Programmable Electrical Safety Tester

MST-8101/8103

Standard RS232 ☑

- 4.3-inch TFT color screen display, clear at a glance
- 105 test files can be compiled, and 25 test steps can be set for each file
- Current resolution up to 0.1µA, accurate
- Automatic discharge function after the test is over
- Up to 10GΩ insulation resistance test range
- 100VA capacity

Model			MST-8101	MST-8103
Function Description			AC	AC/DC/IR
Withstand voltage test				
lose Out Electricity Pressure	AC	voltage range	0.050kV—5.000kV	0.050kV—5.000kV
		Voltage waveform	Sine wave	Sine wave
		Distortion	< 3%	< 3%
		working frequency	50、60Hz optional	50、60Hz optional
		Frequency accuracy	±1%	±1%
		Output Power	100VA（20mA)	100VA（20mA)
		Voltage regulation rate	±（1.0% +50V) (rated power)	±（1.0% +50V) (rated power)
	DC	voltage range	-	0.050 kV—6.00kV
		Signal source frequency	-	600Hz
		Output Power	-	50VA（10mA)
		Voltage regulation rate	-	±（1.0% +100V) (rated power)
	Voltage resolution		1V	1V
	Voltage test accuracy		±2%	±2%
	Voltage generation method		DDS signal source plus class AB power amplifier	DDS signal source plus class AB power amplifier
Electricity flow Measurement test Fan Surround	AC	Current range	0.001mA – 20.00 mA	0.001mA – 20.00 mA
		Short circuit current (momentary)	>40 mA	>40 mA
		Current resolution	0.001 mA	0.001 mA
		Current accuracy	±（2% of reading + 2 words)	±（2% of reading + 2 words)
		Actual current	OFF-0.001 mA-20 mA	OFF-0.001 mA-20 mA
	DC	Current range	-	0.1uA – 10.00mA
		Current accuracy	-	±（2% reading + 2 digits）
	Discharge function			Automatic discharge after the test（DCW）
Insulation resistance test（MST-8103 only）				
The output voltage			0.050V – 1.000kV	
Voltage resolution			1V	
Voltage test accuracy			±2%	
Maximum output current			10mA	
Maximum output power			10VA（1000V/10mA）	
Output instantaneous short-circuit current			>20mA	
Load Regulation			≤ 1 %（rated power)	
Ripple（1kV）			≤ 3%（1kV，no load)	
Discharge function			Automatic discharge after the test	
Resistance measurement range			0.1MΩ– 10GΩ	
Resistance measurement accuracy			Voltage < 500V: 0.2MΩ~ 1GΩ accuracy:［±10% reading + 5 words］1GΩ~ 10GΩ accuracy:［±20% reading + 5 words］ Voltage > 500V: 0.2MΩ~ 1GΩ accuracy:±［3% reading + 5 words］ 1GΩ~ 10GΩ accuracy:±［7% reading + 5 words］	
Arc detection			MST-8101	MST-8103
Measuring range	AC、DC		AC:1mA – 20mA (9 gears, fine-tuning)	AC、DC:1mA – 20mA(9 gears, fine-tuning)
Comparators				
Discrimination method			Window comparator mode I at the ON : When I at <Ix <I on, the PASS ; when Ix is ≤ I or under Ix is ≥ I on, FAIL (article items I at <I on) I down OFF : when Ix< I up, PASS ; when Ix ≥ I up, FAIL; the insulation resistance judgment method is the same as above	
Capping current I on	AC、DC		AC: 0.001mA – 20mA	AC: 0.001mA – 20mA DC: 0.1uA – 10mA
Current upper limit setting I under	AC、DC		AC: 0.001mA – 20mA	AC: 0.001mA – 20mA DC: 0.1uA – 10mA
Resistance upper limit setting			OFF - 0.2MΩ - 10GΩ	
Resistance lower limit setting			0.2MΩ– 10GΩ	
Parameter setting				
Voltage rise time			0.1s – 999.9s	
Voltage drop time			0 s – 999.9s ,（only after the withstand voltage PASS)	
Voltage waiting time			0.3s - 999.9s（only DC withstand voltage, and meet the rise time + test time > waiting time）	
Test time setting			0.3s - 999.9s (when TIMER ON)	
Time accuracy			±（0.2% setting value ± 0.1s)	
Protocol			SCPI , Modbus	
storage			105 test files can be programmed , and 25 test steps can be set for each file	
interface			HANDLER , SINGAL , RS232C , RS485（optional)	
Size (W*H*D)	mm		215*143*405（without terminal)	
weight	kg		12	