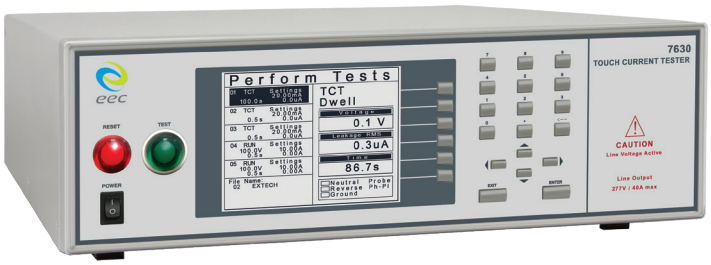
7630 Series

Touch Current Tester

The 7630 series is the complete full set of touch current analyzer. It is built-in with different measuring devices (MD) and testing conditions meeting any environmental simulation. The 7630 also integrate a dynamic load monitoring function capable of handling with up to 40A. Remotely control the 7630 via RS-232 to form an automatic testing system.



3 YEAR warranty

Key Highlight

- 7 different human body simulation measuring devices (MD).
- 8 different testing fault condition simulations.
- Prompt & Hold function: provides alerts and instructions between tests.
- Capable of handling up to 40A DUT power.
- Simulate human body impedance (MD) and simultaneously displaying both voltage and touch current during the measurement results.
- Swappable measuring device (MD) for quick calibrations, maintenances, and replacements.
- Provided with touch current to measure AC/DC/AC+DC in conformity to the IEC 60601 standard for medical electrical equipment.

Available Interface

USB RS-232 LAN GPIB

7630 Product Specifications		
MODEL		7630
INPUT		
Voltage (AC)		115/230V ± 15%
Frequency		50/60Hz ± 5%
TOUCH CURRENT		
Line Condition		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
Probe Setting		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)
Leakage Current & Imax Display Range1 (RMS)		0.0uA-20.00mA
Leakage Current & Imax Resolution (RMS)	0.0-999.9uA	0.1uA
	1000-8399uA	1uA
	8.40-20.00mA	0.01mA
Leakage Current & Imax Accuracy (RMS) (AC + DC)	DC	±(2% of reading + 3 counts)[2]
	15Hz < f < 100kHz	±(2% of reading + 3 counts)[2]
	100kHz < f < 1MHz	±(5% of reading) (> 10.0uA)
Leakage Current & Imax Accuracy[3] (RMS) (AC)	15Hz < f < 30Hz	±(3% of reading + 5 counts)[2]
	30Hz < f < 100kHz	±(2% of reading + 3 counts)[2]
	100kHz < f < 1MHz	±(5% of reading) (> 10.0uA)
Leakage Current & Imax Accuracy[4] (RMS) (DC)		±(2% of reading + 3 counts)[2] (> 10.0uA)
Leakage Current & Imax Display Range[1] (Peak)		0.0uA-30.00mA
Leakage Current & Imax Resolution (Peak)	0.0-999.9uA	0.1uA
	1000-8399uA	1uA
	8.40-30.00mA	0.01mA
Leakage Current & Imax Accuracy (Peak) (AC + DC)	DC	±(2% of reading + 3 counts)
	15Hz < f < 1MHz	±(10% of reading + 2uA)[5]
Leakage Current & Imax Accuracy[2] (Peak) (AC)	15Hz < f < 1MHz	±(10% of reading + 2uA)[5]
Touch Voltage Display Range (RMS)	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
Touch Voltage Resolution (RMS)	0.0-999.9mV	0.1mV
	1000-8399mV	1mV
	8.40-10.00V	1V
Touch Voltage Accuracy (RMS) (AC + DC)	DC	±(2% of reading + 3 counts)[6]
	15Hz < f < 100kHz	±(2% of reading + 3 counts)6[6]
	100kHz < f < 1MHz	±(5% of reading) (> 10.0mV)
Touch Voltage Accuracy[2] (RMS) (AC)	15Hz < f < 30Hz	±(3% of reading + 5 counts)[6]
	30Hz < f <100kHz	±(2% of reading + 3 counts)[6]
	100kHz < f < 1MHz	±(5% of reading) (> 10.0mV)
Touch Voltage Accuracy[3] (RMS) (DC)		±(2% of reading + 3 counts)6 (> 10.0mV)
Touch Voltage Display Range (Peak)	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
Touch Voltage Resolution (Peak)	0.0-999.9mV	0.1mV
	1000-8399mV	1mV
	8.40-15.00V	1mV/1V
Touch Voltage Accuracy (Peak) (AC + DC)	DC	±(2% of reading + 3 counts)[7]
	15Hz < f < 1MHz	±(10% of reading + 2mV)

