x 63 A	Modbus TCP	●	126 804