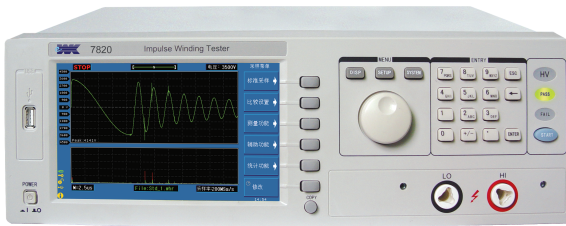


# Transformer, Motor and Winding Test Instruments

## D. WK 7820 Series Impulse Winding Tester

NEW



### WK 7820 Series

#### Features

- First LXI winding tester
- 65k color 7" TFT wide display screen
- Up to 200Msps sampling rate
- Measuring speed: 6 meas/sec
- 6kB memory depth
- High-fidelity corona extraction algorithm (patent technology)
- Four waveform comparison methods
- Automatic storage of parameters
- Measurements on voltage, time and frequency
- Pan and zoom of waveforms
- Average times: 0 to 32
- Destructive testing for your correct choose of voltage
- Use demagnetizing impulse to ensure the conformity of test results
- Provide your credentials to access this instrument.
- 20 setup files can be stored and automatically loaded
- Waveforms can be stored in USB disk.
- Instrument firmware can be automatically upgraded through USB
- Chinese and English Operation languages
- Three user's operation display available
- Foot-control interface for fast measurement
- Handler interface can be used in automatic production line
- RS232C、USB Device and LAN to realize remote control

#### Brief Introduction

Combination of intelligence, easy-use, innovation, high-efficiency and accuracy

Relying on the accumulation of winding test technology and years of extensive market research and the experience from last two generation products, eWK has developed a new WK 7820 series impulse winding tester bearing prominent appearance, display, function and performance. The new series is comparable with the most advanced products on the market. WK 7820 series adopts the currently advanced 32bit CPU, high-density SMT, 65k color 7-inch TFT wide display screen.

Its operation is quite easy and its interface is user friendly. With maximum 5,000V impulse voltage, 200Msps sampling rate and 6kB memory depth, WK 7820 series can test your instrument more accurately. Applications of advanced technologies, such as standard sampling average, demagnetizing impulse, high-fidelity corona extraction and destructive testing, show our design conception—for customer's satisfaction and share the future technology.

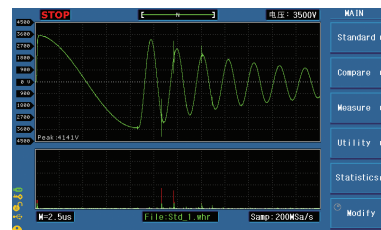
WK 7820 series provides almost all advanced interfaces so you can make remote control and store the displaying graph quickly. To meet customer's increasing requirements for the test of small inductors, WK 7820 series has equipped with exclusive test fixtures to decrease the effects of testing cable on measurement results.

#### TFT wide display: best visualization of signal

WK 7820 series equips with 65k color 7" TFT wide display to show waveforms more detailed and clear. Displaying more oscillation waveforms on the wide display meets the requirement for low dissipation DUTs. This display has advantage over mono LCD in obtaining sharp comparison results between standard and tested waveforms.

#### High-fidelity corona extraction technology: extract more reliable corona

WK 7820 series adopts a new patent technology—high-fidelity corona extraction technology, developed by eWK. Coronas extracted through this method reflect the real coronas generated in the process of winding test without any lose. A traditional method for corona detection in other products is to calculate the waveform-sampling area by integral methods. Due to the different integral areas, the result of integration can be different as well. Therefore, it is impossible to judge the corona generated by the same coil product under the same test condition, which will result in different detection results. WK 7820 series first achieves to extract corona without distortion on the impulse winding tester. With no doubt, the test result is reliable.



#### Fast storage of graphs: Never worry that you fail to store measurement waveform in time.

Winding testers currently available on the market always need an interface to send the tested waveform data to PC. Then PC software rebuilds the sampled waveform. In this way, customers are required to have some special skills and knowledge. However, by using WK 7820, all you need have is an USB disk

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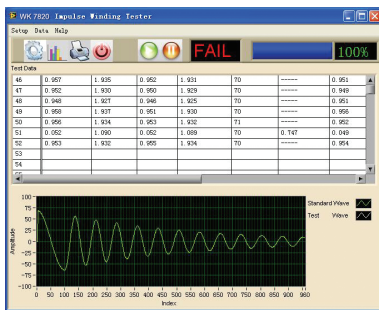
and all you need do is to press a button to store the screenshot to a USB disk. Thus eWK2882 series removes your worry.

### LXI Standard: remote control for your convenience

LAN exists almost everywhere and WK 7820 series has no exception. LXI standard combines advantages of Ethernet and Web and uses them in test system so that you can control your system and read test results anytime and anywhere. LXI brings you a brand new system design including local, remote and distributed design. By LXI, you can create a test system meeting your current requirement and upgrade it in the future according to your new requirements.

### Multiple I/O interfaces: for your convenience and flexibility

Multiple external interfaces are selectable in WK 7820 series impulse winding tester. You can control your system by RS232C, USB Device or LAN or compose an automatic test system by using Handler interface. Foot-control interface provides great convenience for your test. The included RS232 communication software allows you to control your instrument, to collect and analyze data conveniently.



### Standard waveform automatic detection: your helpful assistant

Operators can set multiple voltages and sampling rates on WK 7820 series impulse winding tester, which needs professional measurement knowledge. When non-professionals do not know how to choose the setup for your products, all you need do is use the automatic detection function to obtain recommended setup. It is of great help when operators detect many kinds of coils or do not know which sampling voltage and rate should be used.

### Destructive testing: for suitable impulse testing voltage

Destructive testing does not really mean to destroy products under test but to choose a more suitable impulse testing voltage for the product. Some operators may not know how high an impulse voltage should be applied across the products. If the voltage is too low, the test results will not be as good as expected; if the voltage is too high, defective rate will increase. Destructive testing will help you to solve above problems. All you need do is to set the starting voltage, terminating voltage and step voltage. Then WK 7820 series will automatically find out the critical voltage of corona discharge according to the change of corona of DUT and you can determine your impulse testing voltage based on the critical voltage. It is recommended that the impulse testing voltage be 70% of the critical voltage.

## Specifications

Impulse Voltage	100V~5000V with a 10V resolution Accuracy:±2%	
Inductance Range	≥10uH	
Impulse Energy	Max.:0.25 Joule	
Measuring Speed	6 meas/sec	
Pulses Applied	Max. 32	
Input Impedance	5MΩ	
Display	800x480 dots,65k color TFT; Waveform Display Dots:600x256	
Waveform Acquisition	8 Sampling Rates: Max. 200Msps, 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 indicators/Sound Alarm	
Measurement Statistics	Statistics for measurement results	
Memory	20 standard waveforms 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	
<b>Power</b>		
Power Supply	110V/220V±10% 50Hz/60Hz±5%	
Power Consumption	≤200VA	
<b>General Specifications</b>		
Working environment	Temperature	0°C - 40°C
	Humidity	≤75% R.H.
Weight	15Kg	
Dimensions (H x W x D)	132mmx400mmx390mm	
Safety and EMC	IEC61010-1:2001,IEC61326-2-1:2005	