

Your partner for the High Voltage  
& High Current Test Equipments



GRANDTOP  
europe



## IMPULSE VOLTAGE TEST

Impulse voltage test system can be used to generate lightning impulse ( $1.2 \pm 30\% / 50 \pm 20\% \mu\text{s}$ ), LI ( $T1: 1 \sim 5 \mu\text{s}$ ,  $T2: 40 \sim 60 \mu\text{s}$ ) for cable testing, chopped lightning impulse (chopped time between  $2 \sim 5 \mu\text{s}$  to test power transformers, instrument /voltage transformers and bushings), switching impulse ( $250 \pm 20\% / 2500 \pm 60\% \mu\text{s}$ ) and steep front waveforms (to test glass insulator, composite insulators or ceramic insulators).



<u>Model No.</u>	<u>Rated Voltage (kV)</u>	<u>Impulse Energy (kJ)</u>	<u>Impulse Capacitance (<math>\mu\text{F}</math>)</u>	<u>Stage Voltage (kV)</u>	<u>Stage Number</u>
IVG300/15	300	15	0.333	100	3
IVG300/30	300	30	0.667	100	3
IVG400/40	400	40	0.5	100	4
IVG400/20	400	20	0.25	100	4
IVG600/30	600	30	0.166	100	6
IVG800/40	800	40	0.125	100	8
IVG900/50	900	50	0.125	150	6
IVG900/7.5	900	67.5	0.167	150	6
IVG1200/45	1200	45	0.0625	150	8
IVG1200/90	1200	90	0.125	150	8
IVG1600/80	1600	80	0.0625	200	8
IVG1800/90	1800	90	0.0556	200	9
IVG2400/240	2400	240	0.0833	200	12
IVG2800/280	2800	280	0.0174	200	14
IVG3000/300	3000	300	0.067	200	15
IVG3600/180	3600	180	0.0278	200	18
IVG4800/360	4800	360	0.03125	200	24

## AC VOLTAGE TEST TRANSFORMERS

AC voltage test transformers are applicable for the AC voltage withstand test and partial discharge test of different insulation materials and electrical apparatus as below:

- Insulators in dry or wet conditions;
- Medium and high voltage Switchgear, GIS;
- instrument transformer, VT, CT;
- Circuit breaker;
- Power and distribution transformers;
- Power XLPE cables;
- Bushings;
- Surge arresters

They are widely used in the electrical apparatus manufacturers, electric power department, research institute and universities. The possibility of stacking several transformer allows reaching very high voltages by keeping a reasonable floorspace.



<u>Model No.</u>	<u>Maximum Output Voltage (kV)</u>	<u>Rated Output Current (A)</u>	<u>PD Level</u>
JXAC-5/50	50	0.1	<3pC
JXAC-5/100	100	0.05	<3pC
JXAC-20/100	100	0.2	<3pC
JXAC-50/100	100	0.5	<3pC
JXAC-50/250	250	0.2	<3pC
JXAC-500/250	250	2	<3pC
JXAC-150/300	300	0.5	<3pC
JXAC-300/300	300	1	<3pC
JXAC-250/250*2	500	0.5	<5pC
JXAC-500/250*2	500	1	<5pC
JXAC-300/300*2	600	0.5	<5pC
JXAC-600/300*2	600	1	<5pC
JXAC-1200/300*2	600	2	<5pC
JXAC-700/350*2	700	1	<5pC
JXAC-800/400*2	800	1	<5pC
JXAC-3000/500*3	1500	2	<10pC

**AC RESONANT TEST SYSTEMS  
WITH METAL TANK TYPE**

AC resonant test systems with variable inductance and metal tank type are used for factory testing of medium and high voltage cables, high voltage capacitors, generators, and motors. They use the resonance between the capacitive test object and the inductive HV reactor of the test system to generate a continuous sinusoidal high voltage.

The oil-cooled HV reactor is installed in a closed steel tank. The high voltage is fed outward through the steel tank through a HV bushing. The reactor can be fitted with additional voltage taps (bushings) to achieve largest testable capacitances of test objects at lower test voltages.



