

# WK7820 Series Impulse Tester



NEW

CE

WK7820 Series

## Features

- Single channel to Max.:8 channels
- Impulse voltage of 30V~10kV
- Minimum inductance can be tested: 1uH
- Up to 200Msps waveform sampling rate
- Maximum measuring speed: 6meas/sec
- Storage depth of 6k Bytes
- High bandwidth analog acquisition circuit
- High-fidelity corona extraction algorithm (patent technology)
- Four waveform comparison methods
- Automatic storage of instrument parameters
- Measurements on voltage, time and frequency
- Amplification, stretch and movement of the waveform for accurate display
- Multi-sample average, average processing of 32

standard waveforms

- Destructive testing for your correct choose of voltage
- Use demagnetized impulse to ensure the conformity of tested waveforms
- 20 groups of instrument files can be stored and automatically loaded
- Screen information can be stored in USB disk (COPY key)
- System firmware can be automatically upgraded through USB-disk
- Four selectable display interface effects
- Foot control interface
- RS232C, USB LAN and Handler interface

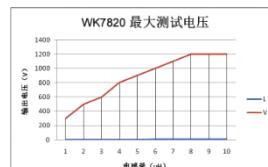
## Brief Introduction

WK7820 series are newly developed impulse testers. This product line is able to perform impulse tester from low voltage of 30V to high voltage of 10kV, single channel to multichannel (Max.:8 channels) in this industry. It adopts popular 32 bit CPU and high density SMD technology, 65k color 7-inch TFT wide display screen, bringing ease for your eyes and convenience to your operation. The minimum impulse voltage of 30V, maximum impulse voltage output of 10kV, minimum inductance 1uH, sampling rate of 200Msps, memory depth of 6k bytes makes your test accurately. The usage of standard sample average, application of demagnetized impulse, high bandwidth analog acquisition circuit, technology of high-fidelity corona extraction as well as the opening of non-destructive test reflect the design philosophy "customer-oriented".

WK7820 series is consist of 3 models:WK7820-1, WK7820-2 and WK7820-3. With minimum impulse voltage of 30V and maximum impulse voltage of 1200V, WK7820-1 low inductance impulse tester can test 1uH low inductance value. It is to inductance coils used by switching power supply. With impulse voltage of 100V~5000V, WK7820-2 is a standard product for testing all kinds of coils. With maximum impulse output voltage of 10kV, WK7820-3 is appropriate for interturn test of higher insulation and voltage resistance. Standard-equipped USB Host, RS232C, USB Device · LAN interface and Handler of WK7820 series product are convenient for your fast storage of graphs and remote control.

### Corona extraction function:

With high-fidelity corona extraction algorithm (patent technology) and high bandwidth and analog acquisition circuit,WK7820 series product can fully recover corona waveform of high-frequency and makes you know more about the insulating property of products. The maximum output test voltage of WK7820-1 is related to the load inductance value, as shown in the follow:



# WK7820 Series Impulse Tester

## Specifications

Model	WK7820-1	WK7820-2	WK7820-3
Impulse voltage	30V-1200V 5V steps	100V-5000V 10V steps	500V-10kV 20V steps
Voltage accuracy	±(5% set value +5V)	±(5% set value +15V)	±(5% set value +25V)
Readback accuracy	±(5% actual value +5V)	±(5% actual value +15V)	±(5% actual value +25V)
Channels	1		
Inductance test range	≥1uH	≥10uH	≥20uH
Impulse energy	Max.: 0.02 Joule	Max.: 0.25 Joule	Max.: 0.5 Joule
Test speed	6 times/second	6 times/second	3 times/second (when 10kV impulse voltage is output)
Pulses applied	Max.: 32		
Input Impedance	5MΩ		
Display	800x480 dots, 65k color TFT; Waveform Display Range: 600x256		
Waveform Acquisition	Sampling rate: Max. 200Msps, 8 levels adjustable Resolution: 8 Bits Memory Depth: 6k Bytes Average: 1 to 32		
Comparison Methods	Comparison with Standard Waveform: <ul style="list-style-type: none"> <li>• Area Size Comparison</li> <li>• Differential Area Comparison</li> <li>• Corona Discharge Comparison</li> <li>• Differential Phase Comparison</li> </ul>		
Waveform Measurement	Voltage/Frequency/Time		
Trigger Mode	Manual/External/Bus/Internal		
Detection Output	OK/NG display/LED/ Alarm		
Measurement Statistics	Statistics for measurement results		
Memory	20 groups of standard waveform data and instrument setup can be stored in internal non-volatile memory. USB flash memory can be used as external memory.		
Interface	Handler, RS232C, USB Device, USB Host, LAN		
Power supply			
Power supply	220V ±10% 50Hz/60Hz ±5%		
Power consumption	≤200VA		
General conditions			
Working environment	Temperature Humidity	0°C - 40°C ≤75% R.H.	
Safety and electromagnetic compatibility	IEC61010-1:2001, IEC61326-2-1:2005		