CE39

EV Diagnose, Equalize & Charge/Discharge Equipment

CE39 is the industry's first four-in-one EV diagnostic and maintenance equipment that integrates vehicle diagnostics, battery cell equalization and module charging/discharging.

Supports whole-vehicle diagnostics for electric vehicles

Supports offline testing of batteries, motors, electronic controls, compressor, DCDC and OBC

Intelligent and efficient equalization and charging/discharging

Supports simultaneous operation of diagnosis and equalization/charging/discharging

Diagnose Equalize Charge Discharge

Four functions in one, Super cost-effective

Features

1. Supports simultaneous operation of diagnosis and equalization and charging/discharging.
2. Supports whole-vehicle diagnosis, covering full-system detection for over 95% of electric vehicle models.
3. Supports offline testing of batteries, motors and electronic controls.
4. Supports offline testing of compressor, DCDC and OBC.
5. Supports intelligent equalization technology, enabling synchronous equalization of 24 battery cells.
6. Supports 40A high current, significantly improving work efficiency.
7. Supports remote monitoring of equipment, allowing real-time tracking of operational status.

Functions

1. Comprehensive whole-vehicle diagnosis: Covering over 95% of electric vehicle models, it supports full-function diagnostics, including code reading, code clearing, data stream reading, actuator tests, and special functions. It enables real-time data stream monitoring and visually presents the communication network and fault points through a vehicle topology diagram, ensuring precise diagnosis and fault localization.

2. Professional testing and maintenance for battery, motor, electric control, compressor, DCDC, and OBC: Supports offline diagnostics for high-voltage core components such as DC converters, onboard chargers, air conditioning compressors, PTC heaters, and motor controllers. It enables offline reading of data streams and fault codes.

3. Built-in control board fault code repair guidelines: providing troubleshooting ideas, circuit schematics, control board topology diagrams, guided repair..

4. Battery pack deep inspection: Supports reading SOC/SOH, individual cell/module voltage, temperature, and fault information. Automatically calculates key indicators such as total voltage and voltage difference, and marks abnormal data.

5. Precise cell equalization: It supports synchronous equalization of 24 battery cells and is compatible with mainstream battery types such as ternary lithium, lithium iron phosphate, and lithium titanate.

6. High-current efficient charging and discharging: Supports 40A charging and 20A discharging currents, quickly adjusts the battery cells to the target voltage, and meets the fast charging and discharging requirements of the battery pack.

7. Tablet Collaborative Interconnection: The lightweight host is equipped with a smart tablet, which supports simultaneous diagnosis and equalization operations, and real-time monitoring of equalization progress, charge and discharge curves, and device status.

8. Multiple security protections: Built-in overvoltage, undervoltage, overcurrent, short circuit, reverse connection and over-temperature protection mechanisms ensure the safe operation of the device and battery.

9. OTA remote upgrade: Support remote firmware upgrade and function module iteration.

Tablet parameters

Display	10.1 inches, resolution 800×1280
CPU	2.0GHz octa-core
Memory	4GB
Storage	128GB
System	Android
Wi-Fi	2.4GHz/5GHz Dual Band
Battery	9360mAH/3.8V lithium battery

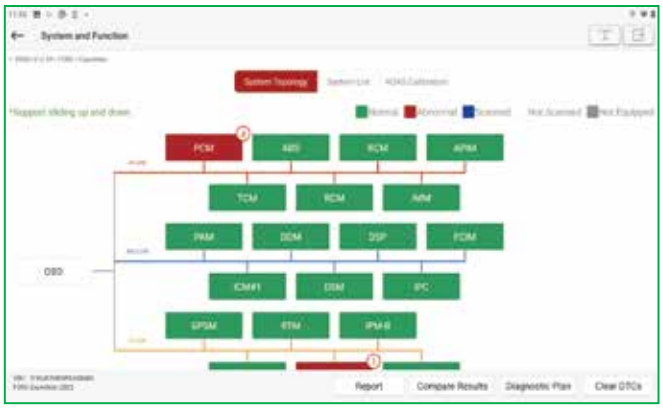
Charging method	Type-C, contact charging
Interface	USB2.0-TypeA×1, USB2.0-TypeC×1, DC-IN port, charging base contact
Communication	Wi-Fi, Bluetooth, USB
Size	295.9×196×38.6mm
ED BOX operating voltage	DC 9~18V
ED BOX communication method	Bluetooth
ED BOX size	112×72.5×32.5mm

Host parameters

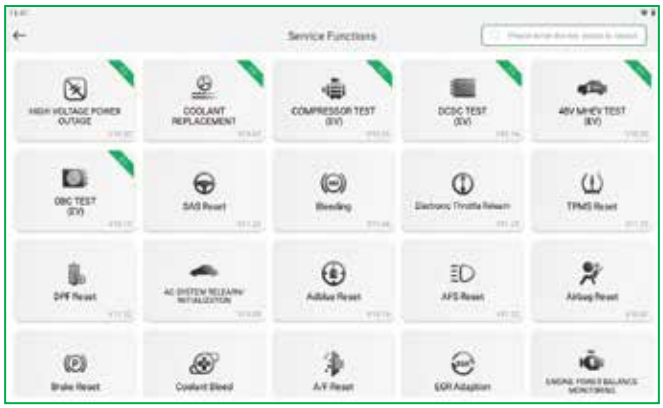
Power input	AC 90~264V/50-60Hz
Battery module voltage range	DC 0-112V
Cell voltage range	1.6~5V
Charging current range	0.5~40A, maximum power 3.2kW
Discharge current range	0.1-20A, maximum power 2.4kW
Single cell voltage accuracy	±0.1%FS±5mV (maximum range 5V)
Single cell current accuracy	±0.5%FS±0.05A (maximum range 20A)
Communication	Wi-Fi, Bluetooth
Number of equalization channels	2×12

Equalization interface	12PIN×1, 13PIN×1
Charging control	Constant voltage charging, constant current charging
Discharge control	Constant current discharge, constant voltage discharge
Battery module charge and discharge protection	Battery module overcharge and over-discharge protection, over-temperature protection
Reverse polarity protection	Support
Over-temperature protection	Cooling box over-temperature 85°C protection
Host protection	Over-temperature, over-current, and current out-of-control trigger shutdown protection
Abnormal protection	Power line power failure, main cable power failure

Whole-vehicle diagnosis, topology diagram for quick fault location.



Battery pack in-depth detection and offline testing for DCDC, OBC and PDU.



Intelligent balancing maintenance, 24 battery cells synchronous balancing.

High current and efficient charging and discharging, fast adjustment to target voltage.