

Model 3500D, 3505D, 3565D and 3570D Functional Specifications

Unless otherwise stated, accuracy's are relative to a laboratory standard measurement.

DIELECTRIC WITHSTAND TEST MODE	
Descriptions	Specifications
INPUT VOLTAGE	115 / 230V selectable, $\pm 15\%$ variation 47 - 63 Hz
FUSE	115 VAC, 230VAC -- 3.15A fast acting 250VAC
OUTPUT	Rating AC 0 - 5000V, 2V / step, 12mA DC 0 - 6000V, 2V / step, 5mA (DC mode on 3565D and 3570D 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	3500D, 3505D : 50 / 60 Hz selectable 3565D and 3570D : DC and 50 / 60 Hz selectable
WAVE FORM	Sinewave, Distortion : $<2\%$ THD
RIPPLE	$<5\%$ at 6KVDC / 5mA (3565D and 3570D only)
DWELL TIME SETTING	0 and 0.2 - 999.9 seconds, 0.1 second / step "0" for continuous running
RAMP TIME SETTING	Model 3505D, 3565D and 3570D 0 and 0.2 - 999.9 seconds, 0.1 second / step 0 ramp setting = 0.1 seconds fixed ramp Model 3500D and 3505D Ramp = 0.1 seconds fixed
FAILURE SETTINGS	AC mode High limit : 0.10 - 12.00 mA, 0.01 mA / step Low limit : 0.00, 0.10 - 12.00 mA, 0.01 mA / step (0= OFF) (3505D, 3565D and 3570D only) Accuracy: $\pm (2\% \text{ of setting} + 0.02 \text{ mA})$ DC mode High limit : 0.02 - 5.00 mA, 0.01 mA / step Low limit : 0.00, 0.02 - 5.00 mA, 0.01 mA / step (0= OFF) (3505D, 3565D and 3570D only) Accuracy : $\pm (2\% \text{ of setting} + 0.02 \text{ mA})$

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METERING	Voltmeter (4 digits) Range : AC 0.00 - 5.00 KV : DC 0.00 - 6.00 KV Resolution : .01 KV Accuracy : \pm (2 % of reading + 10 V) Ammeter (4 digits) Range : AC 0.10 - 12.00 mA : DC 0.02 - 5.00 mA Resolution : 0.01 mA Accuracy : \pm (2 % of reading + 0.02mA)																		
TIMER DISPLAY	Range : 0.0 - 999.9 seconds Resolution : 0.1 second Accuracy : \pm (0.1 % of reading + 0.05 seconds)																		
DISCHARGE TIME	\leq 300 ms The maximum capacitive load vs output voltage : 0.20 μ F --- < 1KV 0.050 μ F --- < 4KV 0.10 μ F --- < 2KV 0.040 μ F --- < 5KV 0.06 μ F --- < 3KV 0.015 μ F --- < 6KV																		
GROUND CONTINUITY CHECK	Current : DC 0.1 A \pm 0.01A, fixed Max. ground resistance : 1 Ω \pm 0.1 Ω , fixed																		
INSULATION RESISTANCE TEST MODE																			
Output Voltage	Range: 100 - 1000 Volts DC Resolution: 10 volt/step Accuracy: \pm (2% of reading + 5 volts)																		
Voltage Display	Range: 0 - 1000 V Resolution: 10 volt/step Accuracy: \pm (2% of reading + 2 counts)																		
Resistance Display	Range: 1 - 1000 M Ω (4 Digit, Auto Ranging) Resolution: <table style="margin-left: 20px; border: none;"> <tr> <td></td> <td style="text-align: center;">500VDC</td> <td style="text-align: center;">1000VDC</td> </tr> <tr> <td></td> <td style="text-align: center;">MΩ</td> <td style="text-align: center;">MΩ</td> </tr> <tr> <td></td> <td style="text-align: center;">0.01</td> <td style="text-align: center;">1.00 - 40.00</td> </tr> <tr> <td></td> <td style="text-align: center;">0.1</td> <td style="text-align: center;">35.0 - 999.9</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">1.00 - 80.00</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">75.0 - 999.9</td> </tr> </table> Accuracy: \pm (3% of reading + 2 counts) at test voltage > 500V \pm (7% of reading + 2 counts) at test voltage \leq 500V		500VDC	1000VDC		M Ω	M Ω		0.01	1.00 - 40.00		0.1	35.0 - 999.9			1.00 - 80.00			75.0 - 999.9
	500VDC	1000VDC																	
	M Ω	M Ω																	
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Descriptions	Specifications
High Resistance Limit	Range: 0 - 1000 MΩ (0 = Off)
Low Resistance Limit	Range: 1 - 1000 MΩ
Delay Timer	Range: 0, 0.5 - 999.9 sec (0 = Constant)
	Resolution: 0.1 sec/step
	Accuracy: ± (0.1% + 0.05 sec)
GENERAL	
REMOTE CONTROL AND SIGNAL OUTPUT	The following input and output signals are provided through the 9 pin D type connector; <ul style="list-style-type: none"> 1. Remote control : test and reset 2. Outputs : pass, fail and test in process
PROGRAM MEMORY	5 Sets (3505D, 3565D and 3570D only)
SECURITY	Key Lock capability to avoid unauthorized access to all test parameters. Memory Lock capability to avoid unauthorized access to memory locations.
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	Tilt up front feet. Dimensions: (W x H x D) 11 x 3.5 x 14.56 in. (280 x 89 x 370 mm) Weight: 20 lbs (9 Kgs)
ENVIRONMENTAL	Operating Temperature : 32° - 113°F (0° - 45°C) Relative Humidity - 0 to 95%
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.