<u>Model No.</u>	<u>Maximum Output Voltage (kV)</u>	<u>Rated Output Current (A)</u>	<u>PD Level</u>
JXXZ-1400/70	70	20	<5pC
JXXZ-2800/70	70	40	<5pC
JXXZ-340/85	85	4	<5pC
JXXZ-1000/100	100	10	<5pC
JXXZ-2250/100	100	22.5	<5pC
JXXZ-2400/120	120	20	<5pC
JXXZ-2640/220	220	12	<5pC
JXXZ-2500/250	250	10	<5pC
JXXZ-3500/350	350	10	<5pC
JXXZ-5250/350	350	15	<5pC
JXXZ-7000/350	350	20	<5pC

## AC RESONANT TEST SYSTEM WITH MODULE TYPE

AC resonant test systems with variable inductance and module type are used for factory testing of medium and high voltage cables, power transformers, bushings, high voltage capacitors, generators, arresters and high voltage accessories. They include stackable modules that can be used to test a wide range of products. The systems can be expandable to cover future test requirements that may require higher voltage and power levels.



<u>Model No.</u>	<u>POWER</u>	<u>Maximum Output Voltage (kV)</u>	<u>Output Current (A)</u>
CLXZ-1050/350	1050	350	3
CLXZ-3500/350	3500	350	10
CLXZ-800/400	800	400	2
CLXZ-1200/400	1200	400	3
CLXZ-600/2*300	800	600	1
CLXZ-1200/2*300	1200	600	3
CLXZ-1200/2*300	12000	600	20
CLXZ-21000/2*350	21000	700	30
CLXZ-900/900	900	900	1
CLXZ-3150/350*3	3150	1050	3
CLXZ-3600/1200	3600	1200	3
CLXZ-8000/1600	8000	1600	5

**VARIABLE FREQUENCY AC RESONANT TEST SYSTEMS**

Variable frequency AC resonant test systems are mainly used for AC withstand voltage test of large capacitive test objects on include SF6 circuit breakers, GIS, power cables, etc. With suitable tuning capacitor, the frequency range can be from 20Hz to 300Hz. The AC resonant test systems are applicable for partial discharge test of instrument transformers, coupling capacitors and metal oxide surge arresters with rated voltage under 1000kV.

**Applications:**

- Onsite GIS testing;
- Power cable testing;

<u>Model No.</u>	<u>POWER</u>	<u>Maximum Output Voltage (kV)</u>	<u>Output Current (A)</u>
TPXZ-960/80	960	80	12
TPXZ-3750/150	3750	150	25
TPXZ-4950/220	4950	220	22.5
TPXZ-400/400	400	400	1
TPXZ-2000/400	2000	400	5
TPXZ-550/550	550	550	1
TPXZ-1100/550	1100	550	2
TPXZ-400/2*400	400	800	0.5
TPXZ-2400/2*400	2400	800	3
TPXZ-4000/2*400	4000	800	5
TPXZ-600/3*400	600	1200	0.5
TPXZ-800/4*400	800	1600	0.5



## SURGE GENERATOR



Surge generators can be used to generate impulse of exponential shapes to perform high energy surge tests. The system can output combination wave (open circuit voltage 1.2/50 $\mu$ s & short circuit current 8/20 $\mu$ s, open circuit voltage 10/700 $\mu$ s & short circuit current 5/300 $\mu$ s). With additional impulse modules, it can output 10/350 $\mu$ s and 8/20 $\mu$ s.



<u>Model No.</u>	<u>Open circuit voltage waveform</u> <u>(1.2/50<math>\mu</math>s)</u>	<u>Short circuit current Waveform</u> <u>(8/20<math>\mu</math>s)</u>	<u>Output Impedance</u>	<u>Impulse repetition</u>
CWG6	1~ 6kV	0.5~3kA	2 $\Omega$	3pulses/minute
CWG10	1~ 10kV	0.5~5kA	2 $\Omega$	2 pulses/minute
CWG20	1~ 20kV	1~10 kA	2 $\Omega$	2 pulses/minute
CWG30	1~ 30kV	1.5~15kA	2 $\Omega$	2 pulses/minute

## HV DC GENERATOR

HV DC generators are used to output DC voltage at power frequency, 50 Hz or 60 Hz. It can test the surge arresters, insulators and other insulation materials for DC withstand.

