

Bench Top Power Supply Test System Compact and Cost-Effective



The Autotest **UTS-325™** bench-top power supply test system combines the best of two worlds. Capable and compact, The **UTS-325** offers a flexible and comprehensive instrument package to meet most any power supply testing need ... in a cost-effective, convenient bench-top environment.

User Defined Applications

AUTOTEST Company's **APG for Windows** software package superbly enhances the **UTS-325's** versatility. This new approach to ATE software combines the power of the Microsoft Windows platform with the flexibility and precision of the UTS-625. Autotest's ASIS language, the window interactive program creation and diagnostics module, and **DART** (**D**esign **A**nd **R**epair **T**esting) real-time control and display system, combine to take full advantage of the UTS-625 instrumentation superiority. This provides the fast and user-friendly universal testing approach demanded by state-of-the-

Testing Flexibility

Standard **UTS-325** configurations include:

Four Dynamic Loads, AC Source, Overvoltage DC Source, High Resolution Digital Multi-Meter, Peak Noise and Time Measurement systems, and a standard interface to accommodate complete static and dynamic testing.

Popular Options Include:

- Solid State AC and DC Sources
- Electronic Load Variations
- High Frequency Matrix
- PCI IEEE-488 (GPIB) Instruments
- Digital and Relay Interfaces
- Oscilloscopes
- Function Generators
- Turn Key Programs & Fixtures

AUTOTEST UTS-325 Specifications:

MEASUREMENT SYSTEM

MEASUREMENT MATRIX

12 position, 4 wire switching matrix any path can be routed to any 4 outputs: DMM, peak measurement, universal timer counter, & external / auxiliary instrument

DIFFERENTIAL WIDE BAND PEAK DETECTOR:

Input ranges: ± 200 mV FS, ± 2 V FS
Accuracy: 0.2% FS Resolution: 0.05% FS
Programmable Bandwidths: 40 Hz-200 KHz, 40 Hz-2 MHz, 40 Hz-20 MHz, -3db standard

LINE SOURCE MEASUREMENT:

RMS voltage, RMS current, peak current, peak inrush current
Accuracy: 0.2% FS Resolution: 0.05% FS

LOAD CURRENT MEASUREMENT: Amps DC

Accuracy: 0.2% FS Resolution: 0.05% FS

UNIVERSAL TIMER COUNTER:

Modes: Frequency, time interval, sequencing, totalizer, transient and crossings detector

Frequency Counter: 0-650 KHz, 0-4.5 MHz

Resolution: 10 Hz, 100Hz

Trigger Level: Programmable 0-20 V, rising or falling

Interval Timer: 7 ranges, 1 μ Sec to 1.8 hours

Resolution: decade, 100 nS to 100 mS

Trigger: Programmable -10 V / +10 V, start /stop

Sequencing: Seven, 8 bit timer latches

Trigger: 2 @ -10 / +10 VDC, 2 @ 0-20 VDC, 1 @ 0-100 VDC, 2 @ TTL logic level

Accuracy: 1% FS Resolution: 0.025% FS

Multiple crossing detector: number of crossing @ trigger level - (maximum 128 crossing)

DIGITAL MULTIMETER: 6 1/2 Digit, IEEE-488 interface

SOFTWARE

Autotest's "APG for Windows*" - High performance multi-tasking software system includes such features as:

- Expandability - with named procedure and function definitions similar to ATLAS.
- Program Library and Data Management Facilities - comparable to Modula-2 and DOD's ADA.
- Powerful Editor/ Debugging facility - with statement-by-statement inspection of executing program.

Autotest's "Design And Repair Testing" (DART) - Allows for manual (keyboard/mouse) control of the UTS-325, providing:

- Real time display of all measurements systems
- Control of all system resources - through pull-down menus and dialogue windows.
- Individual instrument" windows" - providing multi-media style test system control of all test instruments.

OPTIONS

- Power Sources - 1F and 3F Variac / solid state AC, DC
- Load Options - current, voltage & wattage
- High frequency matrix and peak detector
- Digital and relay interface additions
- PCI IEEE-488 instruments
- Rack and Mount Kit
- Complete turn-key programs and fixtures

SOURCES AND LOADS

AC SOURCE

Power*: 2.1 KVA Programmable variac @ 240 VAC input
0-270 VAC
Voltage: 0-270 VAC
Accuracy: 0.5% FS Resolution: 1.0 VAC
Regulation: 1% no load to full load over frequency range
RMS Current: 7.5 A
Peak Current: 22.5 A

DC SUPPLY

Quantity: 1
Voltage: 0 - 55 VDC Regulation: 0.005% + 1 mV
Output Resolution: 13.4 mV Ripple: 1 mV RMS
Current: 0 - 3 ADC Regulation: ± 2 mA
Input Resolution: 1 mA Ripple: 1 mA RMS

USER RELAYS: 16 DPDT (8 dedicated, 8 user-assignable)

Rating: 120 VAC @ 5A 250 VAC @ 4A
500 VAC open contact

16 open collector Aux relay drivers

40mA Link, optimal 4@5mA, isolated contact

PROGRAMMABLE ELECTRONIC LOADS

Quantity: 4 Modular Load (1.7 - 400 volts optional)
4 @ 150 Watts, 3 /30 amps, 3-20/60 volts
Modes: Constant-voltage, constant-current, constant-resistance, short circuit, transient step, OVP relay

Constant voltage mode:

Accuracy: 0.2% FS
Resolution: 5 mV / 15 mV

Constant current mode:

Accuracy: 0.2% FS
Resolution: 0.75 mA / 7.5 mA

Transient step mode:

Slew rate: 1.0 A / μ Sec adjustable

Rep rate: Program selectable 100 Hz crystal controlled, 50 - 1500 Hz adjustable, or external wave shape

INTERFACE

Operator: Monitor, mouse control.
DART instrument control and front panel switches.
Industry Standard PC w/national instrument's PCI-IEEE system interface.

UUT: Unit Under Test interface w/industry standard connectors.
Selftest: Hardware and software for full test and calibration.

PHYSICAL

Size: 18 in / 46 cm width
16 in / 41 cm height
24 in / 61 cm depth
Shipping weight: 200 lbs / 91 kg
Power: 1 line, 120 VAC, 10-15A, 50 / 60 Hz System Power requirement: 120/240, 10-15A, 50-60 Hz AC source power
Environmental: 55° to 85° F / 13° to 29° C

AUTOTEST

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