

## New Energy Vehicle Safety Analyzer AN166X(F) Series



### ★ Regulatory compliance:

GB18384-2020 Electric Vehicles  
Safety

Requirements and  
GB38032-2020 Electric Buses  
Safety Requirements

★ **Four in one:** whole vehicle  
insulation, insulation resistance,  
insulation monitoring, potential  
equalization, and multi-channel  
testing.

★ **Systematic:** professional test  
accessories, on-site devices, i  
nformatization system, and MES  
database connection

## Product Overview

The Ainuo AN1662H(F) New Energy Vehicle Safety Analyzer and the AN1662SD(F) New Energy Vehicle Safety Test System comply with GB18384-2020 Electric Vehicles Safety Requirements and GB38032-2020 Electric Buses Safety Requirements. AN1660B(F) New Energy Vehicle Operational Safety Analyzer is designed to meet the requirements of the operational safety performance inspection regulations for new energy vehicles.

The AN1662H(F) Analyzer features whole vehicle insulation, insulation resistance, insulation monitoring, and potential equalization test functions. It can be equipped with additional features such as AC withstand voltage, DC withstand voltage, and DC low resistance. It supports

multi-channel withstand voltage and multi-channel potential equalization scanning tests. By using test accessories such as AC charging gun, DC charging gun, platform test clip, high-voltage component test clip, etc., it can complete the test connections in one go and automatically or manually perform each step of the safety regulation test.

The AN1662SD(F) Test System integrates the test functions of AN1662H(F). Through industrial computer/ESRS measurement and control software, on-site device and remote control test, it realizes the automated, informatized, and intelligent test process for new energy vehicle safety regulation.

## Features

### System digitistics

- Four-in-one safety regulation test for electric vehicles, with excellent system scalability
- One master unit integrating multiple functions for fast testing speed and high accuracy for safety analyzer
- Multi-channel scanning and one-time wiring, capable of completing all safety tests items

### Hardware features

- Supports wireless scanning, automatic vehicle model recognition, and automatic retrieval of test programs
- Supports CAN communication and automatically presets vehicle status based on the test item

- Customized dedicated test on-site devices, remote control panels, and testing accessories

### Software features

- Workflow setting for electric vehicle safety test items, supporting a mix of automatic and manual tests
- Local storage of test information with no limit on the number of saved records during the product's lifecycle.
- Multiple MES database connections reserved for test condition download and test data upload.
- Software measurement and control system supports data query, filtering, and export, as well as user permission management.

## Specifications

	Model	AN1662H(F)	AN1660B(F)
whole vehicle insulation	Measurement range	0.1MΩ—999.9MΩ	None
	Measured voltage	200Vdc---1000Vdc	
	Test method	Double voltmeter method; battery DC+ /DC- port test and charging port test (optional)	
Insulation monitoring	Resistance switching	5-gear automatic resistance switching detection	None
	Judgment method	Manual judgment and CAN communication (optional)	
Insulation resistance	Output voltage	100Vdc—1,000Vdc	
	Measurement range	0.1MΩ—50GΩ	
	Test channel	Channel 8	Channel 1
Potential equalization	Output current	DC constant current source 1Adc (>200mA) and optional DC constant current source 1-40Adc;	DC constant current source 2-5Adc
	Measurement range	0.1mΩ—600mΩ	0.1mΩ—600mΩ
	Test channel	Channel 10	Channel 1
	Test method	Four-terminal method	Four-terminal method
Optional functions		AC withstand voltage, DC withstand voltage, and DC low resistance	AC withstand voltage and DC withstand voltage

## AN1662SD(F) System Allocation

S/N	Component name	Specification	Remarks
1.1	New energy vehicle safety analyzer	AN1662H(F)	Ainuo
1.2	Safety regulation measurement and control software	ESRS	Ainuo
1.3	Industrial computer	Intel-G1620/4G/120G	Advantech
1.4	Display	19-inch	DELL
1.5	UPS	1kW	Shante
1.6	Alarm lamp	Test/qualified/unqualified	Customized
1.7	Printer	Self-adhesive label printing	Zebra
1.8	Wireless scanning gun	1D/2D recognition	Zebra
1.9	Cabinet	White	Customized
1.10	Test accessories	Optional	Customized
1.11	On-site devices	Optional	Customized
1.12	Remote control	Optional	Customized
1.13	Can card	Optional	Customized