<u>Model No.</u>	<u>Ripple Fctor</u>	<u>Maximum output Voltage (Kv)</u>	<u>Output current (mA)</u>
JXDC-60/2	$\leq 0.5\%$	60	2
JXDC-120/5	$\leq 0.5\%$	120	5
JXDC-200/5	$\leq 0.5\%$	200	5
JXDC-250/10	$\leq 3\%$	250	10
JXDC-300/10	$\leq 3\%$	300	10
JXDC-400/10	$\leq 3\%$	400	10
JXDC-1000/100	$\leq 3\%$	1000	100
JXDC-1600/50	$\leq 3\%$	1600	50
JXDC-2000/500	$\leq 3\%$	2000	500



## VOLTAGE DIVIDER

Voltage divider has the below kinds:

1. Impulse voltage divider for measurement of LI, SI and LIC from 100kV to 3600kV (Capacitance 300~1000pF, Measuring accuracy:  $\leq \pm 3\%$ );
2. Capacitive voltage divider for AC measurement from 50kV to 2000kV (Measuring accuracy:  $\leq \pm 1\%$ );
3. Resistive voltage divider for DC measurement from 20kV to 2400kV (Measuring accuracy:  $\leq \pm 1\%$ );
4. AC, DC or Impulse measurement;

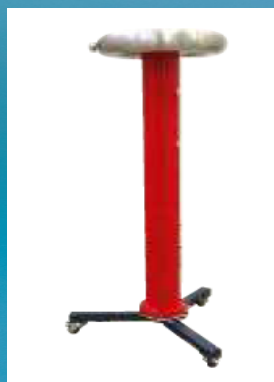
## IMPULSE VOLTAGE DIVIDER

<u>Model No.</u>	<u>Rated Voltage L.I.1.250/50<math>\mu</math>s kV</u>	<u>Rated Voltage S.I.1.250/2500<math>\mu</math>s kV</u>	<u>Rated Capacitance pF</u>
JXVD-400/300	300	240	300~600
JXVD-400/400	400	320	300~600
JXVD-400/600	600	480	300~600
JXVD-300/800	800	640	300~600
JXVD-300/1200	1200	960	300~600
JXVD-300/1600	1600	1280	300~1000
JXVD-300/2400	2400	1920	300~1000
JXVD-400/3000	3000	2400	300~1000
JXVD-400/3600	3600	2880	300~1000



### UNIVERSAL VOLTAGE DIVIDER

Model No.	Rated AC Voltage (kV)	Rated DC Voltage (Kv°)	Rated Voltage S.I. 250/2500 $\mu$ s (kV)	Rated Capacitance (pF)	Rated Resistance (M $\Omega$ )
JXBF-550	550	700	1200	400	500
JXBF-400/400	550	/	650	150	80
JXBF-363	363	465	950	400	400
JXBF-252	252	350	550	400	500
JXBF-40.5/300	40.5	60	100	300	40
JXBF-40.5/75	40.5	/	75	70	5



### PARTIAL DISCHARGE TEST SYSTEMS

Partial discharge detector and coupling capacitor are used for partial discharge measurement. The coupling capacitor can also be used as the voltage divider with additional secondary low voltage arm.

<u>Model No</u>	<u>Rated Voltage</u>	<u>Rated Capacitance</u>	<u>Partial Discharge</u>
JXOC-5/1	5kV	1nF	$\leq 2$ pC
JXOC-25/1	25kV	1nF	$\leq 2$ pC
JXOC-50/1	50kV	1nF	$\leq 2$ pC
JXOC-100/1	100kV	1nF	$\leq 2$ pC
JXOC-200/1	200kV	1nF	$\leq 2$ pC
JXOC-300/1	300kV	1nF	$\leq 2$ pC



## REGULATING TRANSFORMERS

This series of regulating transformers can regulate the output voltage steplessly, smoothly and continuously on load. As it has low impedance voltage and low waveform distortion ratio, it is widely used as the power source for testing of motors, transformers and switchgears. In addition, it can also be used as one component of rectifier device, DC speed adjustment, communication and medical instrument.

