



## Automatic Capacitance & Tan Delta Tester JXJS-10

## Introduction **I**

JXJS-10 automatic capacitance & tan delta tester has bridge, variable frequency converter, AC test transformer and standard capacitor inside. It can be used to measure the dielectric loss on site (power plants or substations) or in the lab (load capacitor, capacitive voltage divider, current transformer, grading capacitors, surge arresters, shunt reactors, bushings, etc). It has tunable frequency and anti-interference function.



## Features **•**

- 1) With big LCD to show the measurement data;
- 2) With mini-printer to print out the test data;
- 3) Automatically recognize the test object whether it is capacitive, inductive or resistive, easy operation;
- 4) Can connect an external standard capacitor, or connect an external oil cup to measure the dielectric loss of insulation oil, or connect measuring electrodes to measure the dielectric loss of solid insulation material.
- 5) Automatically recognize 50Hz/60Hz power source;
- 6) With Series or Parallel methods of measurement;
- 7) Automatically recognize external HV power source with frequency between 40-70Hz, can be used together with AC test transformer or AC resonant test system;
- 8) 100 test results storage facility, computer interface.

## **Technical Parameters**

Capacitance Measurement Range       Internal power source: 3pF~60nF/10kV, 60pF~1μF/0.5kV         External power source: 3pF~1.5μF/10kV, 60pF~30μF/0.5kV         Capacitance: ±(1%* reading+2pF)         Dielectric loss: ±(1%* reading+0.04%)         Capacitance: 0.001pF         Dielectric loss: 0.001%         Test Current         Output voltage: 0.5~10kV; Resolution: 1V; Accuracy: ±(1.5%* reading +10V)         Maximum output current: 200mA         Test frequency: 45,50,55,60,65Hz or 45/55Hz, 55/65Hz, 47.5/52.5Hz; Resolution: ±0.01Hz         External HV Power Source         Maximum test current: 10kV/5A, 50Hz power frequency or variable frequency 40-70Hz         CVT LV Output         Output voltage: 3~50kV; Output current: 3~30A         Test Time         About 15 s         Input Power Suppply         180~270V AC, 50/60Hz         Environmental Temperature         C80% RH, no condensing         Deimension         430mm(W)*330mm(W)		
External power source: 3pF-1.5μF/10kV, 60pF~30μF/0.5kV  Capacitance: ±(1%* reading+2pF)  Dielectric loss: ±(1%* reading+2pF)  Minimum Resolution  Capacitance: 0.001pF  Dielectric loss: 0.001%  Test Current  5μA-5A  Output voltage: 0.5~10kV; Resolution: 1V; Accuracy: ±(1.5%* reading +10V)  Maximum output current: 200mA  Test frequency: 45, 50, 55, 60, 65Hz or 45/55Hz, 55/65Hz, 47.5/52.5Hz; Resolution: ±0.01Hz  External HV Power Source  Maximum test current: 10kV/5A, 50Hz power frequency or variable frequency 40-70Hz  CVT LV Output  Output voltage: 3~50kV; Output current: 3~30A  Test Time  About 15 s  Input Power Suppply  180~270V AC, 50/60Hz  Environmental Temperature  -10~50℃  S80% RH, no condensing  Deimension  430mm(L)*320mm(W)*330mm (H)		Internal power source:3pF~60nF/10kV, 60pF~1µF/0.5kV
Dielectric loss: ±(1%·*reading+0.04%)         Capacitance:0.001pF         Minimum Resolution         Dielectric loss:0.001%         Test Current         5µA~5A         Output voltage:0.5~10kV; Resolution:1V; Accuracy: ±(1.5% *reading +10V)         Accuracy: ±(1.5% *reading +10V)         Maximum output current: 200mA         Test frequency:45,50,55,60,65Hz or 45/55Hz, 55/65Hz, 47.5/52.5Hz; Resolution:±0.01Hz         External HV Power Source         Maximum test current:10kV/5A, 50Hz power frequency or variable frequency 40-70Hz         CVT LV Output         Output voltage:3~50kV; Output current: 3~30A         Test Time         About 15 s         Input Power Suppply         180~270V AC, 50/60Hz         Environmental Temperature       -10~50°C         Relative Humidity       ≤80% RH, no condensing         Deimension		External power source: 3pF~1.5µF/10kV, 60pF~30µF/0.5kV
Dielectric loss: ±(1%·*reading+0.04%)  Capacitance:0.001pF  Dielectric loss:0.001%  Test Current  5μA~5A  Output voltage:0.5~10kV; Resolution:1V; Accuracy: ±(1.5% *reading +10V)  Internal HV Power Source  Maximum output current: 200mA  Test frequency:45,50,55,60,65Hz or 45/55Hz, 55/65Hz, 47.5/52.5Hz; Resolution:±0.01Hz  External HV Power Source  Maximum test current:10kV/5A, 50Hz power frequency or variable frequency 40-70Hz  CVT LV Output  Output voltage:3~50kV; Output current: 3~30A  Test Time  About 15 s  Input Power Suppply  180~270V AC, 50/60Hz  Environmental Temperature  -10~50°C  Relative Humidity  Deimension  430mm(L)*320mm(W)*330mm (H)	Measuring Accuracy	Capacitance: ±(1%* reading+2pF)
