

P01 PRO

EV Detection Tool



P01 PRO is a "special inspection level" electric vehicle detector that integrates battery pack testing, whole vehicle system testing, anti-theft, ADAS, and common maintenance functions.

-  **Deeply customized AAOS system, supports application split screen, and can open two applications at the same time**
-  **Pre-installed SmartSafe device applications, Split screen for voice/video communication**
-  **Battery pack "special inspection level" inspection, comprehensive vehicle series and full system inspection**
-  **Standard patented battery pack special detection connector**
-  **New SLC detection connector, support LAUNCH remote detection ecology**

Features

- Wide model coverage, covering the full system diagnosis of more than 95% of electric vehicle models, and is continuously updating.
- Supports offline testing functions of multiple components and multiple maintenance functions.
- Supports 4 battery pack connection methods, special connector for patented battery pack, high detection efficiency.
- Topology map display, and provides vehicle topology map, clearly displays vehicle communication, and quickly locates fault points.
- Standard remote diagnostic box, support super remote, independent WIFI communication.
- The AAOS system is deeply customized and supports split-screen display of applications. During vehicle detection, the browser can be used to query data in split-screen mode.
- Intelligent connection of multiple devices, supporting four-wheel alignment, tire tread detection, ADAS, anti-theft, and EV detection and maintenance equipment.
- Supports the merging of multiple device reports, and different detection reports of the same vehicle can be merged into a comprehensive report;
- 13.3-inch high-definition display screen, featuring a brand-new industrial design, utilizes state-of-the-art materials and processes, with an ultra-light and ultra-thin body.







Parameters

Host		VCI	
Display	13.3inches(1920×1080)	CPU	Cortex-A7 + Cortex-M7
CPU	2.0GHz Octa-core	Memory	256MB
Memory	8GB	Storage	8GB
Storage	256GB	System	Linux
System	AAOS(Android 10)	Display	3.97 inches, resolution 320×480
Wi-Fi	2.4GHz/5GHz dual-band dual Wi-Fi	Operating Voltage	DC 9~36V
Camera	Front 8MP, Rear 13MP	Wi-Fi	2.4GHz/5GHz dual frequency
Battery	13600mAh/3.8V	Interface	Type B, RJ45, OBD-II 16, DC-IN
Interface	USB, Type C, DC-IN, Mini HDMI	Communication	Local diagnostic modes: Wi-Fi, Bluetooth, USB
Communication	Wi-Fi, Bluetooth, USB	Remote Diagnostic Mode	Ethernet, Wi-Fi
Dimensions	355.4×227×34.45mm	Dimensions	192×107.2×42.5mm

Functions

- Vehicle inspection:** Supports full-system and full-function detection of electric vehicle models such as DTC reading, DTC clearing, data stream reading, action test, and special functions, and supports remote collaboration, super remote, and trial feedback functions.
- Battery pack detection:** Supports battery pack detection for passenger vehicles, commercial vehicles, and battery brands. It can read SOC/SOH, cell/module voltage, temperature, battery pack status and fault information, and automatically calculate total voltage, voltage difference, maximum/minimum Voltage and other key indicator data are automatically labeled with abnormal data.
- Maintenance function:** Supports offline testing of DC-DC converters, OBC car chargers, air conditioning compressors, 48V light hybrid components, etc. Supports maintenance light reset, throttle matching, brake pad replacement, steering angle reset, anti-theft matching, ABS exhaust, injector coding, DPF regeneration, sunroof initialization, gearbox matching.
- Anti-theft matching:** Supports vehicle anti-theft matching, anti-theft chip reading and writing, anti-theft ECU reading and writing, key matching and other functions.
- ADAS calibration:** Supports ADAS system calibration for many models in Europe, America, Asia, and China, and is compatible with ADAS PRO+, ADAS MOBILE, ADAS LITE, ADAS RADAR 3IN1 and other devices.
- User Center:** Supports registering an account, viewing connected devices, and activating diagnostic connectors.
- Upgrade Center:** Supports online upgrade of application software, vehicle model software, and firmware software, and can manage APP and vehicle model software.
- Report Center:** Supports viewing reports generated by all applications, and can filter and merge reports to generate comprehensive reports.
- Tire equipment application:** Supports four-wheel alignment, and tire tread detection functions, and can be connected to WA913 and TTM113.
- Application of EV equipment and tools:** Supports equalization testing, wireless equalization, charge and discharge, equalized charge and discharge, air tightness testing, oscilloscopes, multimeters, voltmeters, digital power supplies, insulation tests, current clamps, and Videoscopes.
- System application:** Supports camera, gallery, calculator, calendar, email, file management, browser, and system settings.

Battery Pack Detection Special Adapter List

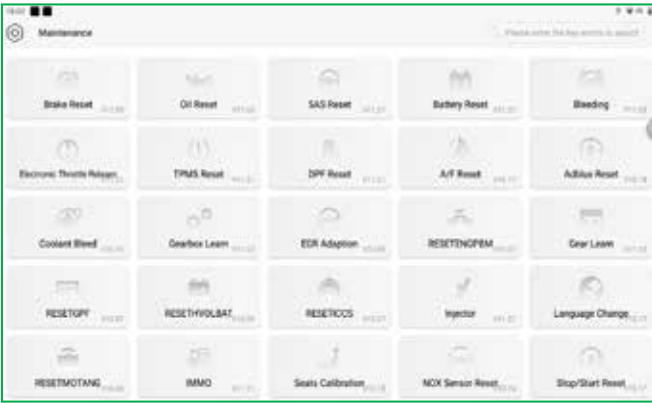
	TL-101R	BYD TANG DM
	TL-102R	BYD HAN EV
	TL-127R	BYD D1
	TL-124B	Tesla Model 3
	TL-152B	Tesla Model 3
	TL-153B	Tesla Model S & X

Four Battery Pack Detection Methods



Supporting specialized adapter connection, quick charging port connection (Only for Chinese models) , jumper connection, and OBD connection, these four methods offer users a broader range of choices.

