

OBC+DCDC: Shinry Technologies HONDA N-VAN e: Teardown Report, Main Circuit Analysis Report

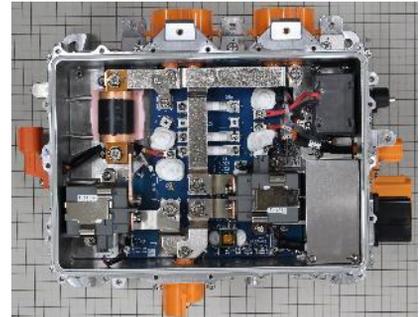


N-VAN e:

<https://www.honda.co.jp/N-VAN-e/>



Unit Appearance



Unit Interior

Report Overview

The Honda N-VAN e: was developed as the first step in Honda's electrification of light commercial vehicles, a segment well suited to EVs due to short routes, urban use, and the need for quiet, low-emission operation. Building on the proven N-VAN platform, Honda preserved its spacious, flat cargo area while integrating an electric powertrain offering about 245 km WLTC range. Development included real-world trials with Yamato Transport, gathering extensive data to refine durability and usability. Positioned as an affordable, practical EV, the N-VAN e: supports Honda's strategy to accelerate EV adoption in everyday business operations.

These reports are a teardown report and a main circuit analysis report of the On-Board Charger + DC-DC Converter unit. The main circuit analysis report focuses on the current path while excluding the control circuitry.

Product Features

- Range: 245km
- Unit Size: (W)308mm x (L)417mm x (H)225mm Weight: 19.1kg
- OBC: Vin: 85-264Vac (single-phase) HV Vout: 200-470Vdc Iout: 22A 6.6kW MAX
- DC-DC Converter: Vin: 210-470 Vdc, Vout: 10.5-14.5 Vdc, Iout: 110 A, 1.5 kW
- Lithium-ion battery (Capacity: 82.7Ah, Total voltage: 358V)
- CLLC Resonant Converter adopted as the OBC circuit configuration
- Synchronous rectification LLC resonant converter adopted as the DCDC converter circuit configuration

Report Content

1) Teardown Report (Disassembly Process + Key Components): 96 pages

- Product disassembly and measurement of weight and size of each component
- Survey of major installed components and main connection paths

2) Main Circuit Analysis Report (Current Paths Excluding Control Circuit): 153 pages

- Product disassembly and investigation of components mounted on the PCB
 - PCB circuit diagram and block diagram (main path)
 - Layer-by-layer wiring layout and circuit connection information (netlist and layout viewer software). Component-to-component connection tracking is supported.
-
- **Delivered one week after order placement**
 - **Please contact us for report pricing**

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