

# AT9005

## COMPREHENSIVE SAFETY TESTER

CHINESE/ENGLISH  
OPERATION

400 (W) \* 200 (H) \* 503 (D)  
UNIT: mm

Weight: 35kg

8 TESTING FUNCTIONS:  
AC withstand voltage, DC withstand voltage, insulation, grounding, leakage, AC power, DC power, startup

- 10 inch LCD display
- Joint testing of six functions (5 out of 6)
- 0.5 second response and testing speed
- Standard RS232/Handler



■ Power Supply 220VAC~240VAC 47.5Hz~52.5Hz Power: maximum 300VA

The AT9005 comprehensive safety gauge tester is a multifunctional, high-performance, and highly reliable electrical safety gauge tester that can achieve eight testing functions, including AC withstand voltage, DC withstand voltage, insulation, grounding, leakage, AC power, DC power, and startup. With a measurement accuracy of 1.5%, multiple measurement parameters can be displayed simultaneously; The system adopts an ARM processor and a 10 inch high-definition TFT LCD display with touch function, which can quickly and accurately complete parameter measurement. At the same time, the instrument has interfaces such as Handler and RS232 to meet different testing and communication needs of users. The AT9005 comprehensive safety testing instrument is mainly used to provide safety testing solutions for electric vehicles, power grids, photovoltaics, home appliances, information equipment, and medical equipment industries, as well as innovative solutions for various electrical measurements.

### AT9005 Functional characteristics of comprehensive safety regulation tester:

- 1 Joint testing of eight functions including AC withstand voltage, DC withstand voltage, insulation, grounding, leakage, AC power, DC power, and startup;
- 2 Equipped with PLC control, variable frequency power supply control, communication and other interfaces, it can be connected to external supporting facilities to achieve automated testing;
- 3 Faster response and testing speed, with a minimum setting of 0.5 seconds;
- 4 1.5 level safety regulation testing accuracy, 0.5 level electrical parameter testing accuracy;
- 5 Equipped with unique self inspection function, it simplifies production operations and does not require re self inspection after group change;
- 6 Adopting Chinese menu prompts for operation steps, easy to understand, all numeric keyboard operation for more convenient settings;
- 7 Can set lower limit judgment to eliminate product missed inspections; Conduct intelligent analysis and sound and light alarm for failed product testing.
- 8 Equipped with more standard line compensation function, with more accurate calculations;
- 9 Equipped with a USB interface, it can achieve massive storage of test results;
- 10 Suitable for testing requirements in different industries such as household appliances, lighting fixtures, and power tools;

## WORKING CONDITIONS

|                     |                                |
|---------------------|--------------------------------|
| Power Supply        | AC220V±10%, 50/60Hz±5%         |
| Ambient Temperature | 0~40°C                         |
| Environmental RH    | 20~80%RH                       |
| Test Time           | Range: 1 ~ 999s resolution: 1s |

## STANDARD CONFIGURATION FEATURES

|                                  |  |
|----------------------------------|--|
| Warning Light                    | Three color alarm light  |
| Remote Control Switch            | Remote control switch with external start and stop signals                                       |
| Single group/single step testing | Single group testing and single step testing can be achieved through editing                     |
| Communication                    | RS232 9-pin interface (communication address can be set to match different address combinations) |
| Switching Output                 | START, STOP, PASS, FAIL, UNDER TEST  |

## OPTIONAL FUNCTION

|                                |  |
|--------------------------------|--|
| Communication                  | RS485  |
| Support host Computer Software | Test data can be remotely transmitted and processed to achieve automated control |
| Others                         | Customizable   |

## AC WITHSTAND VOLTAGE

|                     |  |
|---------------------|--|
| AC output voltage   | Range: 100-5000V, 50Hz/60Hz Dual frequency selectable, resolution: 1V, accuracy±(1.5% set value +3V) |
| Current Measurement | 0.002-9.999-40.00mA, resolution: 0.001mA/0.01mA, accuracy: ±(1.5% Read value +0.01mA)                |
| Current Alarm       | Upper: 0.001-40.00mA, lower: 0.000-40.00mA   |
| Test Time           | Range: 1 ~ 999s resolution: 1s   |