Supports offline testing capability



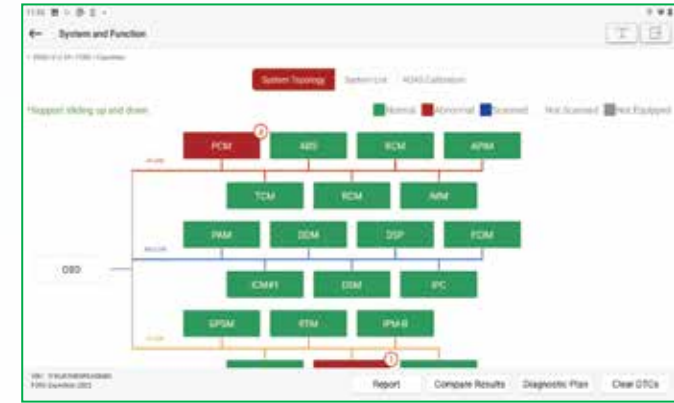
Supports offline testing for components like air conditioning compressors, onboard chargers (OBC), DC-DC converters, and 48V mild hybrid components

Support LAUNCH remote detection ecology



The device initiates a remote diagnosis application, and technical support personnel remotely control the equipment to solve complicated problems. It also supports the release of requirements through super remote diagnosis and pays to find online technicians to quickly solve the problem.

Topological graph for quick fault localization



Provide the whole vehicle topological graph, clearly display the vehicle communication network, and quickly locate the fault point

Coverage for Over 95% of EV Models



Currently, it covers battery pack testing and full-system testing for over 95% of EV brands, with ongoing updates.

P01 EV Detection Tool

P01 is a professional detection level EV detection tool that integrates battery pack detection, whole vehicle system detection, and common maintenance functions.



Scan for more information

- Battery Pack "Professional Grade" Testing
- Dedicated Connector for Battery Pack Testing
- Offline Testing Capability
- Comprehensive Vehicle Series and Full System Inspection



Features

- Cover more than 95% of the whole system of EVs, and keep updating;
- Supports testing of DC/DC converter, onboard charger, high-voltage distribution box, and other common maintenance functions
- Provide four battery pack connection methods, including OBD, special connector, jumper connection and fast charging port connection;
- Equipped with battery pack professional connector as standard and integrated aviation plug connector to improve detection efficiency;
- Support ADAS calibration, tread detection, insulation tester, oscilloscope, digital power supply, multimeter, current clamp, video-scope and other expansion modules;
- Dual WIFI design, the host is connected to the VCI with independent WIFI, and the VCI does not affect the host to access the Internet when it is working;
- Provide the whole vehicle topological graph, clearly display the vehicle communication network, and quickly locate the fault point.

Parameters







Host	
Display Size	10.1inches(1920x1200)
CPU	2.0GHz Octa-core
Memory	4GB
Storage	128GB
System	Android11
Wi-Fi	2.4GHz/5GHz
Camera	Front 8MP、Post 13MP
Battery	3.8V/9360mAH
Interface	Type A、Type C
Communication	Wi-Fi、BT、USB
Product size	318×40.5×246.5mm

VCI	
Voltage	DC9~36V
CPU	Cortex-A7 + Cortex-M7
Memory	256MB
Storage	8GB
System	Linux
Wi-Fi	2.4GHz/5GHz
Communication	Wi-Fi、BT、USB
Interface	USB Type B、OBD II -16、DC-IN
Product size	197×40×83mm

Functions

- 1. Battery pack detection:** support battery pack detection of passenger car and commercial vehicle battery brands, read SOC/SOH, monomer/module voltage, temperature, battery pack status and fault information, and automatically calculate total voltage and differential pressure , key index data such as the highest/lowest voltage, and automatically mark abnormal data;
- 2. Vehicle detection:** support the whole system and full-function detection of EVs, such as code reading, code clearing, data flow reading, action testing, and special functions;
- 3. Fast charging port detection:** connect the fast charging detection gun with Bluetooth, and read the battery pack data through the fast charging port of the vehicle to realize fast detection of the battery pack;
- 4. Maintenance function:** support offline testing of DC-DC converters, OBC car chargers, air conditioner compressors, 48V light hybrid components, etc., and support 30+ common special functions;
- 5. ADAS calibration:** supports ADAS system calibration of many models in Europe, America, Asia, and China, compatible with ADAS PRO+, ADAS MOBILE, ADAS LITE, ADAS RADAR 3IN1 and other equipment;
- 6. Test report:** support the display of battery pack test report, vehicle test report, ADAS calibration report, etc;
- 7. Software upgrade:** support online upgrades, including model software, firmware software, and APP software;
- 8. Module expansion:** support tread detection, digital power supply, oscilloscope, multimeter, current clamp, insulation test, endoscope and other functional expansions.

Battery Pack Detection Special Adapter List

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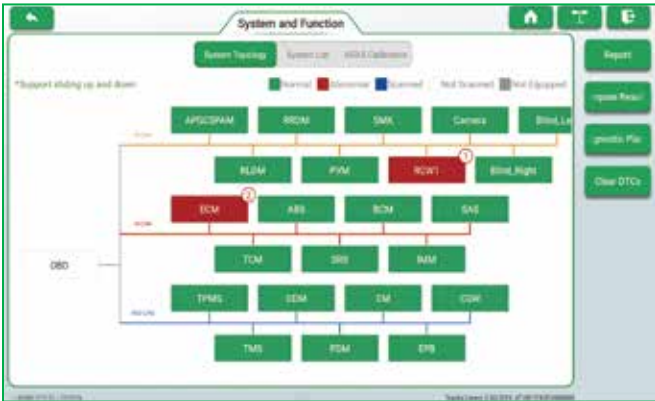
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Supports offline testing capability



Supports offline testing for components like air conditioning compressors, onboard chargers (OBC), DC-DC converters, and 48V mild hybrid components

Topological graph for quick fault localization



Provide the whole vehicle topological graph, clearly display the vehicle communication network, and quickly locate the fault point

Dedicated Battery Pack Testing Software



Built-in dedicated battery pack testing software, supports battery pack testing based on car brand or battery manufacturer, allowing users to access battery pack testing functions more quickly

Coverage for Over 95% of EV Models



Currently, it covers battery pack testing and full-system testing for over 95% of EV brands, with ongoing updates.

P03

EV Integrated Detection Tool



Scan for more information

P03 is a professional detection level EV integrated detection tool that integrates battery pack detection, whole vehicle system detection and common maintenance functions. And built-in 4 common detection tools, including oscilloscope, multimeter, insulation tester and current clamp.

- Battery Pack "Professional Grade" Testing**
- Dedicated Connector for Battery Pack Testing**
- Integration of Four Types of Testing Tools**
- Comprehensive Vehicle Series and Full System Inspection**



Features

1. Built-in 4 common detection tools, including oscilloscope, multimeter, insulation tester and current clamp. Covering common measurement requirements in maintenance scenarios of EV battery pack;
2. Cover more than 95% of the whole system of EVs, and keep updating;
3. Supports testing of DC/DC converter, onboard charger, high-voltage distribution box, and other common maintenance functions;
4. Provide four battery pack connection methods, including OBD, special connector, jumper connection and fast charging port connection;
5. Equipped with battery pack professional connector as standard and integrated aviation plug connector to improve detection efficiency;
6. Support ADAS calibration, tread detection, insulation tester, oscilloscope, digital power supply, multimeter, current clamp, video-scope, and other expansion modules;
7. Dual WIFI design, the host is connected to the VCI with independent WIFI, and the VCI does not affect the host to access the Internet when it is working;
8. Provide the whole vehicle topological graph, clearly display the vehicle communication network, and quickly locate the fault point.

Parameters

Host		VCI	
Display Size	10.1inches(1920x1200)	Voltage	DC9~36V
CPU	2.0GHz	CPU	Cortex-A7 + Cortex-M7
Memory	8GB	Memory	256MB
Storage	256GB	Storage	8GB
System	Android10	System	Linux
Wi-Fi	2.4GHz/5GHz	Wi-Fi	2.4GHz/5GHz
Camera	13.0 MP	Communication	Wi-Fi, BT, USB
Battery	3.7V/18720mAH	Interface	USB Type B, OBD II -16, DC-IN
Interface	Type A, Type C	Size	197×40×83mm
Communication	Wi-Fi , BT, USB		
Size	440×120×298mm		

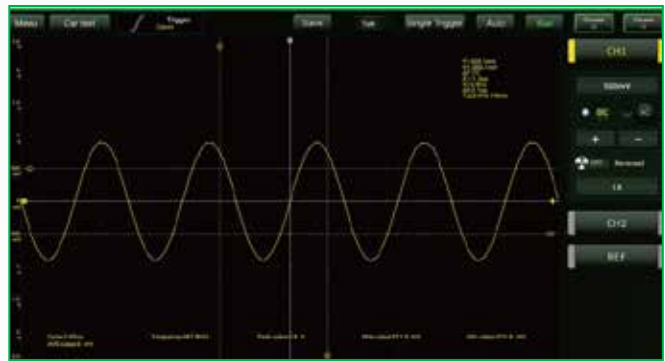
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Integration of four detection tools



Oscilloscope



Multimeter



Insulation Tester



Current Clamp

Battery Pack Detection Specialized Adapters Innovatively supports quick charging port testing



Equipped with specialized adapters for various battery pack brands, no need for complex jumper operations, plug and play for instant testing.



By connecting to the quick charging port and reading battery pack data, rapid battery pack testing is achieved (Only for Chinese models)

Dedicated Battery Pack Testing Software



Built-in dedicated battery pack testing software, supports battery pack testing based on car brand or battery manufacturer, allowing users to access battery pack testing functions more quickly

Coverage for Over 95% of EV Models



Currently, it covers battery pack testing and full-system testing for over 95% of EV brands, with ongoing updates

VM13

Wireless Voltage Monitor



Scan for more information

VM13 is a high-precision, wide-range intelligent DC voltage measuring instrument that supports multi-channel wireless network connections.

Multi-point Voltage Wireless Collection, Integrated Display

Support Voltage Change Curve, High Sampling Rate

Supports Up to 48 Channels Simultaneous Wireless Network Connections

DC 0~1000V Measurement, Accuracy Reaches 0.5%FS



Features

- 1. Wide range measurement, automatic switching range selection.
- 2. High-precision measurement, digital real-time display of voltage value.
- 3. Supports multi-channel wireless networking and can display the voltage values of multiple devices/circuits under test at the same time (up to 48 supported).
- 4. Supports voltage curve graph, allowing real-time viewing of multi-channel voltage change curves.
- 5. Standard probe and alligator clips, can be selected according to usage scenarios.
- 6. The body is compact and lightweight, with a built-in magnetic device that can be adsorbed on the surface of iron objects.
- 7. Built-in rechargeable lithium battery with long battery life.

Functions

- 1. Voltage measurement:** Supports 0~1000V DC voltage measurement with a measurement accuracy of 0.5% FS.
- 2. Multi-channel networking:** Supports networking with terminals such as ST13, displays voltage change curves, and can connect up to 48 channels at the same time.
- 3. Quick connection terminal:** It supports scanning the QR code on the fuselage or manually selecting and adding connection terminals in batches.
- 4. Abnormal alarm:** Communication status indicator, battery power indicator, low battery alarm.
- 5. reminder and find:** Supports reverse search of voltmeter, buzzer reminder and indicator light flashing.

Parameters

Measurement Range	DC 0~1000V	Battery	3000mAh/3.7V
Measurement Accuracy	0.5%FS	Charging Interface	Type C
Resolution	10mV	Working Temperature	0~45°C
Display Method	6-digit digital tube	Storage Temperature	-10~60°C
Communication Method	BT, Wi-Fi	Dimensions	78×100×31mm

Voltage display, can be used independently



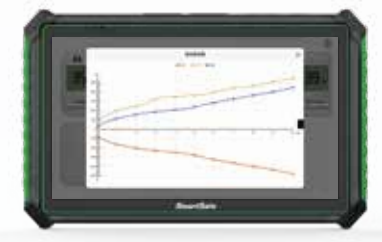
Wireless networking, supports up to 48 channels



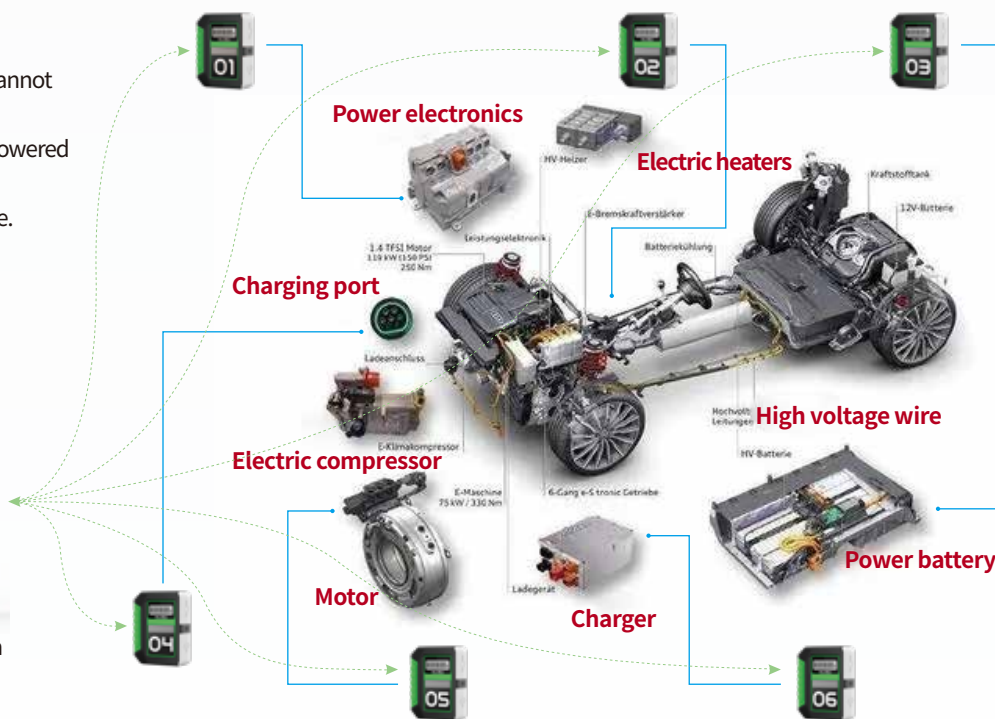
Comprehensive data, increase troubleshooting speed