### Features:

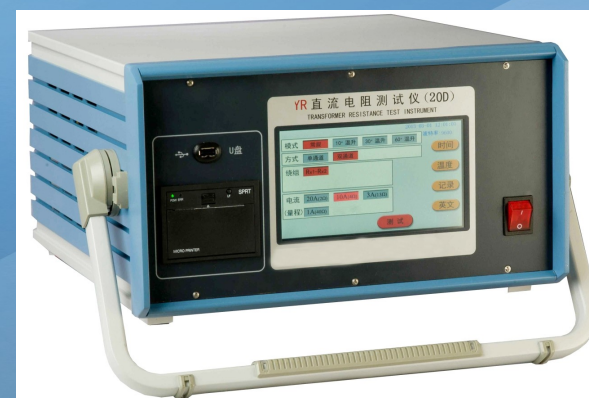
- 1) **Low no-load current and total loss;**
- 2) **Low waveform distortion ratio;**
- 3) **Low impedance voltage;**
- 4) **Excellent linearity of voltage regulation;**
- 5) **Good stability to withstand instant load**



<u>Model No.</u>	<u>Cooling Method</u>	<u>Rated power (kVA)</u>	<u>Phase</u>	<u>Rated input Voltage (V)</u>	<u>Rated output Voltage (V)</u>
JTDZ-xxx	ONAN	25-315	1	220	0-250
JTDZ-xxx	ONAN	40-500	1	380	0-430 or 0-650
JTSZ-xxx	ONAN	40-1600	3	380	0-430 or 0-650
JTSZ-xxx/3.3	ONAN	200-2500	3	380, 3300, 6000 or 10000	0-3300
JTSZ-xxx/6.3	ONAN	200-2500	3	380, 3300, 6000 or 10000	0-6300
JTSZ-xxx/10.5	ONAN	200-2500	3	380, 3300, 6000 or 10000	0-10500
JTDGZ-xxx	DRY	15-200	1	220	0-250
JTDGZ-xxx	DRY	16-200	1	380	0-430 or 0-650
JTSGZ-xxx	DRY	25-315	1	380	0-430 or 0-650

This series of 3 phase regulating transformer is applicable for the testing of transformers or motors upto 10 Kv. Induced regulating transformer, is developed for the no-load, on-load test of transformers

<u>Model No.</u>	<u>Rated Power (kVA)</u>	<u>Rated Input Voltage (V)</u>	<u>Rated Output Voltage (V)</u>
JXTY-xxx	20-3150	380	0-650
JXTY-xxx/2.5	125-2500	380	0-1000, 0-2000, 0-2500
JXTY-xxx/10.9	630-4000	380	0-3150, 0-6300, 0-10900
JXTY-xxx/6.3	630-12500	6000	0-6300
JXTY-xxx/10.5	630-10000	6000	0-10500
JXTY-xxx/10	400-8000	10000	0-6300
JXTY-xxx/10.5	500-10000	10000	0-10500
JXTY-xxx/13	500-10000	6000 or 10000	0-13000
JXTY-xxx/10.9	630-10000	6000 or 10000	0-3150, 0-6300, 0-10900
JXTY-xxx	40-1600	380	0-650



**IMPULSE CAPACITOR**

Impulse capacitors are widely used as the power energy for the high voltage and high current devices, such as impulse current generator, impulse voltage generator, long duration impulse current generator, repetition impulse generator, oscillation circuit test systems, pulse power, etc.



