

# 7630 系列

## 接触电流测试仪

7630 系列内置 7 组人体模拟电路 (MD)，无需配置不同的 MD 测试条件，可满足接触电流测试的需要。7630 系列配有负载监控功能，在 277V 电压下可承受高达 40A 的负载。它还提供 USB、RS232 和以太网等多种通信接口，可与 7006 配合使用，组成高效的自动化测试系统，提升测试效率和灵活性。



### 产品特点

- 提供 7 组人体模拟线路 (MD) 及 8 组失效模式分析 (Fault Condition)，模拟真实世界的各种可能触电危险状况。
- 负载容量可高达 40A 有效值，使其适用于大电流工业产品。
- 可同时显示电流量测值或 MD 两端电压值，清楚呈现测试结果。
- MD 可抽换式设计，让使用者易于替换不同选择外，更满足快速的校验、维修与替换。

### 通讯介面



USB 接口



RS-232 接口



以太网网卡  
(选购)

7630 产品规格		
型号	7630	
输入电源		
电压 (交流)	115/230V ± 15%	
频率	50/60Hz ± 5%	
接触电流测试		
电源状态	Power Switch : Reverse polarity switch for normal condition (on/off/auto setting) Neutral Switch : Neutral switch on/off selection for single fault condition Ground Switch : Ground switch on/off selection for class I single fault condition	
测试棒设定	Surface to Surface (PH-PL), Surface to Line (PH-L), Ground to Line (G-L), Ground to Neutral (G-N), Auto Function (G-N & G-L)	
接触电流测试		
泄漏电流 & 最大电流显示范围 1 (有效值)	0.0uA-20.00mA	
泄漏电流 & 最大电流解析度 (有效值)	0.0-999.9uA	0.1uA
	1000-8399uA	1uA
	8.40-20.00mA	0.01mA
泄漏电流 & 最大电流精确度 (有效值) (交流 + 直流)	直流	±(2% of reading + 3 counts) <sup>2</sup>
	15Hz < f < 100kHz	±(2% of reading + 3 counts) <sup>2</sup>
	100kHz < f < 1MHz	±(5% of reading) (> 10.0uA)
泄漏电流 & 最大电流精确度 3 (有效值) (交流)	15Hz < f < 30Hz	±(3% of reading + 5 counts) <sup>2</sup>
	30Hz < f < 100kHz	±(2% of reading + 3 counts) <sup>2</sup>
	100kHz < f < 1MHz	±(5% of reading) (> 10.0uA)
泄漏电流 & 最大电流精确度 4 (有效值) (直流)	±(2% of reading + 3 counts) <sup>2</sup> (> 10.0uA)	
泄漏电流 & 最大电流显示范围 1 (峰值)	0.0uA-30.00mA	
泄漏电流 & 最大电流解析度 (峰值)	0.0-999.9uA	0.1uA
	1000-8399uA	1uA
	8.40-30.00mA	0.01mA
泄漏电流 & 最大电流精确度 (峰值) (交流 + 直流)	直流	±(2% of reading + 3 counts)
	15Hz < f < 1MHz	±(10% of reading + 2uA) <sup>5</sup>
泄漏电流 & 最大电流精确度 2 (峰值) (交流)	15Hz < f < 1MHz	±(10% of reading + 2uA) <sup>5</sup>
接触电压显示范围 (有效值)	MD Resistance is 0.5kΩ	0.0mV-10.00V
	MD Resistance is 1kΩ	0.0mV-20.00V
	MD Resistance is 1.5kΩ	0.0mV-30.00V
接触电压解析度 (有效值)	0.0-999.9mV	0.1mV
	1000-8399mV	1mV
	8.40-10.00V	1V
接触电压精确度 (有效值) (交流 + 直流)	直流	±(2% of reading + 3 counts) <sup>6</sup>
	15Hz < f < 100kHz	±(2% of reading + 3 counts) <sup>6</sup>
	100kHz < f < 1MHz	±(5% of reading) (> 10.0mV)
接触电压精确度 2 (有效值) (交流)	15Hz < f < 30Hz	±(3% of reading + 5 counts) <sup>6</sup>
	30Hz < f < 100kHz	±(2% of reading + 3 counts) <sup>6</sup>
	100kHz < f < 1MHz	±(5% of reading) (> 10.0mV)
接触电压精确度 3 (有效值) (直流)	±(2% of reading + 3 counts) <sup>6</sup> (> 10.0mV)	
接触电压显示范围 (峰值)	MD Resistance is 0.5kΩ	0.0mV-15.00V
	MD Resistance is 1kΩ	0.0mV-30.00V
	MD Resistance is 1.5kΩ	0.0mV-45.00V
接触电压解析度 (峰值)	0.0-999.9mV	0.1mV
	1000-8399mV	1mV
	8.40-15.00V	1mV/1V
接触电压精确度 (峰值) (交流 + 直流)	直流	±(2% of reading + 3 counts) <sup>7</sup>
	15Hz < f < 1MHz	±(10% of reading + 2mV)