Vehicle troubleshooting

- Precharging failed and high voltage cannot be supplied
- Quickly locate faults that cannot be powered on due to high voltage
- cannot charge by fast and slow charge.
- Motor temperature failure
- PDU control box failure
-



Summary of multi-channel voltage data



Application cases

Prima cannot start



Multiple startups are normal

- There are total positive and total negative relay pull-in actions at startup
- No trouble code

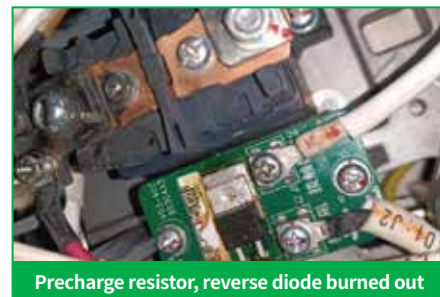
PDU+MCU is difficult to judge



Many possible failures

- There is a problem with the key wake-up line or the wake-up relay
- There is a problem with the brake switch or connector wire
- There is a problem with the VCU acquisition connector or circuit
- There is a problem with the total positive and total negative relays, there is no bus voltage
- There is bus voltage and pre-charging failed
- There is a problem with the motor control bus collection
- Motor control board is defective
-

Quick detection of multiple points in the same test



Simultaneous detection of multiple nodes

- For the total positive and negative output terminals of the battery, use a wireless voltmeter
- For the total positive and negative input terminals of the motor, use a wireless voltmeter
- DCDC positive and negative input terminals, use a wireless voltmeter
- Start the positive and negative terminals of the battery and use a wireless voltmeter
- The key wake-up line, use a wireless voltage meter

ECC01

Current Clamp



Scan for more information

ECC01 is an EV circuit system testing tool that supports DC voltage, DC current, and AC current testing. It can complete circuit testing in a non-contact manner under power-on conditions.

Simple and Safe

Fast and Accurate

Stable Data

Compact and Portable



Features

1. Non-contact DC test, which can be detected when power is on, simple and safe;
2. Anti-electromagnetic interference, providing stable and reliable measurement data;
3. Automatically select the range, combined with the noise reduction algorithm, fast and accurate measurement;
4. Ergonomic design, small and portable.

Functions

(Need to be used with P01/P03/ST13/ST10 and other equipment)

1. Support DC voltage/current test, dual-mode display;
2. Support AC current test;
3. Support range selection;
4. Support real-time display of measured value, maximum value, minimum value, peak-to-peak value;
5. Support measurement waveform saving and playback.

Parameters

Test functions	DC test, DC voltage test, and AC test
Battery	9V dry cell
Current test methods	Clamp CT, non-contact measurement
Jaw dimension	φ16 mm×18 mm
Input measuring range	0~200A AC/DC
Resolution	1mA AC/DC
Output gear	10mV/A (0~20 A), 100 mV/A(0~200 A)

Accuracy	±3%FS (23°C±5°C, below 75%rh)
Phase error	≤3°(AC50Hz / 60Hz, 23°C±2°C)
Zero-setting	Adjust the ZERO key for zero setting
Frequency response	DC~ 50kHz
Working current	500mA
Working temperature	0~50°C
Size	278×71×37 mm



Usage Scenarios of ECC01

IRT01

Insulation Resistance Tester



Scan for more information

IRT01 is a special insulation resistance tester for EVs. It is equipped with powerful measurement and data processing software, which can efficiently complete the measurement of parameters such as insulation resistance and voltage.

- Flexible Application
- Wide Measurement Range
- Smart Alarm
- Auto Shutdown

Features

- Flexible application, can measure insulation resistance and AC/DC voltage, support comparison measurement, continuous measurement, timing measurement 3 modes;
- Wide range measurement, for different output voltages, the resistance measurement range can reach 10M Ω -1000G Ω ;
- Intelligent alarm, low resistance, timely alarm to protect personnel and equipment safety when the range is exceeded;
- 5-inch LCD backlit display, convenient for measurement in poor light environments;
- Automatically shut down without any operation in 15 minutes, saving energy and electricity.



Usage Scenarios of IRT01

Functions

- Insulation resistance test:** support the selection of 500V/1000V/2500V/5000V output voltage range, support comparison measurement, continuous measurement, timing measurement three modes;
- Voltage measurement:** support DC and AC voltage measurement;
- Other functions:** support LCD backlight, automatic shutdown after 15 minutes without operation, over-range alarm, high-voltage warning indication.

Parameters

Output voltage	500 V/1000 V/2500 V/5000 V	DC measurement	± 30 V~ ± 600 V DC,resolution: 1 V, accuracy: $\pm 2\%$
	500V:10M Ω ~20G Ω	AC measurement	± 30 V~ ± 600 V AC,resolution: 1 V, accuracy: $\pm 2\%$
Insulation resistance	1000V:10M Ω ~40G Ω	Display mode	5-inch display
	2500V:10M Ω ~100G Ω	Battery	3150mAh/11.4V
	5000V:10M Ω ~1000G Ω	temperature	0~50 $^{\circ}$ C
Short-circuit current	<3.0mA	Size	190 \times 207 \times 72mm

OM201

Two-channel Oscilloscope & Multimeter



Scan for more information

OM201 is a professional measurement tool for EVs that integrates multimeter and two-channel oscilloscope.

- Multi-purpose Device
- Automatic Measurement
- Waveform Playback
- Multiple Communication Methods



Features

- Integrating the functions of multimeter and dual-channel oscilloscope, one machine with multiple functions;
- Provide 3 measurement functions, including manual, tracking, automatic cursor;
- Waveform diagrams can be saved locally and viewed at any time;
- Support both wired and wireless communication methods (can be used with P01).

Functions

 (Need to be used with P01/P03/ST13/ST10 and other equipment)

- Dual-channel oscilloscope:** supports automatic measurement of 6 parameters, automotive testing, waveform recording and playback;
- Multimeter:** support DC/AC voltage, current measurement, resistance measurement, diode measurement, on-off measurement.



