

# ITC55300

unclamped inductive load tester



<b>utilities</b>	<p><i>AC Input Power:</i> 105 - 125 VAC 50/60 Hz 210 - 250 VAC 50/60 Hz</p> <p><i>AC Fuse:</i> 115 VAC - 6A 230 VAC = 3A</p> <p><i>Service:</i> 10 A 10 A</p> <p><i>Maximum Current:</i> 115 VAC - 6A 230 VAC - 3A</p>
<b>mechanical specifications</b>	<p><i>Physical Dimensions:</i></p> <p>Height: 7.5" (19 cm)</p> <p>Width: 17" (43 cm)</p> <p>Depth: 19.5" (49.5 cm)</p> <p>Weight: 60 lbs. (27 kg)</p>
<b>electrical specifications</b>	<p><i>Military Specifications:</i> ITC55300 Testers Conform to MIL-STD-750, Method 3470</p> <p><i>Output Energy Limits:</i> 1 millijoule to 0.00495 * (VDD)<sup>2</sup> joules in 1 millijoule steps (i.e., 50V = 12.375 joules, 100V = 49.5 joules, 150V = 111.375 joules)</p> <p><i>Output Current x Time (IT) Limit:</i> No Limit</p> <p><i>RTF Test Increment to Failure:</i> Increments ID or L with programmable inductive load box attached</p> <p><i>Current Sensor Scale Factor:</i> 250 mV/Amp @ 0.1A to 40.0A, 25 mV/Amp @ 40.1A to 200A</p> <p><i>Current Sensor Type:</i> Hall Effect Sensor</p> <p><i>Drain Current Range:</i> 0.1 to 400 amperes in 0.1 ampere steps</p> <p><i>Drain Voltage Range:</i> Plus or Minus (N- or P- Channel) 10 -150 volts in 1 volt steps</p> <p><i>Rated Drain-Source Avalanche Voltage Range: (BVDSS)</i> 10 to 2500 volts in 1.0 volt steps</p> <p><i>Gate Pulse Voltage Range:</i> Plus or minus (N- or P- channel) 2 - 20 volts in 1-volt steps</p> <p><i>Leakage Test (Pre &amp; Post Avalanche)</i> Forced Voltage = 2V to Programmed Drain Voltage (max.) I = 1.0 mA</p> <p><i>Solid State Power Switch:</i> 400 amps</p> <p><i>Gate Drive Resistance:</i> 25Ω (50Ω per Kelvin leg)</p> <p><i>Parameter Entry:</i> Touch screen display on front panel. GPIB from host computer or computer controlled via PTNET. Any entry or calculated parameter that produces an out-of-range value indicates the parameter to be changed and a Start Test cannot be initiated until the parameter error has been corrected.</p> <p><i>Waveform Capture &amp; Analysis:</i> Waveforms can be captured and viewed on the LCD front panel display or via the optional Engineering Characterization Package available for PTNET.</p> <p><i>Outputs:</i> Two isolated test outputs for testing N, P or combination MOSFET's, IGBT's and single and dual diodes with optional RSF box.</p>
<b>interfaces</b>	<p><i>PTNET:</i> Network and control via PTNET, includes software to operate as network of one. Provides up to 50 virtual bins.</p> <p><i>Handler Interface:</i> Tesec handler with 15-bin control and ITC5510 compatible interface standard, others are special order.</p> <p><i>ITC5510-RSF Selector Box:</i> Interface Supported</p> <p><i>ITC55MUX4:</i> PC Parallel Interface Supported</p> <p><i>IEEE 488 (GPIB) Interface:</i> Talker/Listener with Tesec protocol standard; other protocols are special order.</p>
<b>optional inductive load boxes</b>	<p><i>ITC5514A:</i> 0.01 - 159.9 mH - Inductance is manually selected</p> <p><i>ITC5514B:</i> 0.01 - 159.9 mH - Inductance selection is programmable</p> <p><i>ITC5515:</i> 0.1, 0.3, 1.0, 3.0, 10.0 mH - Inductance selection is programmable</p> <p><i>ITC5516:</i> 0.001 - 0.300 mH - Inductance selection is programmable</p> <p><i>ITC55140:</i> 0.01 - 159.9 mH - Inductance selection is programmable</p> <p><i>External Inductor:</i> 500 mH maximum limit</p> <p><i>Load Inductance Range (Software Limits):</i> Range 1 = 0.001 to 0.300 mH in 0.001 mH steps (using ITC5516) Range 2 = 0.01 to 99.99 mH in 0.01 mH steps (using ITC5514) Range 3 = 100.0 to 159.9 mH in 0.1 mH steps (using ITC 5514)</p>

Note: Specifications subject to change without notice.

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spec sheet