

Isolation Tester RES-1000A

- Apply to Electric/Hybrid Vehicle Isolation Measurement;
- According to FMVSS305 and ECE R94;
- All channel isolation voltage > 1500V;
- Built-in adaptive excitation power 70V~950V;
- Battery inside and 5 hours support;
- Data Logger with 10Hz, Max. recording 5 hours;
- Vb analog 100kHz high-speed output;
- Anti-Shock $\geq 100g$, 6ms half sine.

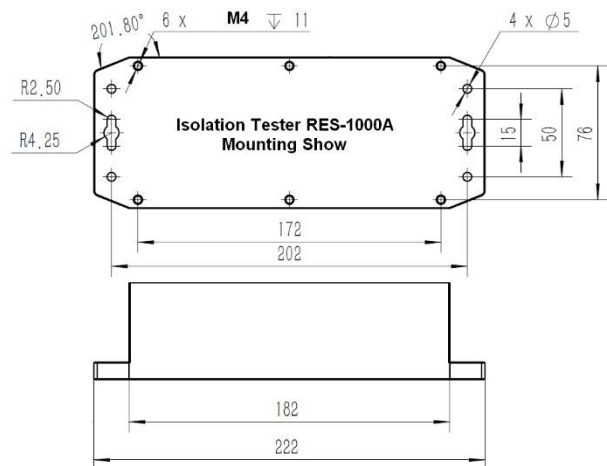


Isolation tester RES-1000A is used for electrical safety measurement in new energy vehicle crash tests. Including the isolation resistance and voltage monitoring before trigger; the measurement of three voltages (Vb, V1 and V2) and isolation resistance and total energy after the trigger of the car crash; the measurement start time can be set. The device supports 4-channel PT1000 temperature sensor input function. The measurement supports 10Hz data synchronous collection. Ethernet communication is used for parameter setting and data downloading, and ISOMME, CSV data format and EXCEL test reports are provided

Specification (25°C):

| Name | Unit | Value |
|--------------------------|--|---|
| Voltage Range | V | ± 1000 |
| Voltage Accuracy | %Read | ± 1 ($\pm 100\sim 999V$) |
| Iso. Resistance | k Ω | 20~5000 |
| Iso. Resistance Accuracy | %Read | ± 5 (20~500k Ω) ± 10 (500~5000k Ω) |
| Energy Range | mJ | 5000 |
| Injection Voltage | V | 100~950 |
| Temp. Interface | 4 chs | PT1000 Sensor |
| Data Sampling | Hz | 10 |
| Recording Time | min | 290 |
| Battery Work | min | 300 |
| Trigger Input | Switch and RS485 | |
| Connector | High Volt Input: 4mm Banana; Others: LEMO | |
| Power Supply | V | 9~18 |
| Working Temp | °C | -10~45 |
| Case Materials | / | Nylon |
| Size | mm | 222 × 86 × 73 |
| Weight | grams | 600 |

Dimension (mm):

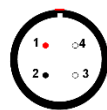
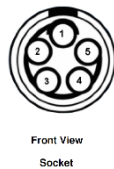
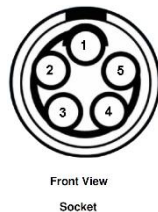
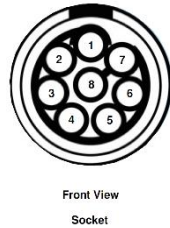


Parameter Settings:

1. Isolation resistance measurement can be turned off before triggering;
2. TE measurement can be turned off after triggering, and the start and forced end times can be set;
3. The start time of insulation resistance measurement after triggering can be set;
4. For high-voltage unpowered vehicles, the insulation resistance injection voltage can be set after triggering;
5. Insulation resistance and temperature alarm thresholds can be set;
6. The IP address and data storage location can be set.

Interface Connector:

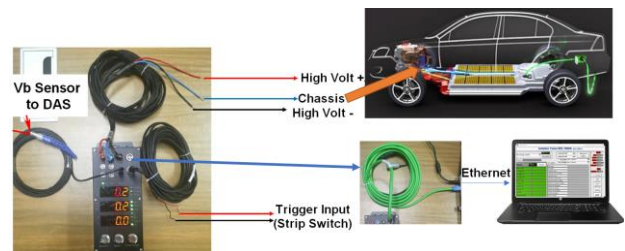
- High Voltage Input (4mm Banana)
ISOP Red: High Voltage Positive
CHS Blue: Electrical Chassis
ISOM Black: High Voltage Minus
- Bus DC IN/ETH (LEMO EGG.1B.308)
Pin1—15V+
Pin2—15V+
Pin3—15V-
Pin8—15V-
Pin4—TX+
Pin5—TX-
Pin6—RX+
Pin7—RX-
- Trigger Input TRG (LEMO EGG.1B.305)
Pin1—Trigger sw+
Pin2—Trigger sw-
Pin3—NA
Pin4—RS485+
Pin5—RS485
- Vb Sensor (LEMO EGG.0B.305)
Pin1—Signal+
Pin2—Excitation+
Pin3—Excitation-
Pin4—Signal-
- Temperature TM1~4 (LEMO EGG.0B.304)
Pin1—PT1000+
Pin2—Sense+
Pin3—PT1000-
Pin4—Sense-



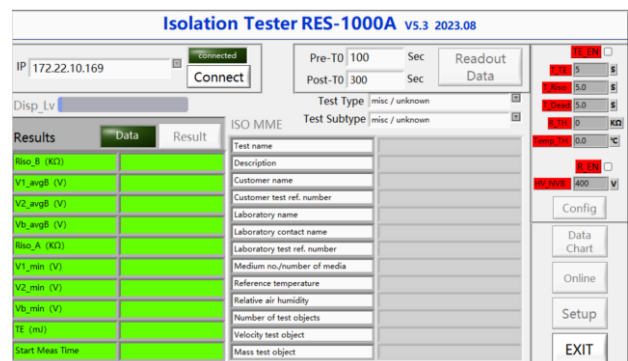
Status LED ON Indicators:

- RDY: Device Ready;
- MEAS: Measuring and Recording;
- DATA: Data in the Memory;
- T0: Triggered;
- ETH: Ethernet Communication;
- Charging: Battery under Charging;
- BAT: Battery Energy is Enough;
- Volt-Alarm: High Voltage Alarm;
- ISO-Alarm: Isolation Alarm;
- TE-Alarm: Total Energy Alarm;
- VOLT: Digital Display Voltages of V1, V2 and VB;
- R: Digital Display Isolation Resistance of R1 before trigger and R2 before stop.
- TE/TL: Digital Display TE Result, BAT Battery Remaining Percent, TL Recording Memory Time Left.

Wire Connecting:



Software:



Control Button (Keep 3sec):

ON/OFF: Power ON/OFF

RESET: Clear Data

START/STOP: Measure and Recording Start or Stop

