

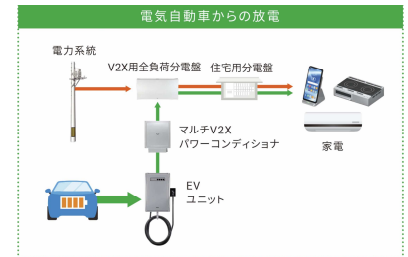
V2H: Omron Multi-V2X System(KPEP-A、KP-DDV) Teardown Report



EV Unit
(KP-DDV)

Power
Conditioner
(KPEP-A)

Products



System Diagram

KPEP-A

https://socialsolution.omron.com/jp/ja/products_service/energy/product/pm/kpep-a.html

Overview

The Omron V2X system can supply electricity in both directions, from the house to the vehicle and from the vehicle to the house. It consists of a power conditioner (KPEP-A) and an EV unit (KP-DDV). This report is a teardown of those two units.

Product features

- Power conditioner (KPEP-A): W450xD232xH562 21.5kg
Rated capacity 5.9kW, rated voltage AC202V (AC101V, single-phase 2-wire)
- EV unit (KP-DDV) : W430xD264xH660 26.0kg
Input/output power 5.9kW (AC side), DC input voltage range 150-450V,
maximum charge/discharge current 25A
- Charging compatible vehicles : Toyota Motor Corporation, Nissan Motor (Japan), Mercedes-Benz (Europe), BYD (China), Hyundai Motor (Korea)
- The EV unit mounting board includes the Infineon 600V GaN Power Transistor “IGOT60R042D1” and the Infineon Gate Driver IC “I1ED3122MU12H”.

Report Contents (57 pages)

- Product teardown, PCB measurement (size)
- Identification of key ICs on the PCB (including datasheet, if we found).
- PCBs and other parts connection
- Characteristic evaluation (Charging/Discharging/Standby power)

Report price

Delivered one week after order placement

Please contact us for report pricing.

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