Robotina d.o.o.
OIC Hrpelje 38
SI-6240 Kozina
Slovenia

1. Introduction

Up to 22kW of charging power - enough to charge electric vehicle for distance of 100km in 45 minutes (calculation made for consumption of 16kWh per 100km)
Modern design with IP54 & IK10 standard - suitable for indoor and outdoor use as well as customable charger colours
Coloured LED light indicates charging status - different colour for various charger states
Secure charging with remote locking option - use RFID card or QR code to unlock and start charging process
OCPP 1.6 communication supported
Eco charging

- Save by charging (eco charging) during off-peak hours
- Charge with surplus energy
- Priority charging at the highest possible power

Long range wireless power meters for installation without cabling - easy installation & monitoring of the energy consumption
Fully compliant with IEC 61851

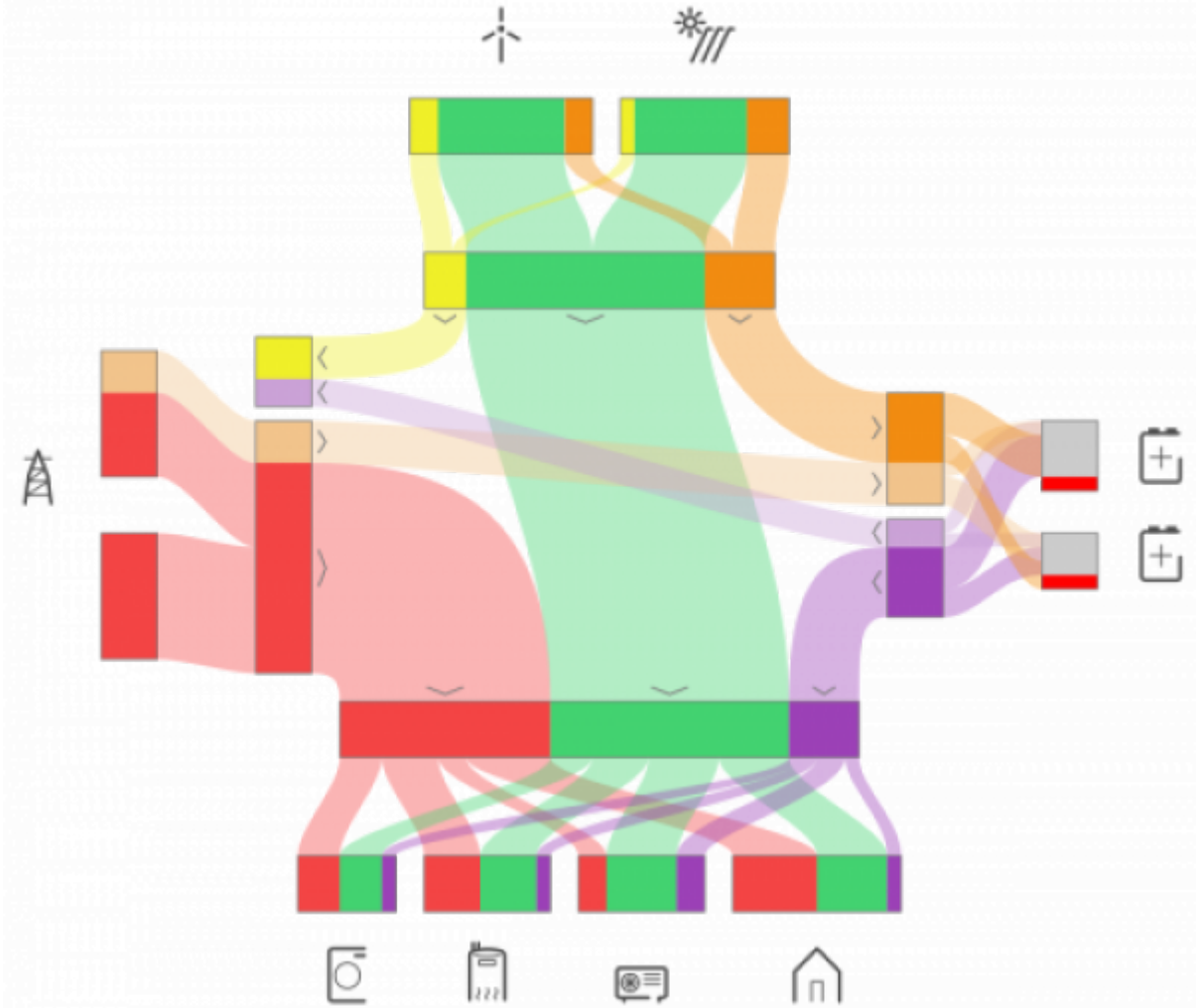
RDC Charger does not require connection to internet for operation !