MODEL		7630
TOUCH CURRENT		
Touch Voltage Accuracy[2] (Peak) (AC)	15Hz < f < 1MHz	±(10% of reading + 2mV)[7]
Measuring Device (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 Components Accuracy		Capacitance : ± 1%; Resistance : ± 1%
MD Voltage Limit		Maximum 70Vpeak or 70Vdc
Leakage Current Offset		0-6500uA
DUT Power Rating (AC)		277.0V/40 Arms max continuous
Voltage Display Range		0.0-277.0V
Voltage Display Resolution		0.1V/step
Voltage Accuracy		±(1.5% of reading + 2 counts) , 30.0-277.0V
Over Current Protection		50 Arms, Response Time < 2 s/250Apeak Response Time < 10us
Delay Timer	AC + DC	0.5-999.9s
	AC/DC only Auto range	1.8-999.9s
	AC/DC only Fixed range	1.3-999.9s
Dwell Timer	AC + DC	0, 0.5-999.9s (0 = continuous)
	AC/DC only	0, 0.1-999.9s (0 = continuous)
Timer Resolution		0.1s
Timer Accuracy		±(0.1% of reading + 0.05s)
HIGH MEASUREMENT RANGE 35mArms/75mApeak (Optional)		
Measuring Device (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
RUN TEST		
Power Measurement Range		0.0 - 10kW
Power Accuracy		± (5% of reading + 3 counts)
Power Factor		0.000 - 1.000
Power Factor Accuracy		± (8% of reading + 2 counts)
Voltage Measurement Range(AC)		0.0 - 277.0V , 1ø
Voltage Accuracy		± (1.5% of reading + 2 counts)
Current Measurement Range(AC)		0.000 - 40.00A
Current Accuracy		± (2% of reading + 5 counts)

MODEL	7630
RUN TEST	
Leakage Current Measurement Range	0.00 - 10.00 mA
Leakage Current Accuracy	± (2% of reading + 2 counts)
MD (L-G)	Resistor MD 2kΩ ± 1%
GENERAL	
Remote Input Signal	Test, Reset, Interlock, Recall File 1 through 10
Remote Output Signal	Pass, Fail, Test-in-Process, Start-Out, Reset-Out
Memory	40 memories, 30 steps/memory Max. Result Display 900 data (30 memories x 30 steps)
Auto Reverse Function	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
Scope Output Interface	At rear panel BNC type to connect scope for some IEC standards test requirement and application
Display	320 x 240 graphic LCD/Contrast 9 Levels 1-9
Interface8	Standard USB & RS232, Optional Ethernet, GPIB
External Scanner port	Yes
Op./Non-Op. Temp./Humidity	0 to 40°C/-40 to 75°C/20 to 80%RH
Dimension (W × H × D), mm	430 x 133 x 300
Weight	12kg
INBOX ACCESSORIES	
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	

Subject to change without prior notice.

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.

Models

- 7630 Touch Current Tester

Options

- OPT.109 Replace RS232 Interface by GPIB Interface
- OPT.754 High Measurement Range 35mArms/75mApeak & 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)

Accessory

- 1929 Remote Test/Reset Control Box (with LED Notification)
- 1932 Touch Current Testing Fixture Socket - Universal Receptacle Set Screw Type (2P+E) (20A/4kV/3M)
- 1950 TCT Self Check Box

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.