

Models 7520DT, 7530DT, 7540DT, 7550DT and 7564SA Functional Specifications

INPUT		
Voltage		115/230 VAC \pm 15%, Single Phase, User selection
Frequency		50/60 Hz \pm 5%
Fuse		6.3 Amp 250V Slo-Blo for 7550DT and 7564SA 5 Amp 250V Slo-Blo for 75/20/30/40DT
DIELECTRIC WITHSTAND TEST MODE		
Output Rating		5 KV @ 40 mA for 7550DT and 7564SA, 5 KV @ 20mA for 75/20/30/40DT 6 KV @ 10 mA DC for 75/30/40/50DT and 7564SA
Output Adjustment		Range: 0 - 5 KV AC 0 - 6 KV DC Resolution: 1 volt/step Accuracy: \pm (2% of setting + 5 volts)
Ramp-HI		12mA peak maximum, ON/OFF selectable
Charge-LO		Range: 0.0 - 350.0 μ A DC or Auto set
HI-Limit	AC	Range: 0.00 - 40.00 mA for 7550DT and 7564SA, 0.00 - 20.00 mA for 75/20/30/40DT Resolution: 0.01 mA/step Accuracy: \pm (2% of setting + 2 counts)
	DC	Range: 0 - 9999 μ A Resolution: 1 μ A/step Accuracy: \pm (2% of setting + 2 counts)
LO-Limit	AC	Range: 0.000 - 9.999 mA Resolution: 0.001 mA/step Accuracy: \pm (2% of setting + 2 counts)
	DC	Range: 0.0 - 999.9 μ A Resolution: 0.1 μ A/step Accuracy: \pm (2% of setting + 2 counts)
Arc Detection		Range: 1 - 9
Failure Detector		Audible and Visual

Voltage Display	Range: 0.00 - 6.00 KV Full Scale 0.00 - 5.00 KV Full Scale for 7520DT only Resolution: 10 volt/step Accuracy: \pm (2% of reading + 2 counts)
Current Display	Auto Range AC Range 1: 0.000mA - 3.500mA Resolution: 0.001mA/step Range 2: 3.00 - 40.00 mA for 7550DT and 7564SA, 3.00 - 20.00 mA for 75/20/30/40DT Resolution: 0.01 mA/step DC Range 1: 0.0 μ A - 350.0 μ A Resolution: 0.1 μ A/step Range 2: 300 μ A - 3500 μ A Resolution: 1 μ A/step Range 3: 3000 μ A - 9990 μ A Resolution: 10 μ A/step Accuracy: All Ranges \pm (2% of reading + 2 counts)
DC Output Ripple	\leq 4% Ripple RMS at 6 KV DC @ 3.5 mA, Resistive Load
Discharge Time	\leq 200 ms
Maximum Capacitive Load DC Mode	1 μ F < 1KV 0.08 μ F < 4KV 0.75 μ F < 2KV 0.04 μ F < 5KV 0.5 μ F < 3KV 0.01 μ F < 6KV
AC Output Wave Form	Sine Wave, Crest Factor = 1.3 - 1.5
Output Frequency	Range: 60 or 50 Hz, User Selection Accuracy: \pm 1%
Output Regulation	\pm (1 % of setting + 5 volts) from no load to full load
Dwell Timer	Range: 0, 0.3 - 999.9 sec (0 = Constant) Resolution: 0.1 sec increments Accuracy: \pm (0.1% + 0.05 sec)
Ramp Timer	Range: AC 0.1 - 999.9 sec DC 0.4 - 999.9 sec Resolution: 0.1 sec increments Accuracy: \pm (0.1% + 0.05 sec)

Ground Continuity For 75/20/30/40/50DT	Current : DC 0.1 A \pm 0.01A, fixed Max. ground resistance : 1 Ω \pm 0.1 Ω , fixed																		
Ground Fault Interrupt	GFI Trip Current: 450 μ A max (AC or DC) HV Shut Down Speed: < 1ms																		
INSULATION RESISTANCE TEST MODE Model 75/30/40/50DT, 7564SA																			
Output Voltage	Range: 100 - 1000 Volts DC Resolution: 1 volt/step Accuracy: \pm (2% of reading + 2 volts)																		
Short Circuit Current	Maximum: 12mA peak																		
Voltage Display	Range: 0 - 1000 V Resolution: 1 volt/step Accuracy: \pm (2% of reading + 2 counts)																		
Resistance Display	Range: 1 - 9999 M Ω (4 Digit, Auto Ranging) Resolution: <table border="0" style="margin-left: 40px;"> <tr> <td></td> <td>500VDC</td> <td>1000VDC</td> </tr> <tr> <td></td> <td>MΩ</td> <td>MΩ</td> </tr> <tr> <td>0.001</td> <td>1.000 - 5.388</td> <td>1.000 - 9.999</td> </tr> <tr> <td>0.01</td> <td>1.40 - 53.88</td> <td>2.80 - 99.99</td> </tr> <tr> <td>0.1</td> <td>14.0 - 538.8</td> <td>28.0 - 999.9</td> </tr> <tr> <td>1</td> <td>104 - 9999</td> <td>280 - 9999</td> </tr> </table> Accuracy: \pm (2% of reading + 2 counts) at test voltage 500 - 1000V and 1 - 1000 M Ω \pm (8% of reading + 2 counts) at test voltage 500 - 1000V and 1000 - 9999 M Ω \pm (8% of reading + 2 counts) at test voltage 100 - 500V and 0 - 1000 M Ω		500VDC	1000VDC		M Ω	M Ω	0.001	1.000 - 5.388	1.000 - 9.999	0.01	1.40 - 53.88	2.80 - 99.99	0.1	14.0 - 538.8	28.0 - 999.9	1	104 - 9999	280 - 9999
	500VDC	1000VDC																	
	M Ω	M Ω																	
0.001	1.000 - 5.388	1.000 - 9.999																	
0.01	1.40 - 53.88	2.80 - 99.99																	
0.1	14.0 - 538.8	28.0 - 999.9																	
1	104 - 9999	280 - 9999																	
Charge-LO	Range: 0.000 - 3.500 μ A or Auto Set																		
HI-Limit	Range: 0 - 9999 M Ω (0 = Off)																		
LO-Limit	Range: 1 - 9999 M Ω																		
Delay Timer	Range: 0, 0.5 - 999.9 sec (0 = Constant) Resolution: 0.1 sec/step Accuracy: \pm (0.1% + 0.05 sec)																		
Ground Fault Interrupt	GFI Trip Current: 450 μ A max (AC or DC) HV Shut Down Speed: < 1ms																		

