

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	≤ 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 : $1 \Omega \pm 0.1\Omega$, 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 border="0" style="margin-left: 20px;"> <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 ≤ 500 V		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																	
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Descriptions	Specifications
High Resistance Limit	Range: 0 - 1000 M Ω (0 = Off)
Low Resistance Limit	Range: 1 - 1000 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)
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	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	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 $^{\circ}$ - 113 $^{\circ}$ F (0 $^{\circ}$ - 45 $^{\circ}$ 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.