

HANGZHOU EV-TECH ON-BOARD CHARGER TEARDOWN REPORT

February 2020. This is a teardown report of the Hangzhouev-tech's on-board charger unit found in Great Wall Motor Co's ORA-R1 electric vehicle.



**ORA-R1 of Great Wall Motor
Company Limited**



On-Board Charger Unit

Vehicle overview

This vehicle is the lowest grade model among the EC cars produced by Great Wall Motor Co. The 33 kWh batteries are mounted under the floor of the vehicle. The peak output power of the Front-Engine Front-Drive (FF) system is 35kW (about 48hp).

OBC unit features

Input voltage: 90-264VAC; Battery charger : 200-420VDC, 12A (3.3kW)

DC-DC converter input voltage: 200-420VDC / Output voltage: $14 \pm 0.1V$

The OBC has a three-layer housing. The main elements of the upper layer are the junction box board (JB) and a power relay. The middle layer consists of a charger and a DC-DC converter circuit composed of a control board and a main board. A cooling channel is provided within the lower layer (bottom side of the housing).

Report content

The 76-page report includes teardown process images and BOM list for each PCB.

Note: The report price may change over time. For current price contact info@ltecusa.com.

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