<u>Model No.</u>	<u>Rated Voltage (kV)</u>	<u>Rated Capacitance (μ8F)</u>	<u>Inductance (nH)</u>	<u>Application</u>
JMCF8-200	8	200	≤ 100	Oscillation circuit
JMWF10-0.6	10	0.6	≤ 30	Mechanical device
JMCF18-40x2	18	40x2	≤ 120	Impulse current generator
JMWF20-20	20	20	≤ 80	Long duration impulse current generator
JMWF30-18	30	18	≤ 200	Oscillation circuit
JMWF35-2	35	2	≤ 100	Cable fault detector
JMWF40-36	40	36	≤ 300	Impulse voltage generator
JMCF50-32	50	32	≤ 20	Pulse power device
JMWF75-1*2	75	1x2	≤ 220	Impulse voltage generator
JMCF80-3	80	3	≤ 120	Impulse current generator
JMCF80-4	80	4	≤ 30	Pulse power device
JMWF100-1	100	1	≤ 200	Impulse voltage generator
JMWF100-2	100	2	≤ 200	Impulse voltage generator
JMWF100-3	100	3	≤ 200	Impulse voltage generator, impulse current generator
JMCF150-2	150	2	≤ 250	Impulse voltage generator

## RESISTORS

We manufacture different kinds of resistors, such as wave shapping resistors for LI, SI and LIC, charging resistors and protective resistors for AC test systems. We can do custom made.

<u>Model No.</u>	<u>Rated Voltage (kV)</u>	<u>Rated Resistance (<math>\Omega</math>)</u>
JXDZ-100/75	100	75
JXDZ-100/600	100	600
JXDZ-100/20k	100	20k
JXDZ-150/25	150	25
JXDZ-150/105	150	105
JXDZ-150/4.5K	150	4.5k
JXDZ-200/80	200	80
JXDZ-200/300	200	300
JXDZ-200/3K	200	5k

<u>Model No.</u>	<u>Rated Voltage (kV)</u>	<u>Rated Resistance (<math>\Omega</math>)</u>
JCDZ-100/5	100	5k
JCDZ-100/10	100	10k
JCDZ-150/15	150	15k
JCDZ-150/40	150	40k
JCDZ-150/53	150	53k
JCDZ-200/10	200	10k
JCDZ-200/20	200	20k
JCDZ-200/45	200	45k



CONTROL AND MEASUREMENT SYSTEM

Control Desk for Impulse Voltage Generator, Impulse Current Generator, AC Test System and DC Generator



CORONA RINGS AND SHIELDED PARTS



**Automatic Capacitance & Tan Delta Tester JXJS-10**

**Introduction:**

JXJS-10 automatic capacitance & tan delta tester has ridge, variable frequency converter. AC test transformer and standart capacitor inside .I t 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 test data;
- 3) Automatically recognize the test object wether it is capacitive, inductive or resistive, easy operation;
- 4) Can connect an external standart 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 recognie 50Hz/60Hz power source.
- 6) With series or Parallel methods of measurement;
- 7) Automatically recognize external HV power source with frequency between 40-70 Hz, can be used together with AC test transformer or AC resonant test system.
- 8) 100 test results storage facility, computer interface.

Capacitance Measurement Range	Internal power source: 3pF~60nF/10kV, 60Pf~1μF/0.5kV External power source: 3pF~1.5μF/10kV, 60Pf~30μF/0.5kV
Measuring Accuracy	Capacitance: ± (1%*reading+2pF) Dielectric loss: ± (1%*reading+0.04%)
Minimum Resolution	Capacitance:0.001pF Dielectric loss:0.001%
Test Current	5μA~5A
Internat HV Power Source	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 valiable frequency 40-70Hz
CVT LV Output	Output voltage: 3~50kV, output current:  3~30A
Test Time	About 15s
Input Power Supply	Maximum test current: 10kV/5A , 50Hz power Frequcy or valiable frequency 40-70Hz
Environnemental Temperature	180~270V AC , 50:60Hz
Relative Humidity	≤80% RH, no condensing
Deimension	430 mm (L)*320 mm (W)*330 mm (H)
Net Weight	29 Kgs

## Transformer Turns Ratio Meter –YT-A

### Introduction:

YT-A transformer turns ratio meter is suitable for the turns ratio measurement of power transformers upto 1000kV, current transformers, voltage transformers and Z type transformers. It has L-N voltage measurement, great convenience for wiring connection, fast test speed and high accuracy.