1.1. RDC Charger & HEMS

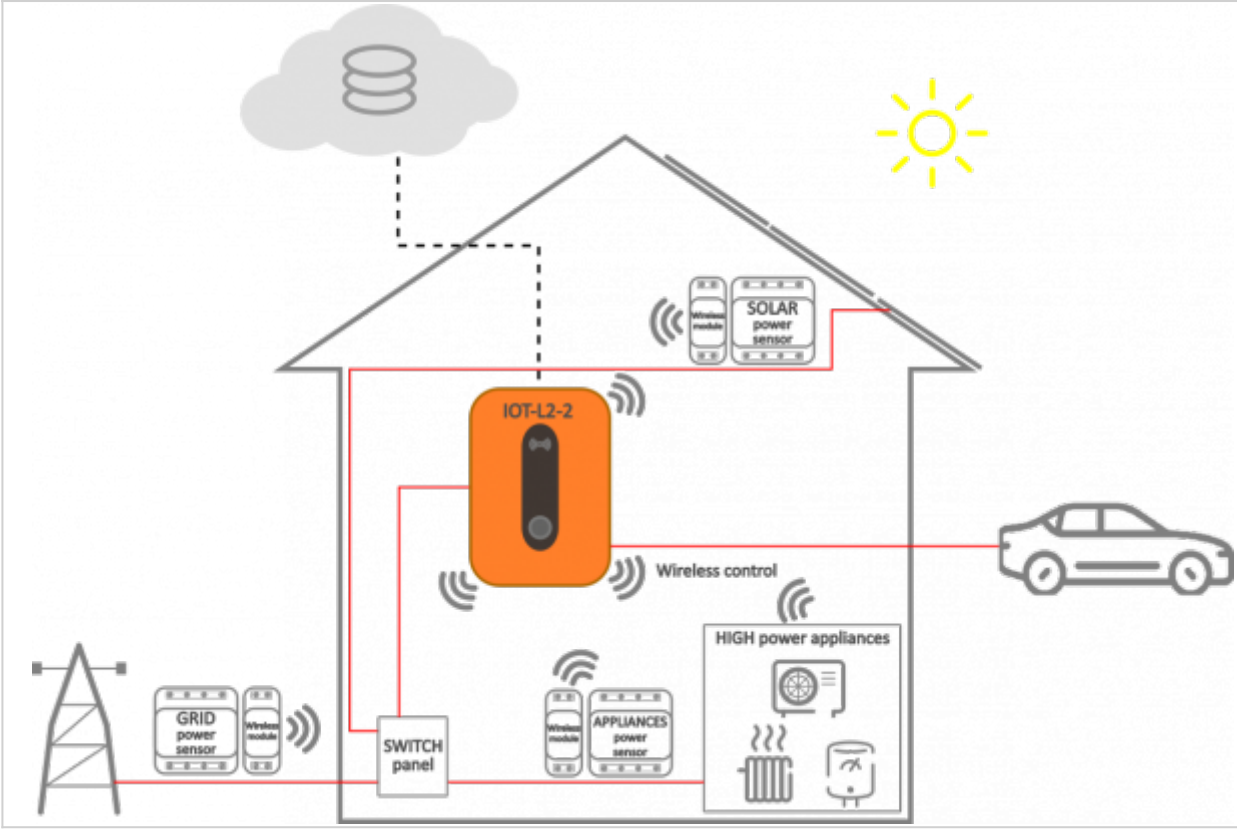
Home Energy Management System (HEMS):

- Monitoring electricity flows at home (consumption, production, and storage)
- Control and manage devices (producers, consumers, prosumers)
- Dynamic Load Management (DLM) keeps consumption power below grid fuses
- Control up to 8 RDC Chargers (EV fleet)
- Provide relevant information and help understanding energy flow
- Minimize cost of electrical energy

