

# 7630 系列

## 接触电流测试仪

7630 系列具备全功能的接触电流量测电路设计，无须再为不同的 MD 量测电路及测试条件配置需求而烦恼。7630 可启用负载监视功能，在 277V 电压下承受待测物最高电流 40A 负载。搭配完整的通讯介面如 USB、RS232、GPIB 和以太网路卡，可执行高效率的自动化测试。



### 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，更满足快速的的校验、维修与替换。

### 通讯介面



USB 介面



RS-232 介面



以太网路卡  
(选购)



GPIB 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 <sup>1</sup> (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 <sup>3</sup> (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 <sup>4</sup> (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 <sup>1</sup> (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 <sup>2</sup> (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 <sup>2</sup> (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 <sup>3</sup> (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
<b>接触电流测试</b>		
接触电压精确度 <sup>2</sup> (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)

#### 35mArms/75mApeak 量测范围 ( 选购 )

人体模拟线路 (MD)	MD1	IEC60990 Fig4 U2, IEC 60950-1, IEC60335-1, IEC60598-1, IEC60065, IEC61010, IEC62368-1
	MD2	IEC60990 Fig4 U1
	MD3	IEC60990 Fig5 U3, IEC60598-1, IEC62368-1
	MD5	IEC60990 Fig5 U1

#### 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)

型号	7630
电气性能测试	
泄漏电流测量范围	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
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
示波器输出介面	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
介面 8	Standard USB & RS232, Optional Ethernet, GPIB
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.109 Replace RS232 Interface by GPIB Interface
- OPT.754 High Measurement Range 35mA/75mVpeak & 4MDs
- OPT.760 HV (5kVac/6.0kVdc) & GB(40A) Link Module
- OPT.766 AC/DC/AC + DC Touch Current Measurement
- OPT.789 MD Module (5MDs) JIS C9250, UL544NP, UL1563
- OPT.7020 MD 1k ohm (non-inductive resistor)
- OPT.7021 MD NFPA99 Figure A.8.4.1.3.3
- 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
- 6600 Series Programmable AC Power Source (6605, 6610, 6620, 6630, 6650)
- 6700 Series Programmable AC Power Source (6705, 6710, 6720, 6730, 6740)

## 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.754, OPT.766 & OPT.789 are mutually exclusive, only one Option can be selected.  
- OPT.789: UL544P, IEC60601 and External MD will be disable and OPT.789 is mutually exclusive with OPT.754, OPT.7020~OPT.7027.  
2. OPT.7020 to OPT.7027 are mutually exclusive, only one Option can be selected.