Usage Scenarios of OM201

Parameters

Battery	3100 mAh/3.8 V	Size	160 \times 195 \times 42 mm
Oscilloscope			
No. of channels	2	Input coupling	DC, AC, and grounding
Bandwidth	10 MHz	Input impedance	1M Ω \pm 2%, parallel with 15pF \pm 5pF
Maximum real-time sampling rate	100 Mbps	Input capacitance	20 pF Max
Time base range	1us/div~10s/div, step by 1~2~5 times	Automatic measurement	Peak-peak,value, average...
Sampling methods	Common, peak value detection, average		/
Multimeter			
DC voltage	± 600 V	Resistance	0~6M Ω
AC voltage	± 600 V	Diode	0~2.0 V
DC current	± 10 A	Continuity	Buzz when less than 50 Ω
AC current	± 10 A		/

WEB1224

Modularized Wireless Equalizer



Scan for more information

WEB1224 is a split-type balancing maintenance equipment designed based on the characteristics of lithium battery charging and discharging points. It can effectively repair the problem of battery performance degradation caused by excessive cell pressure differences in battery pack modules.

40A charging current, 10A discharging current, fast balancing efficiency

Supports SOH battery health assessment and SOC battery capacity assessment

Separate charging and discharging design, balanced wiring is convenient and orderly

Each set contains 3 discharge units, supports 12 channels of equalization, and supports a maximum of 24 channels (additional purchase required)



Features

1. Separate charging and discharging design, equalization channels can be freely combined, and a maximum of 24 cells can be balanced simultaneously.
2. Wireless networking communication, conveniently expand the number of equalization channels.
3. Supports all common lithium batteries in the market.
4. Supports two modes: charge-discharge balance and discharge balance.
5. Isolated high-precision voltage acquisition module for safe, precise and balanced control.
6. Support SOC/SOH and can evaluate battery health status.
7. Each battery core is wired separately and independently, effectively avoiding the problem of misconnection/misconnection.
8. Own patented clamp design, wiring is more convenient and reliable.

Functions

1. **Balanced maintenance:** Supports two working modes: discharge balance and charge-discharge balance, which can be used for ternary lithium and iron phosphate Lithium, lithium titanate, lithium manganate and other batteries are maintained.
2. **Health assessment:** Supports battery health status assessment, and unique software algorithm calculates SOC/SOH values.
3. **Data analysis:** Automatically save historical equilibrium records and support two display methods: curve chart and column chart.
4. **Data transfer:** Supports exporting historical data to U disk as Excel file.
5. **Data visualization:** The balancing process monitors the voltage, current, charging and discharging status, capacity and other information of each single cell in real time.
6. **Multiple protection:** Supports safety protections such as overvoltage, undervoltage, overcurrent, output short circuit, reverse connection, and overtemperature.

Parameters

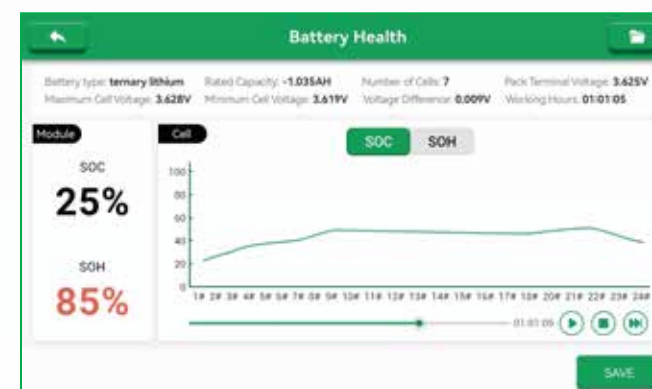
Charge Unit	
Power Input	AC90~264V 40~60Hz
Output Voltage Range	DC 0~112V
Output Voltage Accuracy	$\leq \pm 1\%$ @48~112VDC; $\leq \pm 0.5V$ @10~48VDC
Output Current Range	1~40A
Output Current Accuracy	$\leq \pm 1\%$ @output $\geq 4A$
Display	7 inches LCD touch screen, resolution 1024×600
Dimensions	306.5×255×261.5mm

Discharge Unit	
Number of Channels	4 channels
Discharge Voltage Range	DC 2.8~4.2V
Discharge Current Range	0~10A
Voltage Measurement Accuracy	$\leq \pm 1\%$ @48~112VDC; $\leq \pm 0.5V$ @10~48VDC
Current measurement Accuracy	$\leq \pm 1\%$ @output $\geq 4A$
Communication Method	Wi-Fi, BT
Dimensions	202.5×89.5×105mm

WEB1224 supports two modes: discharge balancing and charge-discharge balancing for all common types of lithium batteries available in the market. It features intelligent operation, ensuring safety and ease of use.



WEB1224 supports battery health status assessment, featuring a unique software algorithm to calculate SOC/SOH values. It automatically saves historical balancing records and supports two display modes: curve chart and bar chart.



WEB1224's own patented clamp design makes wiring more convenient and reliable; Each battery cell is wired separately and independently, effectively avoiding the problem of misconnection/misconnection.



EP401

EV Battery Charge & Discharge Equipment



Scan for more information

EB240 is a high-precision equalization maintenance equipment designed based on the charging and discharging of EV lithium batteries, which can effectively repair battery module performance problems caused by inconsistent battery cell voltages.

 Integrated Safe and Efficient Charging and Discharging

 Supports all types of lithium batteries and nickel-metal hydride batteries

 Supports SOH battery health assessment and SOC battery capacity assessment

 Multiple security protections

Features

1. Support charging and discharging maintenance of various lithium batteries and nickel-metal hydride batteries.
2. Support SOC/SOH, which can evaluate battery health status.
3. Utilizes cutting-edge charge-discharge testing technology to prevent interference with the BMS system;
4. Designed with a wide voltage range and equipped with various built-in charge-discharge modes, meeting the voltage and current requirements of diverse battery pack modules during charge-discharge operations, ensuring safety and enhancing efficiency;
5. Allows flexible configuration of charge-discharge rules and activation cycles, effectively enhancing battery capacity;
6. Equipped with safety features including reverse polarity protection, high-temperature alert, over-current protection, fan failure detection, over-voltage warning, and excessive current alert, ensuring hardware safety.

