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

1. Introduction

Up to 220kW 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

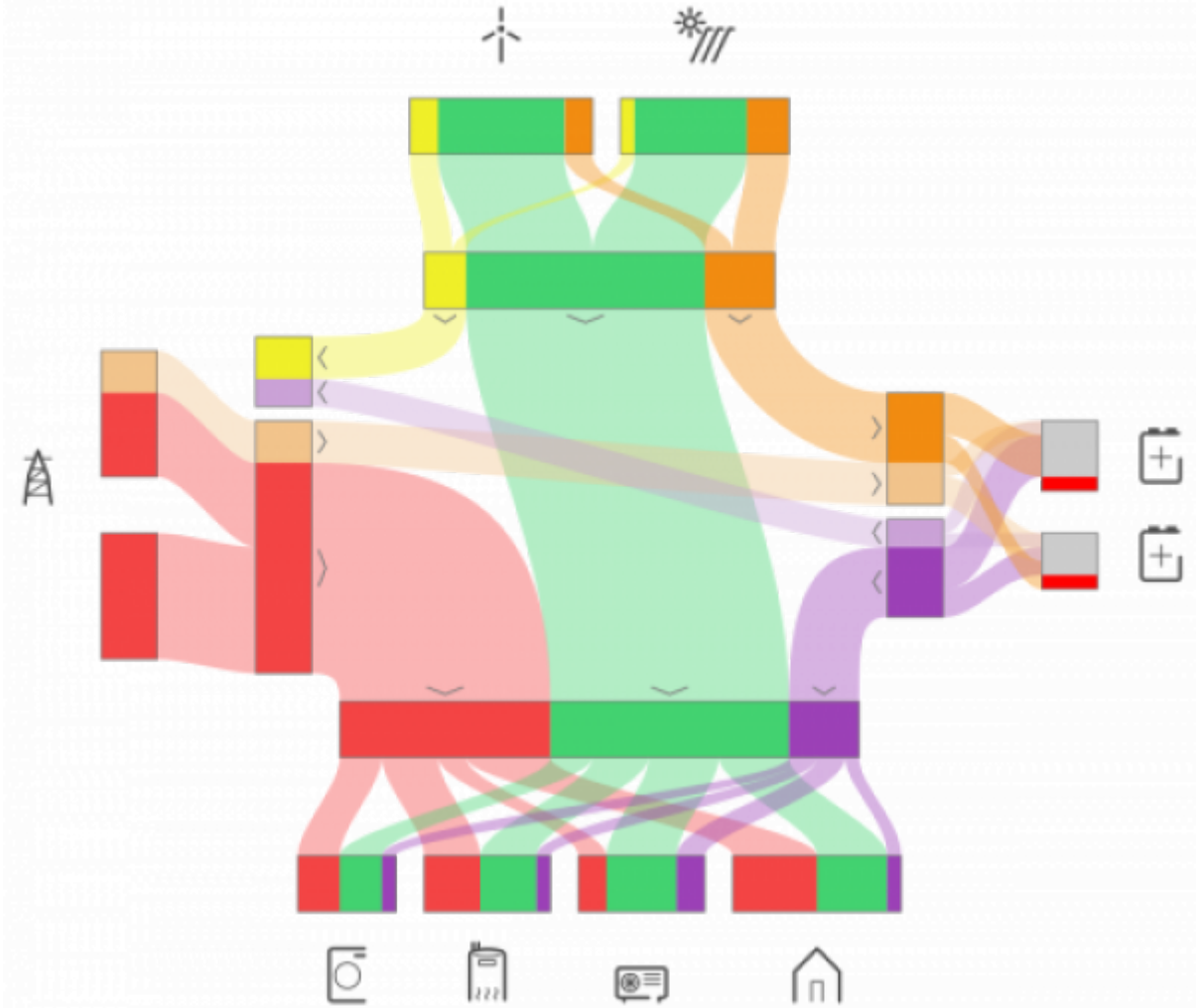
RDC Charger does not require connection to internet for operation !