### Features

- 1) Touch panel, easy for operation;
- 2) Current measurement function, much more sensitive to detect the short circuit in the turns;
- 3) Fast test speed, one time wiring can fullfill 3 phase turns ratio measurement within 10 s;
- 4) 50 test data storage;
- 5) LCD, thermal printer, RS485 communication port and USB port;
- 6) With transformer short circuit protection, turns short circuit



Displayed Digits	5 digits		
Output Voltage	160V, AC	10V, AC	Automatic (inbuilt DC)
Range	0,90~10000	0.9~500	0.9~5000
Accuracy	± 0.1% when Ratio < 2000	± 0.1% when ratio < 150	± 0.1% when ratio < 1000
	± 0.3% when Ratio 2000~10000	± 0.3% when ratio 150~500	± 0.3% when ratio 1000~5000
Resoluton	0.0001		
Power Supply	AC220V± 10%, 50/60Hz± 1Hz		Lithium battery (optimal)
Temperature	-20~40°C		
Relative Humidity	≤ 80% RH, no condensing		
Deimension	360mm (L)*280mm (W)*160mm (H)		
Net weight	6 Kgs		



## Transformer Turns Ratio Meter-YT-F

### Introduction:

YT-F transformer turns ratio meter is suitable for the turns ratio measurement of power transformers upto 1000kV, current transformers, voltage transformers and Z type transformers.

### Feature:

- 1) Touch panel, easy for operation;
- 2) 50 test data storage;
- 3) Test transformers with neutral point, measure the turns ratio of different phases;
- 4) Current measurement function, much more sensitive to detect the short circuit in the turns;
- 5) 50Fast test speed, one time wiring can fulfill 3 phase turns ratio measurement within 10s;
- 6) 50 test data storage;
- 7) LCD, thermal printer, RS485 communication port and USB port;
- 8) With transformer short circuit protection, wrong connection of HV and LV terminals protection;



Displayed Digits	5 digits		
Output Voltage	160V, AC	10V, AC	Automatic (inbuilt DC)
Range	0,90~10000	0.9~500	0.9~5000
Accuracy	± 0.1% when Ratio < 2000	± 0.1% when ratio < 150	± 0.1% when ratio < 1000
	± 0.3% when Ratio 2000~10000	± 0.3% when ratio 150~500	± 0.3% when ratio 1000~5000
Resoluton	0.0001		
Power Supply	AC220V± 10%, 50/60Hz± 1Hz		Lithium battery (optimal)
Temperature	-20~40°C		
Relative Humidity	≤ 80% RH, no condensing		
Deimension	360mm (L)*280mm (W)*160mm (H)		
Net weight	6 Kgs		

## DC Resistance Tester-KRI9310

### Introduction:

KRI9310 DC resistance tester is portable and automatic tester, which is applicable for the inductive test objects (such as distribution transformers, instrument transformers, reactors, etc.) and the resistive test objects (such as contactors of switches, contactors of relays, etc.).

### Features:

- 1) Ranges of output current for selection;
- 2) Automatic calculation function, input the test object material (copper/aluminum) and its temperature, the DC resistor tester will automatically calculate the resistance @ standard temperature (20°C, 75°C or 120°C).
- 3) 500 test data storage;
- 4) USB port to download the test data to USB flash disk;
- 5) Protection-discharge alarming, over-heat alarming;
- 6) Professional probes as optional to measure the real-time temperature.