GROUND BOND TEST MODE Model 7564SA only	
Output Voltage (Open Circuit Limit)	Range: 3.00 - 8.00 Volts AC Resolution: 0.01 volt/step Accuracy: $\pm (2 \% \text{ of Setting} + 0.03\text{V})$ O.C. Condition
Output Frequency	Range: 60 or 50 Hz, User Selection Accuracy: $\pm 1\%$
Output Current	Range: 3.00 - 30.00 Amps AC Resolution: 0.01 Amp/step Accuracy: $\pm (2 \% \text{ of Setting} + 0.02 \text{ A})$
Current Display	Range: 0.00 - 30.00 Amps Resolution: 0.01 Amp/step Accuracy: $\pm (3 \% \text{ of Reading} + 0.03 \text{ A})$
Resistance Display	Range: 0 - 600 m Ω Resolution: 1 m Ω /step Accuracy: $\pm (2 \% \text{ of Reading} + 2 \text{ m}\Omega)$
HI-Limit	Range: 0 - 600 m Ω for 3 - 10 A 0 - 150 m Ω for 3 - 30 A Resolution: 1 m Ω /step Accuracy: $\pm (2 \% \text{ of Setting} + 2 \text{ m}\Omega)$
LO-Limit	Range: 0 - 600 m Ω for 3 - 10 A 0 - 150 m Ω for 3 - 30 A Resolution: 1 m Ω /step Accuracy: $\pm (2 \% \text{ of Setting} + 2 \text{ m}\Omega)$
Dwell Timer	Range: 0, 0.5 - 999.9 sec (0 = Constant) Resolution: 0.1 sec/step Accuracy: $\pm (0.1\% + 0.05 \text{ sec})$
Milliohm Offset	Max. Offset Capability: 200 m Ω Resolution: 1 m Ω / step Accuracy: $\pm (2 \% \text{ of Setting} + 2 \text{ m}\Omega)$

GENERAL SPECIFICATIONS	
PLC Remote Control	Input - Test, Reset, Recall memory # 1, # 2 and # 3 Output - Pass, Fail, Test-in-Process
Memory	Allows storage of up to 50 groups different test programs and 8 step/each memory. Step is not available on 7520DT
Security	Programmable password lockout capability to avoid unauthorized access to test set-up program.
LCD Contrast Setting	9 ranges set by the numeric keys on the front panel.
Buzzer Volume Setting	10 ranges set by the numeric key on the front panel.
Calibration	Software and adjustments are made through front panel.
Mechanical	Bench or rack mount with tilt up front feet.
Dimension	7540DT, 7550DT and 7564SA: (W x H x D) 17 x 5.8 x 20.3 in. (432 x 147 x 515 mm) 7520DT and 7530DT: (W x H x D) 17 x 5.8 x 12 in. (432 x 147 x 305 mm)
Weight	7564SA without scanner 52.5 lbs (24 Kgs) 7564SA with built-in scanner 57.0 lbs (26 Kgs) 7550DT without scanner 50.5 lbs (23 Kgs) 7550DT with built-in scanner 55.0 lbs (25 Kgs) 7540DT with 4 port scanner 39.6 lbs (18 Kgs) 7540DT with 8 port scanner 41.8 lbs (19 Kgs) 7530DT scanner not available 24.8 lbs (11.27 Kgs) 7520DT scanner not available 24.8 lbs (11.27 Kgs)
Scanner Port	Two Port Maximum including the built-in scanner. Not available on 7520DT, 7530DT and 7540DT.
Scanner Built-in Option	High Voltage x 4 Ports (7540DT only) High Voltage x 8 Ports (75/40/50DT and 7564SA) Ground Bond x 8 Ports (7564SA only)