

## High Capacity Power Supply Tester



The *Autotest UTS-625* provides the ultimate in power supply ATE flexibility. By taking full advantage of the open-ended architecture, the *UTS-625* may be custom configured to meet the needs of any application. Housed in a full size rack, the system may be expanded from a single to multiple-bay size as required.. Upgrades and reconfigurations are handled with ease.

AUTOTEST Company's **APG for Windows** software package superbly enhances the *UTS-625* 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 windows-interactive program creation and diagnostics module, and **DART** (**D**esign **A**nd **R**epair **T**esting) real-time control and display modules, combine to take full advantage of the *UTS-625*'s instrumentation superiority. This provides the fast and user-friendly universal testing approach demanded by state-of-the-art ATE users.

### Testing Flexibility

#### *A Standard UTS-625 configuration includes:*

*Five 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 of up to 1100 watts of output power.*

#### **Popular Options Include:**

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

# AUTOTEST UTS-625 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:  $\pm 200$  mV FS,  $\pm 2$  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: .2% FS Resolution: 0.05% FS

### LOAD CURRENT MEASUREMENT: Amps DC

Accuracy: .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  $\mu$ 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-625, 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
- Complete turn-key programs and fixtures

## SOURCES AND LOADS

### AC SOURCE

Power: 7.8 KVA Programmable variac @ 240 VAC input  
Voltage: 0-270 VAC  
Accuracy: 0.5% FS Resolution: 1.0 VAC  
Regulation: 1% no load to full load over frequency range  
RMS Current: 28.0A  
Peak Current: 90.0A

### DC SUPPLY Includes Load OVP bus

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:  $\pm 2$  mA

Input Resolution: 1 mA Ripple: 1 mA RMS

USER RELAYS: 16 DPDT or 8 DPDT and 16 SPDT  
Rating: 120 VAC @ SA, 250 VAC @ 4A  
500 VAC open contact

16 open collector Aux relay drivers

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

### PROGRAMMABLE ELECTRONIC LOADS

Quantity: 5. 1 @ 500 Watts, 10/100 amps, 3-20/80 volts

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 /  $\mu$ 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: 24 in / 61 cm width  
70 in / 178 cm height  
32 in / 81 cm depth

Shipping weight: 500 lbs / 277 kg

Power: 1 line, 208 VAC, 3F, 30 A 5 Wire, 50 / 60 Hz

requirement: 240 VAC required for optimum source output

Environmental: 55° to 85° F / 13° to 29°

# AUTOTEST

Engineered Solutions for Power Supply Testing

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