Range	Resistance measurement					
	10A	3A	1A	0.3A	0.1A	5mA
Mesure Range	0~0.1Ω	0.01~2Ω	0.03~6Ω	0.01~20Ω	0.3~60Ω	30~20kΩ
Accuracy	0.2% readings ± 0.5 μΩ					
Resolution	0.1μΩ					
Battery	Inbuilt lithium-ion polymers battery, 11.1V, 4500mAh					
Temperature	20°C, 75°C, 120°C standart					
Deimension	155m(L)* 210mm(W)* 68mm(H)					
Net Weight	1.66Kgs					
Probe (optional)	Temperature (-99.9°C~199.9°C), accuracy (readings ± 0.5°C)					

## DC resistance test instrument-YRC type

### Introduction:

YRC type DC resistance is applicable to measure the DC resistance of power and distribution transformers, current transformers with rated voltage upto 110 Kv.

### Features:

- 1) Inbuilt power with high efficiency, no electric fan, which will prevent dust from coming into the tester;
- 2) 80 test storage;
- 3) Protection if the tester is connected with 380V AC power supply;
- 4) Discharge alarming;

Model	YR-05C	YR-10C
Output current	5A, 2.51A 1A, 100mA, <10mA	10A, 3A, 1A, 100mA, <10mA
Range	0~20KΩ	0~20KΩ
Accuracy	0.2% readings ±2μΩ	0.2% readings ±2μΩ
Resolution	0.1μΩ	
Output Voltage	DC24V	
Input Power supply	AC220V±10%,5 0Z±1Hz, DC12~24V/5A	
Deimension	335mm (L)*235mm (W)*260mm (H)	
Net Weight	7.7kgs	



## DC resistance test instrument-YR type

### Introduction:

YR type DC resistance test instrument is applicable to measure the DC resistance of power and distribution transformers, current transformers with high resistance values.

### Features:

- 1) Fast charging speed, charging voltage upto 30V;
- 2) Demagnetization function, reduce the remanent magnetization to prevent the difficulty of power on;
- 3) USB port to download the test data to USD flash disk;
- 4) 485 communication port to communicate with the computer;
- 5) Protection if the tester is connected with 380V AC power supply;
- 6) Discharge alarming;

Model	YR-20C	YR-40C	YR-50C
Application	Transformers up to 240 MVA	All transformers	All transformers
Output current	20A, 10A 3A, 1A, 15mA	40A, 20A, 10A, 3A, 1A, 15mA	50A, 40A, 20A, 10A 3A, 1A, 15mA
Range	0~20K $\Omega$	0~20K $\Omega$	0~20K $\Omega$
Accuracy	0.2% readings $\pm 2\mu\Omega$	0.2% readings $\pm 0.1\mu\Omega$	0.2% readings $\pm 0.01\mu\Omega$
Resolution	0.1 $\mu\Omega$	0.01 $\mu\Omega$	0.01 $\mu\Omega$
Output Voltage	DC30V		
Input Power supply	AC220V $\pm 10\%$ , 50Hz $\pm 1$ Hz, DC12~24V/5A		
Dimension	420mm (L)*320mm (W)*200mm (H)		
Net Weight	12kgs		



## Transformer Resistance Test Instrument –YRD/YRE type

### Introduction:

YRD and YRE type transformer resistance test instrument is applicable to measure the DC resistance of power and distribution transformers, current transformers upto 240 MVA. It can also be used during temperature rise test.

### Features:

- 1) 2 channels to measure the resistances simultaneously;
- 2) Constant current technology;
- 3) Color touch panel with easy operation
- 4) Interval time of 10s, 30s and 60s for selection during temperature rise test;
- 5) Automatically save and print the test data within the set timing;
- 6) With temperature rise software to handle the test data;
- 7) USB port to download the test data to USD flash disk for the temperature rise curve;
- 8) 485 communication port to communicate with the computer;
- 9) Protection if the tester is connected with 380V AC power supply;
- 10) Discharge alarming;

Model	YR-40D	YR-40E
Output current	40A, 20A 10A, 3A, 1A, 0.3A	40A, 20A 10A, 3A, 1A, 0.3A, 25mA
Range	0~130Ω	0~40KΩ
Accuracy	0.2% readings ±2μΩ	0.2% readings ±2μΩ
Resolution	0.1μΩ	0.01μΩ
Output Voltage	DC50V	
Input Power supply	AC220V±10%,5 0Z±1Hz, DC 12~24V/5A	
Deimension	410mm (L)*440mm (W)*210mm (H)	
Net Weight	15.8kgs	



## DC Resistance Meter-YR-20W type

### Introduction:

YR-20W type DC resistance meter is applicable to measure the DC resistance of power and distribution transformers, current transformers upto 35kV. It is especially designed for the transformers whose resistances of HV winding and LV windings have a big difference.