Functions

1. **Charge/discharge test:** Adopting a wide voltage design, it is suitable for charging and discharging tests of battery modules of different voltage levels. Supports various lithium batteries and nickel metal hydride batteries.
2. **Health assessment:** Support battery health status assessment, unique software algorithm to obtain SOC/SOH value.
3. **Single unit and terminal voltage collection:** Supports real-time acquisition of pack terminal voltage and individual cell voltage.
4. **Single battery core protection:** Cell current and voltage protection thresholds can be set to prevent overcharge and over-discharge.
5. **Terminal charging and discharging protection:** Supports overvoltage, undervoltage, overcurrent, output short circuit, reverse connection protection and overtemperature protection.
6. **Data visualization:** During the charging and discharging process, the voltage of each single cell, terminal voltage, terminal current, the charging and discharging status, the charging and discharging capacity, etc. are monitored in real time.

Parameters

Powerinput	AC90~264V/40~60Hz	Discharge Current range	Max current:100A / max power:7.2kW
Display	7-inch TFT LCD screen,resolution 1024×600	Charge Control	Constant current charging + constant voltage charging
Data Communication	CAN,RS485	Discharge Mode	Constant current discharge
Group Terminal Voltage Accuracy	$\leq \pm 0.5\%FS + 0.3V$, resolution:0.1V	Charge、Discharge Protection	Overcharge and over-discharge protection, over-high temperature protection
Single Voltage Accuracy	$\leq \pm 0.1\%FS + 5mV$, resolution:0.001V	Host Protection	Over-temperature, over-current and out-of control current trigger shutdown protection
Test Current Accuracy	$\leq \pm 1\%FS + 0.2A$, resolution:0.1A	Reverse Polarity Protection	Supported
Charge and Discharge Voltage Range	DC 2~420V	Abnormal Protection	Power cord power failure, main cable power failure
Charge Currentrange	Maximum current 100A, maximum power 4.4kW	Over-temperature Protection	The resistance box over-temperature is 85°C; Radiator over temperature is 100°C


EB240

EV Battery Cell Equalizer



Scan for more information

EB240 is a high-precision equalization maintenance equipment designed based on the charging and discharging of EV lithium batteries, which can effectively repair battery module performance problems caused by inconsistent battery cell voltages.

 Supports 24-Channel Balancing

 Efficient and Precise Cell Balancing

 Compatible with All Types of Lithium Batteries

 High-Precision Voltage/Current Measurement

Features

1. Capable of simultaneously balancing up to 24 battery cells;
2. Compatible with all common types of lithium-ion batteries available in the market;
3. Intelligent balancing function allows individual balancing of battery cells within a battery module, preventing overcharging or over-discharging of individual cells.

Functions

1. **Balancing Maintenance:** Supports charging, discharging, and balancing modes for lithium-ion batteries like ternary lithium, lithium iron phosphate, lithium titanate, and lithium manganese;
2. **Parameter Configuration:** Pre-settable work modes, battery types, voltage thresholds, operating currents, cell series numbers, and other parameters;
3. **Multiple Protections:** Supports overvoltage, undervoltage, overcurrent, output short circuit, reverse polarity protection, and overheat protection;
4. **Data Visualization:** Real-time monitoring of voltage, current, charge-discharge status, and capacity of individual cells during the balancing process;
5. **Data Analysis:** Automatically stores historical balancing records, supports data presentation in both graph and bar chart formats;
6. **Data Export:** Historical data can be exported to a USB drive as Excel files;

Parameters

Power input	AC90~264V/40~60Hz	Wireless communication	WiFi and BT(external WiFi antenna)
Power	600W Max	Equalize number of channels	2×12Pin
Charge and discharge voltage range	1.8~4.2V	Equalize interface	16Pin
Voltage detection accuracy	$\pm 0.1\%FS \pm 2mV$ (maximum range 5V)	Battery interface	24Pin
Charge and discharge current range	0.1~5A Max	Display	7-inch TFT LCD screen,resolution 1024×600
Current detection accuracy	$\pm 1\%FS \pm 0.05A$ (maximum range 5A)	Communication Interface	SMA,USB-Device
Battery temperature detection accuracy	$\pm 2^{\circ}C$ (-25°C~85°C)	Charge control	Constant current charging+constant voltage charging
Discharge mode	Constant current discharging + constant voltage discharging		
Protection function	Input over-current protection, over-voltage protection, output over-current protection, over-temperature protection		

EB480

EV Battery Cell Equalizer



Scan for more information

EB480 is a high-precision lithium battery equalization maintenance equipment designed based on the charging and discharging of EV lithium batteries, which can effectively repair the problem of reduced cruising range caused by inconsistent battery voltage.

- Supports 48-Channel Balancing
- Efficient and Precise Cell Balancing
- Compatible with All Types of Lithium Batteries
- High-Precision Voltage/Current Measurement

Features

- Supports simultaneous balancing of up to 48 battery cells at maximum capacity;
- Compatible with all common types of lithium-ion batteries available in the market;
- Independent channel design ensures that each individual cell within the module avoids overcharging or over-discharging.

Functions

- Balancing Maintenance:** Supports charging, discharging, and balancing modes for lithium-ion batteries like ternary lithium, lithium iron phosphate, lithium titanate, and lithium manganese;
- Parameter Configuration:** Pre-settable work modes, battery types, voltage thresholds, operating currents, cell series numbers, and other parameters;
- Multiple Protections:** Supports overvoltage, undervoltage, overcurrent, output short circuit, reverse polarity protection, and overheat protection;
- Data Visualization:** Real-time monitoring of voltage, current, charge-discharge status, and capacity of individual cells during the balancing process;
- Data Analysis:** Automatically stores historical balancing records, supports data presentation in both graph and bar chart formats;
- Data Export:** Historical data can be exported to a USB drive as Excel files;

Parameters

Power input	AC90~264V/40~60Hz	Wireless communication	WiFi and BT(external WiFi antenna)
Power	1200W Max	Equalize number of channels	4×12Pin
Charge and discharge voltage range	1.8~4.5V	Equalize interface	26Pins×2
Voltage detection accuracy	±0.1% FS±2mV (maximum range 5V)	Battery interface	24Pin
Charge and discharge current range	0.1~5A Max	Display	7-inch TFT LCD screen,resolution 1024×600
Current detection accuracy	±1% FS±0.05A (maximum range 5A)	Communication Interface	SMA,USB-Device
Battery temperature detection accuracy	±2°C (-25°C~85°C)	Charge control	Constant current charging+constant voltage charging
Discharge mode	Constant current discharging		
Protection function	Input over-current protection, over-voltage protection, output over-current protection, over-temperature protection		

ET30

EV Battery Airtightness Detector (Low pressure)



Scan for more information

ET30 is a professional air-tightness detection equipment designed for EV battery packs.