Energy flows



RDC Charger & HEMS overview



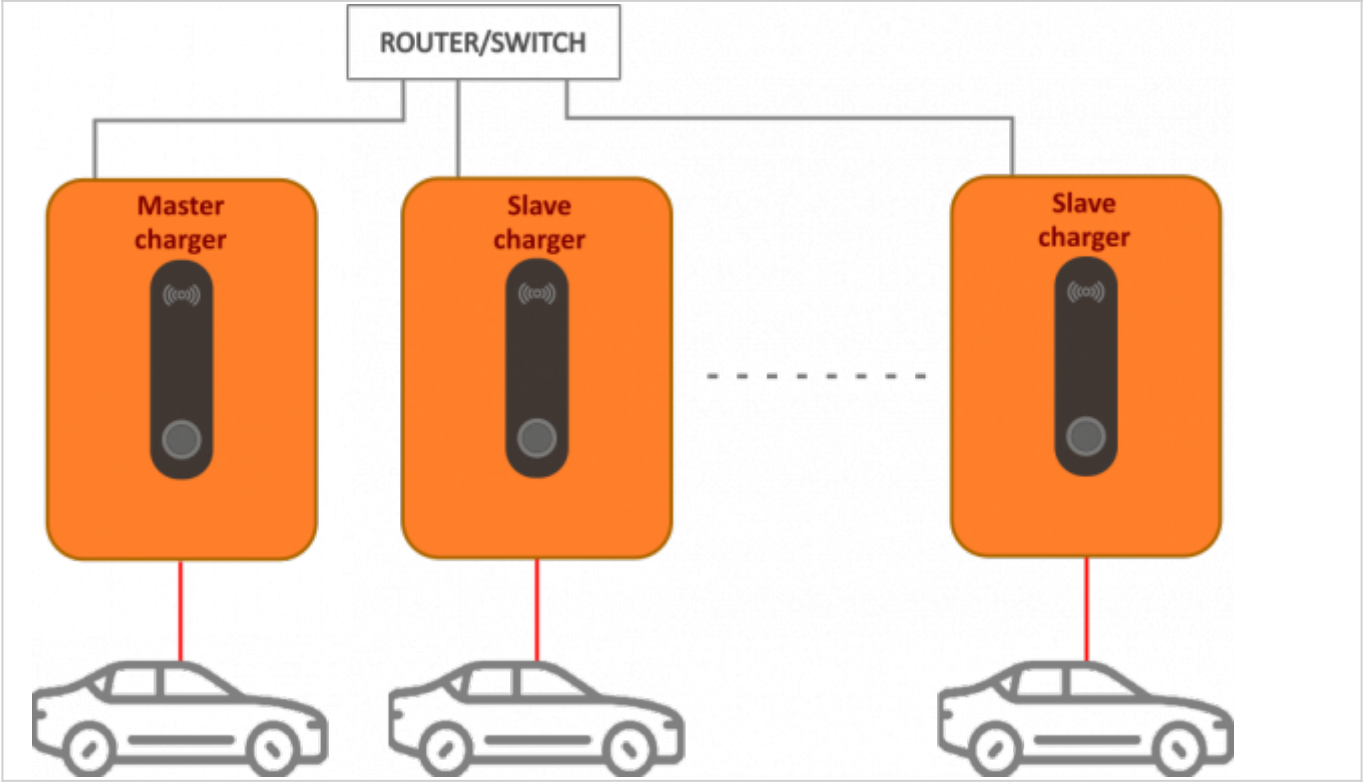
Note:

- IOT-L2-2 linker can be installed as external unit or is integrated into the RDC Charger.

1.2. RDC Charger & EV fleet

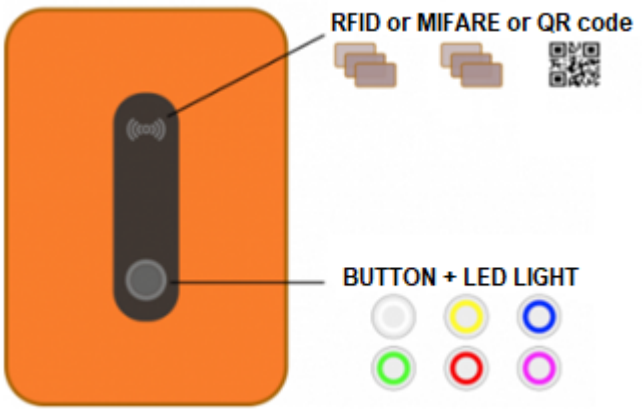
- **Control up to 8 RDC Chargers (EV fleet)**
- Suitable for multi-apartment buildings, hotels, etc.
- Only one charger is master, others are slave
- Master does optimal operation (Dynamic Load Management) of EV fleet within the building

EV fleet



1.3. Operation

- If EVSE is enabled and not locked, charging starts automatically as soon as vehicle is connected with power cable.
  Otherwise, enable EVSE with **short press** on button, by application or use RFID/MIFARE card /QR code.
- **short press** button toggle enable/pause charging
- **long press** button toggle priority/eco charging
- LED indicator for charging status



RFID, MIFARE or QR

- Unlock EVSE and toggle enable/pause charging

AUTHORIZATION REQUIRED

- EVSE need authorization to start charging
- charging is activated by RFID, MIFARE card /QR code or by application

ECO CHARGING

- Allows charging with lower power
- Charging at low tariff only (depending on tariff table settings)
- Charging by surplus energy

PRIORITY CHARGING

- Utilize all available power to charge as fast as possible
- Any eco charging settings are ignored
- In case of *Dynamic load management* EVSE(s) with *Priority charging* will be limited last