### Features:

- 1) Interval time of 10s, 30s and 60s for selection during temperature rise test;
- 2) Double power with constant current;
- 3) Color touch panel with easy operation;
- 4) Test the LV winding, HV winding at the same time or seperately;
- 5) With temperature rise software to handle the test data;
- 6) USB port to download the test data to USD flash disk for the temperature rise curve;
- 7) 485 communication por to communicate with the computer;
- 8) Protection if the tester is connected with 380V AC power supply;
- 9) Discharge alarming;

Display Digits	4.5 digits	
Ouput current	HV side: CH 1.5A, 1A, 0.1A , 10mA	LV side: CH2, 20A, 10A, 5A,2A
Range	0~2Ω	0~2Ω
Accuracy	0.2% readings ±1μΩ	0.2% readings ±0.2μΩ
Output Volatge	DC20V	DC4V
Resolution	0.1μΩ	
Output Voltage	DC50V	
Input Power supply	AC220V±10%,50Z±1Hz,	
Deimension	410mm (L)*440mm (W)*210mm (H)	
Net Weight	15.8kgs	



## Instrument Transformer Characteristic Tester-JYH-B

### Introduction:

JYH-B instrument transformer characteristic tester can measure the turns ratio, polarity and volt-ampere characteristic of the current transformers and voltage transformers. It has large power regulating transformer, set-up transformers and current-up device inside. The tester is widely used in the routine test of voltage and current transformers.

### Features:

- 1) The test voltage and current can be set, the tester will automatically increase the voltage and form the volt-ampere characteristic curve;
- 2) Ability to be connected with an external set-up transformer with out-put voltage upto 4kV and current upto 1.5A, which can test current transformers upto 500kV 1A;
- 3) Big LCD shows the volt-ampere curve;
- 4) With micro-printer to print out the test data;
- 5) With numbers keyboards, easy operation;
- 6) 100 test data storage;
- 7) RS232 communication port, can be connected to computer, test data can be upload to the computer for edit or save;

	Output Voltage And current	Load range
Inbuilt step-up Transformer	0~2500V 0~20A	1A/2500V, 2A/1500V, 5A/600V, 10A/220V, 20A/30V
Measuring Accuracy	Accuracy of volt-ampere: 0.5 class, accuracy of turns ratio measurement: 0.5 class (when secondary voltage $\geq$ 50V, secondary current $\geq$ 200mA)	
Inbuilt Current-up Device	0-800A/1000A	800VA
Precision of turns ratio measurement	$\leq$ 1%	
Power supply	AC220V, 50/60Hz	
Environnement Temperature	-10°C~50°C	
Deimension	425mm (L)*300mm (W)*290mm (H)	
Net Weight	26kgs	



### ADDITIONALL SERVICE

GrandTop Europe provides services to theirs customers:

- On site Installation
- Services support (Hot line)
- Fast intervention
- Spare parts

GrandTop Europe had invest in a Magnetic Capacitor Measuring System to evaluate the good quality of the High Impulse Voltage **Capacitors**.

With this new offer of service, our Support Service, could check your capacitors up to 30kV and could be see during the time theirs performances.



It is a really safety important issue, each 1 or 2 years it will be great to doing this safety control !

### OUR CUSTOMERS



### **GrandTop Europe**

23 Vieux Bouchard  
F-19300 Egletons - France  
Téléphone : +33(0)5 55 29 36 61  
(Mobil : +33 (0)6 45 28 79 08)  
Fax: +33(0)5 55 87 47 69  
E-mail : sales@grandtop.eu