Minimum Resolution       Dielectric loss:0.001%         Test Current       5μA~5A         Output voltage:0.5~10kV; Resolution:1V; Accuracy: ±(1.5% *reading +10V)         Internal HV Power Source       Maximum output current: 200mA         Test frequency:45,50,55,60,65Hz or 45/55Hz, 55/65Hz, 47.5/52.5Hz; Resolution:±0.01Hz         External HV Power Source       Maximum test current: 10kV/5A, 50Hz power frequency or variable frequency 40-70Hz         CVT LV Output       Output voltage:3~50kV; Output current: 3~30A         Test Time       About 15 s         Input Power Suppply       180~270V AC, 50/60Hz         Environmental Temperature       -10~50°C         Relative Humidity       ≤80% RH, no condensing         Deimension       430mm(L)*320mm(W)*330mm (H)		Dielectric loss: ±(1%·*reading+0.04%)
Test Current  5µA~5A  Output voltage: 0.5~10kV; Resolution: 1V; Accuracy: ±(1.5% *reading +10V)  Internal HV Power Source  Maximum output current: 200mA  Test frequency: 45,50,55,60,65Hz or 45/55Hz, 55/65Hz, 47.5/52.5Hz; Resolution: ±0.01Hz  External HV Power Source  Maximum test current: 10kV/5A, 50Hz power frequency or variable frequency 40-70Hz  CVT LV Output  Output voltage: 3~50kV; Output current: 3~30A  Test Time  About 15 s  Input Power Suppply  180~270V AC, 50/60Hz  Environmental Temperature  -10~50°C  Relative Humidity  ≤80% RH, no condensing  Deimension  430mm(L)*320mm(W)*330mm (H)	Minimum Resolution	Capacitance:0.001pF
Output voltage: 0.5~10kV; Resolution: 1V; Accuracy: ±(1.5% *reading +10V)  Internal HV Power Source  Maximum output current: 200mA  Test frequency: 45,50,55,60,65Hz or 45/55Hz, 55/65Hz, 47.5/52.5Hz; Resolution: ±0.01Hz  External HV Power Source  Maximum test current: 10kV/5A, 50Hz power frequency or variable frequency 40-70Hz  CVT LV Output  Output voltage: 3~50kV; Output current: 3~30A  Test Time  About 15 s  Input Power Suppply  180~270V AC, 50/60Hz  Environmental Temperature  -10~50℃  Relative Humidity  ≤80% RH, no condensing  Deimension  430mm(L)*320mm(W)*330mm (H)		Dielectric loss:0.001%
Accuracy: ±(1.5% *reading +10V)  Internal HV Power Source  Maximum output current: 200mA  Test frequency: 45,50,55,60,65Hz or 45/55Hz, 55/65Hz, 47.5/52.5Hz; Resolution: ±0.01Hz  External HV Power Source  Maximum test current: 10kV/5A, 50Hz power frequency or variable frequency 40-70Hz  CVT LV Output  Output voltage: 3~50kV; Output current: 3~30A  Test Time  About 15 s  Input Power Suppply  180~270V AC, 50/60Hz  Environmental Temperature  -10~50°C  Relative Humidity  ≤80% RH, no condensing  Deimension  430mm(L)*320mm(W)*330mm (H)	Test Current	5μA~5A
Test frequency:45,50,55,60,65Hz or 45/55Hz, 55/65Hz, 47.5/52.5Hz; Resolution:±0.01Hz  Maximum test current:10kV/5A, 50Hz power frequency or variable frequency 40-70Hz  CVT LV Output  Output voltage:3~50kV; Output current: 3~30A  Test Time  About 15 s  Input Power Suppply  180~270V AC, 50/60Hz  Environmental Temperature  -10~50°C  Relative Humidity  \$80% RH, no condensing  Deimension  430mm(L)*320mm(W)*330mm (H)		
S5/65Hz, 47.5/52.5Hz; Resolution:±0.01Hz  Maximum test current:10kV/5A, 50Hz power frequency or variable frequency 40-70Hz  CVT LV Output Output voltage:3~50kV; Output current: 3~30A  Test Time About 15 s  Input Power Suppply 180~270V AC, 50/60Hz  Environmental Temperature -10~50°C  Relative Humidity ≤80% RH, no condensing  Deimension 430mm(L)*320mm(W)*330mm (H)	Internal HV Power Source	Maximum output current: 200mA
CVT LV Output  Output voltage:3~50kV; Output current: 3~30A  Test Time  About 15 s  Input Power Suppply  180~270V AC, 50/60Hz  Environmental Temperature  -10~50°C  Relative Humidity  ≤80% RH, no condensing  Deimension  430mm(L)*320mm(W)*330mm (H)		
Test Time  About 15 s  Input Power Suppply  180~270V AC, 50/60Hz  Environmental Temperature  -10~50°C  Relative Humidity  ≤80% RH, no condensing  Deimension  430mm(L)*320mm(W)*330mm (H)	External HV Power Source	·
Input Power Suppply  180~270V AC, 50/60Hz  Environmental Temperature  -10~50°C  Relative Humidity  ≤80% RH, no condensing  Deimension  430mm(L)*320mm(W)*330mm (H)	CVT LV Output	Output voltage:3~50kV; Output current: 3~30A
Environmental Temperature -10~50°C  Relative Humidity ≤80% RH, no condensing  Deimension 430mm(L)*320mm(W)*330mm (H)	Test Time	About 15 s
Relative Humidity ≤80% RH, no condensing  Deimension 430mm(L)*320mm(W)*330mm (H)	Input Power Suppply	180~270V AC, 50/60Hz
Deimension 430mm(L)*320mm(W)*330mm (H)	Environmental Temperature	-10~50°C
	Relative Humidity	≤80% RH, no condensing
Net Weight 29kgs	Deimension	430mm(L)*320mm(W)*330mm (H)
Net Weight 25kgs	Net Weight	29kgs