

Model 5500DT and 5560DT Functional Specifications

DIELECTRIC WITHSTAND TEST MODE

Unless otherwise stated, accuracies are relative to a laboratory standard measurement.

Descriptions	Specifications
INPUT VOLTAGE	115 / 230V selectable, $\pm 15\%$ variation 47 - 63 Hz
FUSE	115 VAC, 230VAC -- 5A slow-blo 250VAC
OUTPUT	Rating AC 0 - 5000V, 2V / step, 20mA DC 0 - 6000V, 2V / step, 6mA (5560DT only) Regulation : $\pm (1\% \text{ of output} + 5V)$
VOLTAGE SETTING	0V - Max output rating, 10 volts/step Accuracy : $\pm (2\% \text{ of Setting} + 5V)$ (relative to displayed output) Can be adjusted during operation via UP and DOWN arrow keys.
OUTPUT FREQUENCY	Model 5500DT : 50 / 60 Hz selectable 5560DT : DC and 50 / 60 Hz selectable
WAVE FORM	Sinewave, Distortion : $<1\%$ THD
RIPPLE	$<4\%$ at 6KVDC / 6mA (for model 5560DT DC mode only)
DWELL TIME SETTING	0 and 0.5 - 999.9 seconds, 0.1 second / step "0" for continuous running
RAMP TIME SETTING	0 and 0.5 - 999.9 seconds, 0.1 second / step 0 setting = .2 seconds
FAILURE SETTINGS	AC mode High limit : 0.05 - 20.00 mA, 0.01 mA / step Low limit : 0.00 and 0.05 - 20.00 mA, 0.01 mA / step Accuracy : $\pm (2\% \text{ of setting} + 0.02 \text{ mA})$ DC mode High limit : 0.02 - 6.00 mA, 0.01 mA / step Low limit : 0.00 and 0.02 - 6.00 mA, 0.01 mA / step Accuracy : $\pm (2\% \text{ of setting} + 0.02 \text{ mA})$ Arc for AC and DC mode Sensitivity range : 0-9 Arc detection : minimum duration $\leq 10 \mu\text{s}$

METERING	<p>Voltmeter (4 digits)</p> <p>Range : AC 0.00 - 5.00 KV : DC 0.00 - 6.00 KV</p> <p>Resolution : 0.01 KV</p> <p>Accuracy : \pm (2 % of reading + 10 V)</p> <p>Ammeter (4 digits)</p> <p>Range : AC 0.05 - 20.00 mA : DC 0.02 - 6.00 mA</p> <p>Resolution : 0.01 mA</p> <p>Accuracy : \pm (2 % of reading + 0.02mA)</p>						
TIMER DISPLAY	<p>Range : 0.0 - 999.9 seconds</p> <p>Resolution : 0.1 second</p> <p>Accuracy : \pm (0.1 % of reading + 0.05 seconds)</p> <p>Ramp = 0 : 0.2 seconds</p>						
DISCHARGE TIME	\leq 200 ms						
MAXIMUM CAPACITIVE LOAD DC MODE	<table> <tr> <td>1uF < 1KV</td> <td>0.08uF < 4KV</td> </tr> <tr> <td>0.75uF < 2KV</td> <td>0.04uF < 5KV</td> </tr> <tr> <td>0.5uF < 3KV</td> <td>0.01uF < 6KV</td> </tr> </table>	1uF < 1KV	0.08uF < 4KV	0.75uF < 2KV	0.04uF < 5KV	0.5uF < 3KV	0.01uF < 6KV
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GROUND CONTINUITY CHECK	<p>Current : DC 0.1 A \pm 0.01A, fixed</p> <p>Max. ground resistance : 1 Ω \pm 0.1Ω, fixed</p>						
PROGRAM MEMORY	10 sets						
REMOTE CONTROL AND SIGNAL OUTPUT	<p>The following input and output signals are provide through two 9 pin D type connectors;</p> <ol style="list-style-type: none"> 1. Remote control : test and reset 2. Remote recall of memory program #1, #2 and #3 3. Outputs : pass, fail and test in process 						
SECURITY	Password lockout capability to avoid unauthorized access to test set-up program.						
LINE CORD	Detachable 7 ft. (2.13m) power cable terminated in a three prong grounding plug.						
TERMINATIONS	5ft.(1.52m) high voltage and return leads (2) with clips and a standard U.S. style (NEMA 5-15) remote receptacle box for testing items terminated with a line cord. International receptacles also available.						
MECHANICAL	<p>Bench or rack mount (2U height) with tilt up front feet</p> <p>Dimensions: (w x h x d) 17 x 3.5 x 16.5in. (432 x 88 x 419mm)</p> <p>Weight: 5500DT: 20 lbs (9kgs) 5560DT: 24 lbs (11Kgs)</p>						
ENVIRONMENTAL	<p>Operating Temperature : 32° - 113°F (0° - 45°C)</p> <p>Relative Humidity - 0 to 95%</p>						
CALIBRATION	Traceable to National Institute of Standards and Technology (NIST). Calibration controlled by software. Adjustments are made through front panel keypad in a restricted access calibration mode. Calibration information stored in non-volatile memory.						