

OlifeEnergy SmartMeter



A unit designed to maximize the charging speed that prevents circuit breakers from failures. It makes it possible to charge at low tariff (HDO) and from solar power excesses. It is suitable for households and small companies.

SmartMeter measures the current consumption of a building or its defined circuit, assessing the available input power for EV charging and regulating the maximum charging current of the station. OlifeEnergy SmartMeter controls a single OlifeEnergy charging station at a single connection (one or two charging points according to the type of charging station). The unit is mounted on a DIN rail in the main switchboard. The current is measured indirectly, by split-core current transformers. The communication with the charging station takes place via a serial line over RS485 bus bar, or optionally by means of a wireless module.

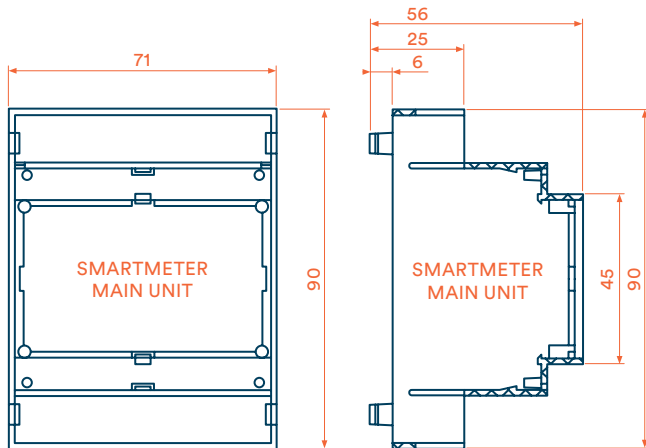
SPECIFICATION

Measured values	active power, energy, AC current, AC voltage
Rated voltage	AC 230/400 V
Rated current	125 A
Rated network frequency	50/60Hz
Communication protocol	Modbus RTU
Connection – phase voltage	2,5 mm screw terminal blocks
Communication connection	Metallic – RS485 – RJ45 (FTP, STP Cat5, Cat6) Wireless – wireless module - LoRa
Mounting	DIN rail
Width	4 DIN modules
Operating temperature	-25 °C to +40 °C
Operating humidity	5 % to 95 %
IP class	IP 20
Power loss	< 5 VA

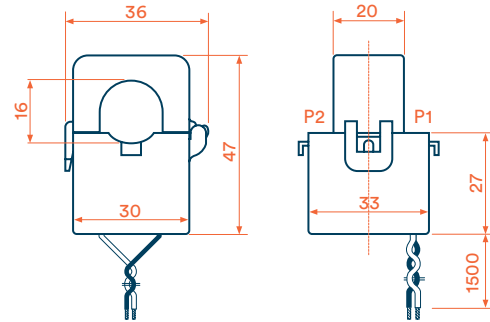
Optional wireless communication module for wireless communication between SmartMeter and OlifeEnergy charging station:

Frequency	865 MHz
Range	> 250 m in free space
Technology	LoRa

SMART METER



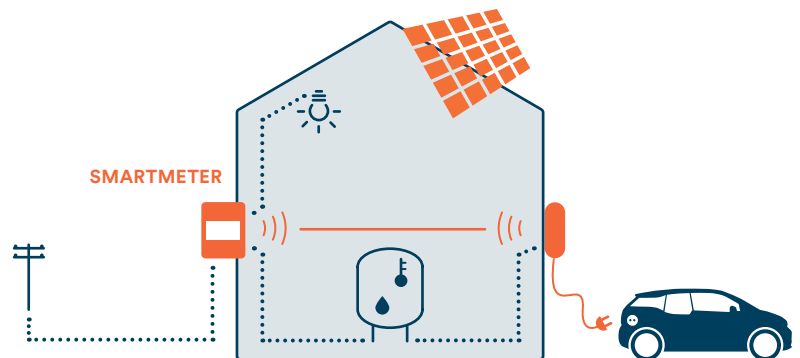
CURRENT MEASURING TRANSFORMER (3X)



(Dimensions in mm)

FUNCTION SCHEME

SmartMeter works with a single charging station. It prevents the circuit breaker from a circuit breaker release; it is able to process excesses from solar power station and to charge under favourable conditions based on HDO signal. It can be used mostly in households and small companies.



POWER CONTROL OF LARGER UNITS

For charging company EV fleet, and in large sites and apartment buildings it is possible to use OlifeEnergy SmartMeter in cooperation with an external control system. Together they provide stability of the complete system that avoids blackouts and penalties for exceeding maximum ¼ hour power consumption limits.

