

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

| INPUT | |
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| 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 |

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| 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) |

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|--|---|---------------|--------|---------|--|------------|------------|-------|---------------|---------------|------|--------------|--------------|-----|--------------|--------------|---|------------|------------|
| 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 | |
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| 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) |