型号		7630
接触电流测试		
接触电压精确度 2 (峰值)(交流)	15Hz < f < 1MHz	±(10% of reading + 2mV) <sup>7</sup>
人体模拟线路 (MD)	MD1	IEC60990 Fig4 U2, IEC 60950-1, IEC 62368-1, IEC60335-1, IEC60598-1, IEC60065, IEC61010, IEC 62368-1 IEC60990 Fig4 U1
	MD2	IEC60990 Fig5 U3, IEC60598-1, IEC 62368-1 IEC60990 Fig5 U1
	MD3	IEC 60601-1
	MD4	UL544NP, UL484, UL923, UL471, UL867, UL697
	MD5	UL544P
	MD6	UL1563
	MD7	IEC60950, IEC61010-1 FigA.2 (2k ohm) for RUN Test MD Circuit
	External MD & Frequency check	Basic measuring element 1kΩ
	MD 元件精确度	Capacitance : ± 1%; Resistance : ± 1%
MD 电压限制	Maximum 70Vpeak or 70Vdc	
泄漏电流归零调整	0-6500uA	
待测物功率 (交流)	277.0V/40 Arms max continuous	
电压显示范围	0.0-277.0V	
电压显示解析度	0.1V/step	
电压精确度	±(1.5% of reading + 2 counts) , 30.0-277.0V	
过电流保护	50 Arms, Response Time < 2 s/250Apeak Response Time < 10us	
延迟时间	交流 + 直流	0.5-999.9s
	交流 / 直流在自动档位下	1.8-999.9s
	交流 / 直流在固定档位下	1.3-999.9s
测试时间	交流 + 直流	0, 0.5-999.9s (0 = continuous)
	交流 / 直流	0, 0.1-999.9s (0 = continuous)
时间解析度	0.1s	
时间精确度	±(0.1% of reading + 0.05s)	
电气性能测试		
功率量测范围	0.0 - 10kW	
功率精确度	± (5% of reading + 3 counts)	
功率因素	0.000 - 1.000	
功率因素精确度	± (8% of reading + 2 counts)	
电压量测范围 (交流)	0.0 - 277.0V, 1ø	
电压精确度	± (1.5% of reading + 2 counts)	
电流量测范围 (交流)	0.000 - 40.00A	
电流精确度	± (2% of reading + 5 counts)	
泄漏电流量测范围	0.00 - 10.00 mA	
泄漏电流精确度	± (2% of reading + 2 counts)	
MD (L-G)	Resistor MD 2kΩ ± 1%	
一般规格		
远端控制输入讯号	Test, Reset, Interlock, Recall File 1 through 10	

型号	7630
电气性能测试	
远端控制输出讯号	Pass, Fail, Test-in-Process, Start-Out, Reset-Out
记忆组	40 memories, 30 steps/memory Max. Result Display 900 data (30 memories x 30 steps)
自动反向功能	AUTO Reverse ON/OFF parameter setting selection Automatic Reverse polarity switch for normal condition in one step setting menu Only display maximum leakage current value
示波器输出接口	At rear panel BNC type to connect scope for some IEC standards test requirement and application
显示器	320 x 240 graphic LCD/Contrast 9 Levels 1-9
接口 8	Standard USB & RS232, Optional Ethernet
外部扩展器连接	Yes
操作温度 / 储存温度 / 湿度	0 to 40° C/-40 to 75° C/20 to 80%RH
尺寸 (宽 x 高 x 深), mm	430 x 133 x 300
重量	12kg
标准配件	
Power Cable (10A)*1; Fuse*1; 1102 Hipot Return Lead - Alligator Clip*2; 1148 DUT Power Cable (3 Wires)*1; 1151 DUT Power Cable (2 Wires)*1; 1224 USB Cable*1; 1505 Interlock Disable Key*1	

产品规格如有变更恕不另行通知

1. For Leakage Current: if the final measured signal is > 5mA, then the maximum composite signal can be measured is 28Vpeak. If the final measured signal is ≤ 5mA, then the maximum composite signal can be measured is 12Vpeak.  
For Leakage Voltage: if the final measured signal is > 8V, then the maximum composite signal can be measured is 28Vpeak. If the final measured signal is ≤ 8V, then the maximum composite signal can be measured is 12Vpeak.
2. When current > 5mA, the accuracy is ±(5% of reading).
3. AC cutoff frequency for High Pass Filter is 15Hz on AC only mode.
4. AC cutoff frequency for Low Pass Filter is 15Hz on DC only mode.
5. When current > 5mA & 15Hz < f < 100kHz, the accuracy is ±(10% of reading + 2 counts).
6. When voltage > 8V, the accuracy is ±(5% of reading).
7. When voltage > 8V & 15Hz < f < 100kHz, the accuracy is ±(10% of reading + 2 counts).
8. Only one interface can be selected among RS232 & USB, GPIB & Ethernet interface card.

## 产品型号

- 7630 Touch Current Tester

## 选购功能

- OPT.760 HV (5kVac/6.0kVdc) & GB(40A) Link Module
- OPT.766 AC/DC/AC + DC Touch Current Measurement
- OPT.7020 MD 1k ohm (non-inductive resistor)
- OPT.7022 MD IEC60974
- OPT.7023 MD IEC60598-1
- OPT.7024 MD NFPA99 Figure A.4.3.3.1.3b
- OPT.7025 MD NFPA99 Figure A.4.3.3.1.3a
- OPT.7027 MD 2k ohm (non-inductive resistor)
- 7006 Matrix Scanner
- 6700 Series Programmable AC Power Source (6705, 6710, 6720, 6730, 6750)
- EAL-5000 Series Programmable AC Power Source (EAL-5005, EAL-5012, EAL-5020, EAL-5030, EAL-5040, EAL-5060)

## 选购配件

- 1929 远端控制盒 (含 LED 显示)
- 1932 接触电流测试治具盒
- 1950 TCT 点检治具盒

Note: 1. OPT.7020 to OPT.7027 are mutually exclusive, only one Option can be selected.