- High Reliability
- Ultra High Accuracy
- Stability Pressure Regulation
- Intelligent Operation



Features

- High sensitivity pressure sensing for precise and stable testing accuracy;
- Real-time display of pressure curve during the testing process for clear monitoring;
- Alert notifications for testing anomalies or failures;
- Real-time display of working status during stages like inflation, pressure stabilization, leakage, and exhaust, providing visual process tracking.

Functions

- Low-pressure airtightness testing:** Using compressed air as the medium, a certain pressure is applied to the battery pack cavity, and a highly sensitive sensor detects pressure changes to determine its sealing integrity;
- Parameter configuration:** Pre-settable parameters include workpiece number, volume, pressure, duration for each stage, leakage limit, and other settings;
- Dual pressure display:** Real-time display of current pressure and leakage fluctuation;
- Testing history:** Automatically saves testing history records, supports detailed data presentation in the form of graphs;
- Multi-language support:** Supports various languages including Simplified Chinese, Traditional Chinese, English, German, French, Japanese, Spanish, Portuguese, Italian, and more.

Parameters

Power Input	AC90V~264V/40~60Hz	Power	20W Max
Test Pressure Range	0~30Kpa	Air Source Requirements	0.1~1.0Mpa Dry Compressed Air
Sensor Resolution	1pa	AirInlet Interface / Test Interface	φ6 mm air pipe
Test Accuracy	±5pa	Working Temperature	-10~55°C
Communication Interface	RS232 / USB	Working Humidity	10%~90%

ET500

EV Battery Airtightness Detector (High pressure)



Scan for more information

ET500 is a high and low voltage compatible air tightness testing equipment that supports the sealing test of electric vehicle battery pack boxes and liquid cooling systems.

- High and low voltage compatible
- High-precision non-destructive testing
- Stable pressure and high sensitivity
- Intelligent operation



Features

- The battery pack and liquid cooling system share high and low voltages.
- High-sensitivity pressure sensing, high testing accuracy and stability.
- Automatically detect the pressure inside the battery pack. When the pressure is reached, it will automatically enter the next stage. Segmented inflation is more accurate.
- The pressure gauge panel displays the process pressure curve in real time, making the test process clear at a glance.
- High voltage automatic protection, alarm prompt when test fails or is abnormal.

Functions

- Air tightness testing:** Compressed air is used as the medium to apply a certain pressure to the battery pack cavity, and a highly sensitive sensor is used to detect changes in pressure to determine its sealing.
- Parameter settings:** Parameters such as workpiece number, volume, pressure, time of each stage, leakage limit and other parameters can be preset.
- Process visualization:** Real-time display of the working status of inflation, pressure stabilization, leakage, exhaust and other stages.
- Dual display of pressure value:** Display current pressure and leakage amount in real time.
- Detection history:** Automatically save detection history records and support curve charts to display detailed data.

Parameters

Power Input	AC90~264V/40~60Hz	Air Requirements	0.4~1.0MPa Dry Compressed Air
Test Pressure Range	0~500Kpa	Air Intake Interface/Test Interface	Φ8mm Ttrachea/Φ6mm Trachea
Sensor Resolution	1pa	Working Temperature	-10~ 55℃
Test accuracy	±5pa	Working Humidity	10%~ 90%
Interface	RS232 / USB		

DP750

Adjustable Power Supply



Scan for more information

DP750 is a dedicated intelligent digital power supply suitable for both EVs and fuel vehicle maintenance. The voltage range of the high-voltage output is 250V-750V, which can be used for offline driving and maintenance testing of high-voltage electrical appliances.

- Suitable for Electrical and Fuel Vehicles
- Dual-Mode Output for High and Low Voltage
- High Voltage Self-Check Protection
- Bluetooth Wireless Control



Features

- High-voltage and low-voltage modules are independently isolated, allowing each module to protect itself during power output without mutual interference;
- Independent protection mechanisms are present in the input circuit, high-voltage output circuit, and low-voltage output circuit. They can detect faults such as undervoltage, overvoltage, overcurrent, and short circuits, and initiate corresponding protective measures;
- Compatible with various models of Smartsafe intelligent terminals for remote control capabilities.

Functions

- Low Voltage Output:** Supports 12V/24V DC output, switchable through buttons;
- High Voltage Output:** Supports 250V-750V, 0A-5A DC output, adjustable voltage/current through knobs;
- Multiple Protections:** Supports high voltage input overvoltage, undervoltage protection, high voltage output overtemperature, short circuit, reverse polarity protection, low voltage output current limiting, short circuit protection;
- Remote Control:** Can be used with ST13/P01/P03 devices, remote operation via Bluetooth connection.

Parameters

Power Supply	AC100-240V@16A	Communication	BT
Maximum Power	3200W Max	Display	LED Digital Tube
High Voltage Output	Voltage: 250~750V Current: 0~5A	Protection	Short-Circuit, Current-Limiting, OverVoltage, UnderVoltage, Over Temp
Low Voltage Output	Voltage: 12/24V Current: 1A	Working Temp	-10~65℃
Front Panel	High Voltage: Current knob, Voltage knob, High voltage switch button Low Voltage: 12V knob, 24V knob, Low voltage switch	Size	315x192x186mm
		Weight	4.85kg

DP901

Adjustable High Voltage Power Supply



DP901 is a dedicated intelligent digital power supply suitable for both EVs and fuel vehicle maintenance. The voltage range of the high-voltage output is 50V-900V, which can be used for offline driving and maintenance test scenarios of more high-voltage electrical appliances.

- Suitable for Electrical and Fuel Vehicles
- Dual-Mode Output for High and Low Voltage
- High Voltage Self-Check Protection
- Bluetooth Wireless Control



Features

- The high-voltage and low-voltage modules are isolated from each other, allowing individual protection for each module during power output without mutual interference;
- Independent protection mechanisms are implemented in the input circuit, high-voltage output circuit, and low-voltage output circuit. These mechanisms can detect faults such as undervoltage, overvoltage, overcurrent, and short circuits, and initiate appropriate protective measures;
- Compatible with various models of Smartsafe intelligent terminals for remote control capabilities.