## DC WITHSTAND VOLTAGE

|                     |   |
|---------------------|---|
| DC output voltage   | Range: 100-6000V, resolution: 1V, accuracy±(1.5% set value +3V)                     |
| Current Measurement | 0.005-9.999-10.00mA, resolution: 0.001mA/0.01mA, accuracy: ±(2% Read value +0.01mA) |
| Current Alarm       | Upper: 0.001-10.00mA, lower: 0.000-10.00mA  |
| Test Time           | Range: 1 ~ 999s resolution: 1s  |

## INSULATION RESISTANCE

|                                   |  |
|-----------------------------------|--|
| DC output voltage                 | Range: 100-1000V Continuing Adjust, resolution: 1V, accuracy: ±(1.5% set value +3V)  |
| Insulation resistance measurement | 100-499V: 1-16G: ±(5% Read value +0.5MΩ); 1GΩ - 10GΩ: (gust for reference)<br>500-1000V: <100MΩ-1GΩ: ±(3% Read value +2MΩ); 1GΩ - 10GΩ: ±(10% Read value +5MΩ) |
| Insulation resistance alarm       | Upper: 1 ~ 2000MΩ; lower: 0 ~ 2000MΩ   |
| Test Time                         | Range: 1 ~ 999s resolution: 1s   |

## GROUNDING RESISTANCE

|                                    |  |
|------------------------------------|--|
| Output AC current                  | Range: 5-40A Continuous adjustable output, 50/60Hz Dual frequency selectable, resolution: 0.01A accuracy: ±(2% set value +0.20A) |
| Grounding Resistance Measurement   | Range: 10.0 ~ 600mΩ accuracy: 2% Read value +3mΩ, resolution: 0.1mΩ  |
| Grounding resistance Alarm Setting | Upper: 5 ~ 10A:10.0 ~ 600mΩ; 10 ~ 20A:10.0 ~ 300mΩ; 20 ~ 30A:10.0~200mΩ; lower: 0.0 ~ 100mΩ                                      |
| Test Time                          | Range: 1 ~ 999s resolution: 1s   |

## LEAKAGE CURRENT

|                               |  |
|-------------------------------|--|
| Measurement Settings          | Leakage current to ground: G-L, G-N, AUTO (G-L, G-N)   |
| Leakage Type Setting          | Dynamic leakage and static leakage, optional with three built-in human body networks, free switching, and customizable to any human body network |
| AC voltage measurement        | Range: 5.0V-300.0V, resolution: 0.1V, accuracy: ±(1.5% Read value +3V)   |
| Leakage current measurement   | Range: 0.000mA-20.00mA, resolution: 0.001/0.01mA, accuracy±(1.5% Read value +5dgt)   |
| Leakage current setting alarm | Upper: 0.001 ~ 20.00mA; lower: 0.000 ~ 20.00mA   |
| Test Time                     | Range: 1 ~ 999s resolution: 1s   |

## AC/DC POWER

|                          |   |
|--------------------------|---|
| AC voltage measurement   | Range: 0.0V-300.0V, resolution: 0.1V, accuracy: ±(0.25% Read value +0.25%Range Value)   |
| AC current measurement   | Range: 0-30A, resolution: 0.001A/0.01A, accuracy: ±(0.25% Read value +0.25%Range Value) |
| Active Power Measurement | Range: 0-6000W, resolution: 0.1W/1W, accuracy: ±(0.25% Read value +0.25%Range Value)    |
| Power Setting Alarm      | Upper: 0.1 ~ 6000W lower: 0 ~ 6000W 0=Off   |
| Test Time                | Range: 1 ~ 999s resolution: 1s  |

## START (OPTIONAL)

|                        |   |
|------------------------|---|
| AC voltage measurement | Range: 5.0V-300.0V, resolution: 0.1V, accuracy: ±(0.25% Read value +0.25%Range Value)   |
| AC current measurement | Range: 0-30A, resolution: 0.001A/0.01A, accuracy: ±(0.25% Read value +0.25%Range Value) |
| Current Setting Range  | Upper: 0.001 ~ 30.00A, lower: 0.000 ~ 30.00A  |