1.1. RDC Charger & HEMS

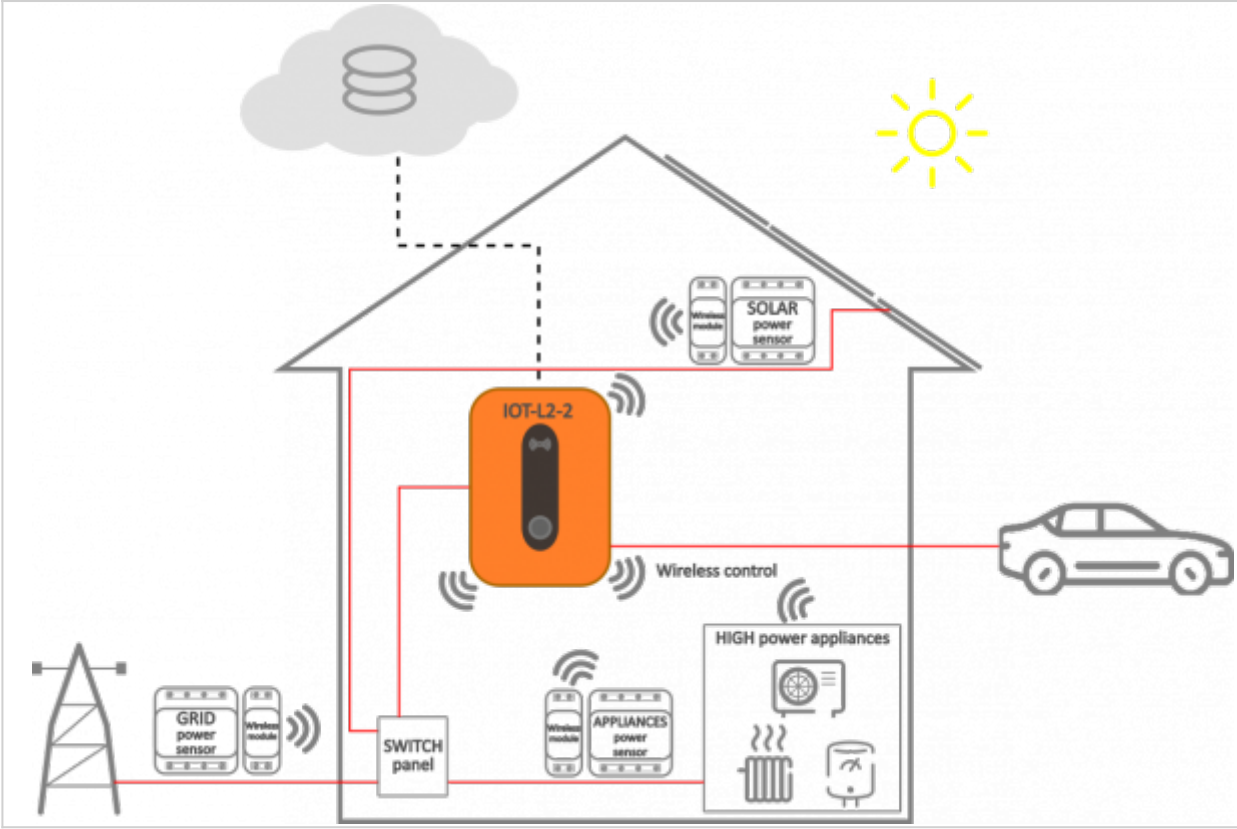
Home Energy Management System (HEMS):

- 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



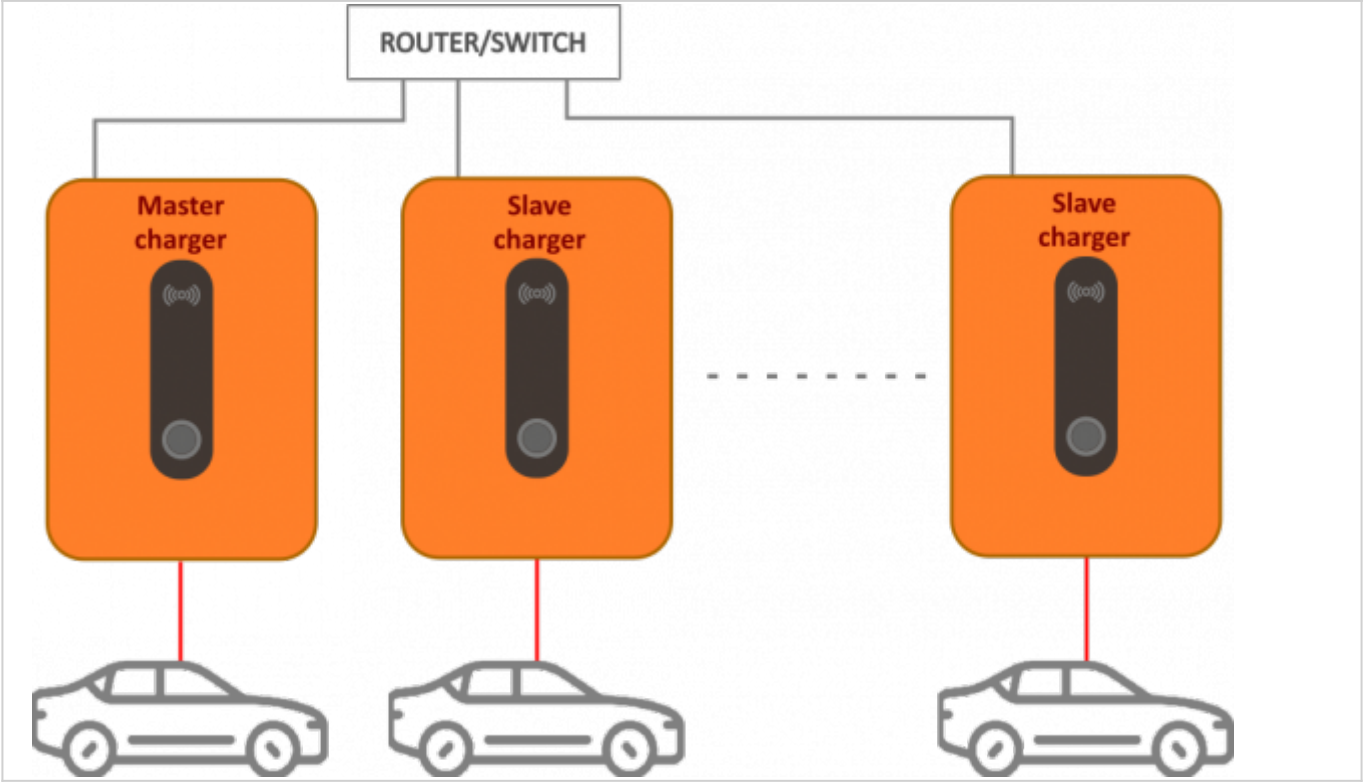
Note:

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

1.2. RDC Charger & EV fleet

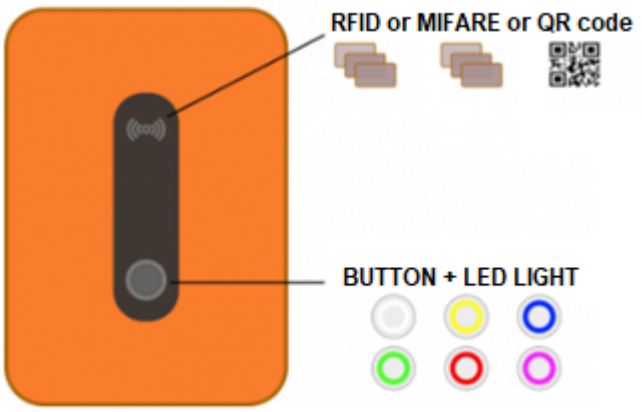
- **Control up to 8 RDC Chargers (EV fleet)**
- Suitable for multi-apartment buildings, hotels, etc.
- Only one charger is master, others are slave
- Master does optimal operation (Dynamic Load Management) of EV fleet within the building

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

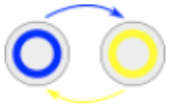
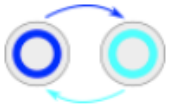
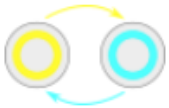
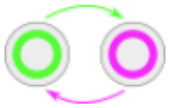
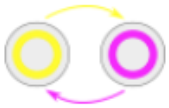
- EVSE need authorization to start charging
- charging is activated by RFID, MIFARE card /QR code or by application

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

LED indicator	On	Blinking
	Available	Available, authorization required
	Preparing (EV is not connected, authorization done) or suspended by DLM	Preparing or finishing (EV is connected, authorization required)
	Charging	/
	/	Charging ended or suspended by EV
	/	Priority charging
	/	Priority charging is suspended
	/	Reserved
	/	Reserved, preparing (EV is connected)
	/	Faulted (error) or unavailable