

## **K511 Single Phase Protection Relay Test Set**

## **Features**

- The control platform of device adopt the latest high speed DSP processor and a very large-scale field programmable logic device FPGA with features of running speed, system stability and operation convenience.
- 0--300V/0.33A auxiliary DC power supply, which can provide working power to protection device or other device independently, ripple factor is less than 0.1%, accuracy 0.5%.
- It display clearly via 3.8 inch, 320X240 resolutions LCD.
- It can test each type of single relay via manual or automatic mode.
- The inner part is style of architecture frame structure, it use high strength aluminum alloy case with shake-proof and shock resistance in order to bear severe vibration tests.
- Store 1024 group different auto-test and manual-test results.
- Operation convenience for rotary encoder work in with shortcut key.
- All-in-one design with multi-function, small volume, light weight, easy to use and carry.

## Main specifications :

Voltage gene	rators			
Setting	1-phase AC	1 x 0 300 V		
Range	(L-N)			
Power	1-phase AC	195VA MAX. at 0300V		
	(L-N)			
Accuracy		0.4% reading + 0.1% range typical at 0-300V		
Resolution		1mV		
Current generators				
Setting	1-phase AC	0-40A;0-200A		
Range	(L-N)			
Power	1-phase AC	1120 VA MAX.,at 040A ; 1200VA MAX., at		
	(L-N)	0-100A (12V);900VA MAX., at 0200A(4.5V)		
Accuracy		0.4% reading + 0.1% range typical at 0-200A		
Resolution		1mA		
Generators, general				
Frequency	Range	5 1000 Hz		
	Accuracy / drift	Error < 0.001Hz at 0 50Hz, error < 0.0002Hz at		
-		50Hz		
	Resolution	0.01Hz		
Phase	Range	- 360° +360°		
	Accuracy / drift	Error < 0.2 °		
	Resolution	0.1°		
Time	Range	0.001 9999.999s		
	Accuracy / drift	Error<0.1ms		
	Resolution	1ms		
DC generator	rs			
Voltage ranges		0 300V/195VA		
Current ranges		0 30A/840VA		
Accuracy				
Resolution		1mA; 1 mV		
Ampere mete	er			
Measurement method		TRMS (AC)		
Range		0-5A (AC )		
Accuracy		0.4% reading + 0.1% range		
Voltage mete	r			
Measurement method		TRMS(AC), Average value(DC)		
Range		0-300 V		
Accuracy		0.4%rd+0.1%rg		
Power factor meter				
Power factor	meter			
	meter ( cos φ ) Range	(-1.00)–1.00		

Accuracy	±0.04			
Phase meter				
Phase φ (°)	0- 359			
Resolution	1			
Accuracy	±1			
Aux DC Supply				
Range	0300V/0.33A			
Binary Inputs				
Number	2 pairs			
Compatible Voltage	30V 250VDC, or dry contact			
Binary outputs				
Number	1 Pair			
Capacity	250V/3A(AC,DC)			
Power supply				
Nominal input voltage	110/220V AC ±10%			
Power	1000VA			
Nominal frequency	50/60±5Hz			
Environmental conditions				
Operation temperature	0°C60 °C			
Storage temperature	-20°C 70 °C			
Humidity range	5 95 %, non-condensing			
Weight	24KG			
Dimensions	365 (W) ×465 ( D ) ×160 (H) mm			
PC Interface	RJ45			

## Major functions:

Items	IEEE(R) No.
Overcurrent relays	50/76
Inverse time overcurrent relays	51
Undercurrent relays	37
Directional overcurrent relays	67
Overvoltage relays	59
Undervoltage relays	27
Directional voltage relays	91
Time-delay relays	