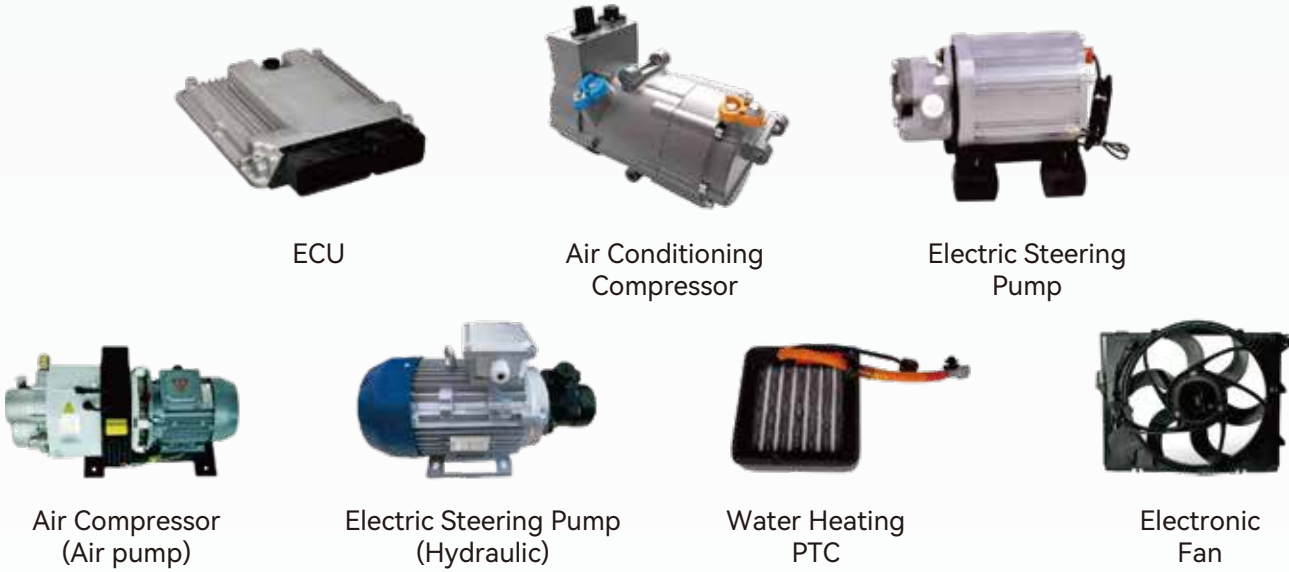
Functions

- Low Voltage Output:** Supports 0V50V, 0A15A DC output, adjustable voltage/current through knobs;
- High Voltage Output:** Supports 50V900V, 0A5A DC output, adjustable voltage/current through knobs;
- Multiple Protections:** Supports high voltage input overvoltage, undervoltage protection, high voltage output overtemperature, short circuit, reverse polarity protection, low voltage output current limiting, short circuit protection;
- Remote Control:** Can be used with ST13/P01/P03 devices, remote operation via Bluetooth connection.

Parameters

Power Supply	AC100-240V@20A	Communication	BT
Maximum Power	4000W Max	Display	LED Digital Tube
High Voltage Output	Voltage: 50~900V Current: 0~5A	Protection	Short-Circuit, Current-Limiting, OverVoltage, UnderVoltage, Over Temp
Low Voltage Output	Voltage: 0~50V Current: 0~15A	Working Temp	-10~65°C
		Size	395x315x265mm
		Weight	11kg
Front Panel	High Voltage: Current knob, Voltage knob, High voltage switch button Low Voltage: Current knob, Voltage knob, Low voltage switch button		

Usage Scenarios



* Suitable for but not limited to maintenance scenarios involving DP750/DP901 electrical devices

Operating Modes



LT150

EV Battery Lift



Scan for more information

The LT150 is a professional lifting equipment designed for the disassembly and assembly of EV battery packs, which can quickly and safely complete the dismantling of battery packs and move them to the repair station. Equipped with a high-voltage insulation protection pad to protect the safety of maintenance workers.

- Quick and Safe Battery Pack Installation and Removal**
- Heavy-Duty 360° Universal Moving Casters**
- Equipped with High-Voltage Insulation Protection Pads**



Features

- With a rated lifting capacity of up to 1.5T, it meets the needs for most electrical vehicle battery disassembly and installation in the market;
- Utilizing laser materials and robot welding to ensure high precision and quality;
- Powered by an asynchronous AC motor, the hydraulic gear pump drives the cylinder with the assistance of balancing support bars, ensuring smooth lifting and lowering;
- Equipped with heavy-duty 360°swivel casters for easy mobility;
- The platform surface is fitted with rubber insulation pads to prevent maintenance personnel from coming into contact with electricity.

Parameters

Voltage	AC90~264V/40~60Hz	Platform width	800mm
Operating voltage	24V	Platform length	1260mm
Power	0.75KW	Tilt angle	25°
Rated lifting weight	1.5T	Ascending time	18s
Minimum height	1100mm	Descending time	11s (descending speed adjustable)
Maximum height	1850mm	Size	1260×800×1100mm

TT76

EV Maintenance Tool Trolley



Scan for more information

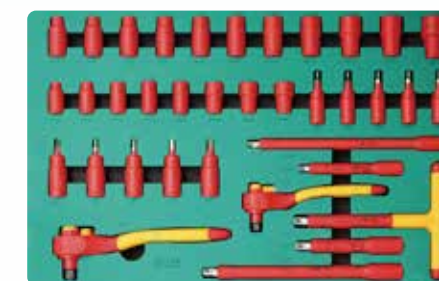
The TT76 is a specialized automotive repair tool trolley developed for the maintenance of electrical vehicles. It includes 76 commonly used insulated tools, offering comprehensive functionality, reliable quality, and a balance of practicality and cost-effectiveness.

- Complete Range of Insulation Tools**
- High-quality Steel, Sturdy and Durable**
- Dual-color Handles, Oil and Scratch-resistant**



Features

- The handle is formed by aluminum alloy mold casting, exquisite and durable;
- The side of the tool cart is designed with screwdriver placement holes and a tool card box;
- The side mesh expands the functionality of the tool cart;
- Heavy-duty stacked ball bearing slides extend the service life, lengthen the extension distance, allowing the drawers to be fully opened.



36-Piece Insulated Socket Tool Set Kit

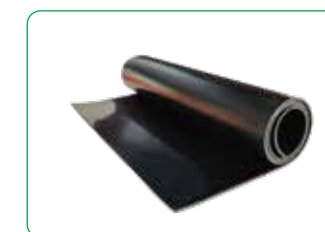


17-Piece Insulated Wrench and Pliers Tool Set Kit



22-Piece Insulated Wrench and Screwdriver Bit Tool Set Kit

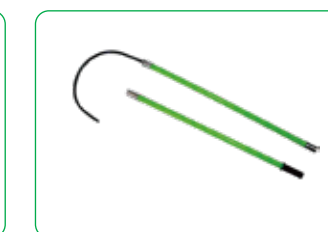
Safety Protective Equipment



Insulating Mat



Safety Goggles

Insulation Protection Kit
(Including Protective Suit, Insulated Gloves, Insulated Boots)

Insulated Rescue Hook