Isolation Tester RES-1000A

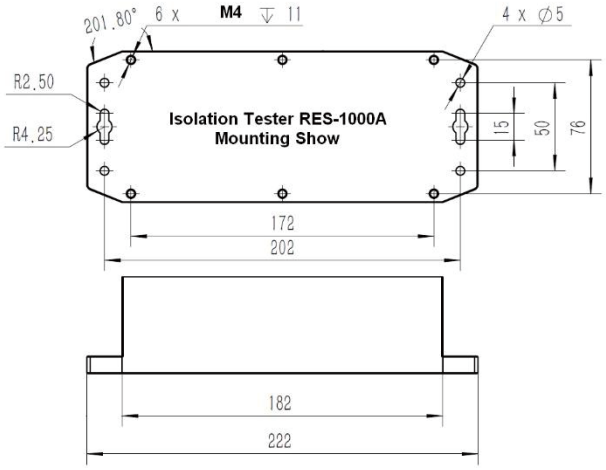
- Apply to Electric/Hybrid Vehicle Isolation Measurement;
- According to FMVSS305 and ECE R94;
- All channel isolation voltage>1500V;
- Built-in adaptive excitation power 70V~950V;
- Battery inside and 5 hours support;
- Data Logger with 10Hz, Max. recording 5 hours;
- Vb analog 100kHz high-speed output;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

Name	Unit	Value
Voltage Range	V	±1000
Voltage Accuracy	%Read	± 1 (± 100~999V)
Iso. Resistance	kΩ	20~5000
Iso. Resistance Accuracy	%Read	± 5 (20~500kΩ) ± 10 (500~5000kΩ)
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	℃	-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:

1. High Voltage Input (4mm Banana)

   ISOP Red: High Voltage Positive
   CHS Blue: Electrical Chassis
   ISOM Black: High Voltage Minus

2. Bus DC IN/ETH (LEMO EGG.1B.308)

   Pin1—15V+
   Pin2—15V+
   Pin3—15V-
   Pin8—15V-
   Pin4—TX+
   Pin5—TX-
   Pin6—RX+
   Pin7—RX-

Front View
Socket

3. Trigger Input TRG (LEMO EGG.1B.305)

   Pin1—Trigger sw+
   Pin2—Trigger sw-
   Pin3—NA
   Pin4—RS485+
   Pin5—RS485

Front View
Socket

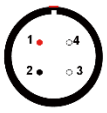
4. Vb Sensor (LEMO EGG.0B.305)

   Pin1—Signal+
   Pin2—Excitation+
   Pin3—Excitation-
   Pin4—Signal-

Front View
Socket

5. Temperature TM1~4 (LEMO EGG.0B.304)

   Pin1—PT1000+
   Pin2—Sense+
   Pin3—PT1000-
   Pin4—Sense-



Control Button (Keep 3sec):

ON/OFF: Power ON/OFF

RESET: Clear Data

START/STOP: Measure and Recording Start or Stop

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;

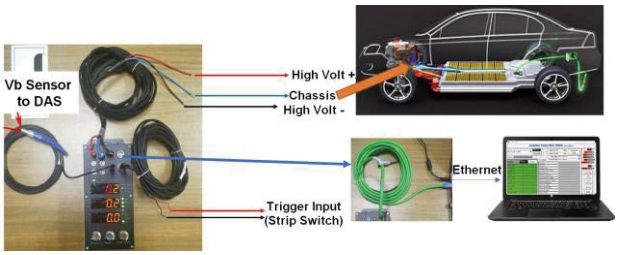
TE-Alarm: Total Energy Alarm;

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: