DISCRETE SEMICONDUCTOR TESTER
5000E & 5300HX

CONTENTS

DEVICES TESTED - 1
TABLE OF TESTS - 2
PERFORMANCE - 4
RANGE EXTENSIONS - 5
TEST PROGRAMMING - 6
DATALOGGING/DATA MANAGEMENT - 7
DIAGNOSTICS/AUTO CALIBRATION - 8
ADAPTORS - 9
FIXTURES - 11
HANDLER/PROBER INTERFACE - 11
TEST SPECIFICATIONS - 12
GATED DEVICE TEST SPECIFICATIONS - 14
WEIGHT AND DIMENSIONS - 15
SELECTING A TESTER - 15
PRODUCT LIST - 16
CLIENT LIST - 20

DEVICES TESTED

DISCRETE DEVICES

- Transistor
- Triac
- SCR
- OVP Solid State
- Diode
- Zener
- MOV
- STS/SBS
- IGBT
- Sidac
- Quadrac®
- JFET
- MOSFET
- Diac
- Opto-Coupler

ARRAYS / LOGIC

- Multiple Devices
- Mixed Devices
- Opto-Logic
- Opto-Switch
- Opto-Triac

PROGRAMMABLE OVERVOLTAGE PROTECTORS

- Programmable OVP
- Gated Devices / SLIC Protector
- 5 Pin Module

IC'S / HYBRIDS / RELAYS

- Regulator
- Power Hybrids
- Custom Devices
- Relay (1-4 Pole) A, B, C Form

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TABLE OF TESTS

DEVICE	REQUIRED ADAPTOR	LEAKAGE	BREAKDOWN	GAIN	ON-STATE	OFF	TRIGGER	LATCH	HOLD	BREAKOVER
TRANSISTOR	Sustaining Tests use ADP-410	I_{EBO}, I_{CBO}, $I_{CEO/R/S/V}$	BV_{CBO}, BV_{EBO}, BV_{CEO}, V_{CESUS}	h_{FE}	V_{CESAT}, V_{BESAT}, V_{BEON}					
TRIAC		I_{DRM}, I_{RRM}	V_{D+}, V_{D-}		V_{T+}, V_{T-}		I_{GT} 1/2/3/4 V_{GT} 1/2/3/4	I_{L+}, I_{L-}	I_{H+}, I_{H-}	
SCR		I_{DRM}, I_{RRM}, I_{GKO}	V_{DRM}, V_{RRM}, BV_{GKO}		V_{TM}		I_{GT}, V_{GT}	I_L	I_H	
MOSFET		$I_{DSS/V}$, I_{GSSF}, I_{GSSR}	BV_{DSS}	V_{GSTH}, g_{FS}	V_{DSON}, V_{SD}, I_{DON}, V_{GSON}					
DIODE		I_R	BV_R		V_F					
ZENER		I_R	BV_Z, ZZ(1KHz)		V_F					
OPTO-COUPLER	ADP-310	I_{COFF}, I_{CBO}, I_R	BV_{CEO}, BV_{CBO}	CTR, h_{FE}	V_{CESAT}, V_{SAT} (COUPLED), V_F					
REGULATOR	ADP-320				Regulation, V_O, V_{IN}					
MOV, TRANSIENT SUPPRESSOR		I_{D+}, I_{D-}	V_{N+}, V_{N+}		V_{C+}, V_{C-}					
J-FET		I_{GSS}, I_{DOFF}, I_{DGO}	BV_{DGO}, BV_{GSS}		I_{DSS}, V_{DSON}	V_{GSOFF}				
OPTO-SWITCH		I_{COFF}	V_D		NOTCH=I_{GT1}, I_{GT4} V_{ON}=V=SAT (coupled)		I_{ON}=I_{GT1}, I_{GT4} I_{OFF}=I_{GT1}, 1GT4			
DIAC	ADP-350		V_{V+}, V_{V-}, ΔV							V_{BO+}, V_{BO-}, I_{BO+}, I_{BO-}, Symmetry $ΔV_{BO}$
OPTO-LOGIC	ADP-370	I_R			I_{FON}, V_{OL}, Hysteresis	I_{FOFF}, V_{OH}				

DEVICE	REQUIRED ADAPTOR	LEAKAGE	BREAKDOWN	GAIN	ON-STATE	OFF	TRIGGER	LATCH	HOLD	BREAKOVER
SSOVP 2KV Req'd	ADP-360 ADP-340-4/5	I_{DRM}, I_{RRM}	V_{CLAMP+}, V_{CLAMP-}, V_{Z+}, V_{Z-}		V_{T+}, V_{T-}				I_{H+}, I_{H-}	V_{BO+}, V_{BO-}, I_{BO+}, I_{BO-}
SSOVP/5 Pin Module*	ADP-340-5 Tip-Com, Ring-Com, Tip-Ring	I_{D+}, I_{D-}, Coil Resistance, Continuity	V_{B+}, V_{B-}, V_{Z+}, V_{Z-}, V_L (100V/µSec)		V_{T+}, V_{T-}				I_{H+}, I_{H-}	V_{BO+}, V_{BO-}, I_{BO+}, I_{BO-}, V_{BB+}, V_{BB-}
QUADRAC®	ADP-350	I_{DRM}, I_{RRM}	V_{D+}, V_{D-}		V_{T+}, V_{T-}				I_{H+}, I_{H-}	V_{BO+}, V_{BO-}, I_{BO+}, I_{BO-}
SIDAC 2KV req'd.	ADP-360		V_{BB+}, V_{BB-}		V_{T+}, V_{T-}				I_{H+}, I_{H-}	V_{BO+}, V_{BO-}, I_{BO+}, I_{BO-}
IGBT		I_{CES}, I_{GESF}, I_{GESR}	BV_{CES}	V_{GETH}	V_{CESAT}, I_{CON}, V_{GEON}, V_F					
STS, SBS	ADP-350								I_{H+}, I_{H-}	V_{SW+}, V_{SW-}, V_{BO+}, V_{BO-}, I_{SW+}, I_{SW-}
RELAY	ADP-390				RCONT, RCOIL		OPTIME, RELTIME	VOPER, VREL		
GATED DEVICE	ADP-340-5G	I_R, I_G, I_{GKS}, I_D			V_F, V_T		I_{GT}, V_{GT}		I_H	V_{BO}, I_{BO}

* Not available with 5000E

NOTE: Parameters that require two tests, such as GFS, are calculations.

PERFORMANCE

THROUGHPUT

A six test step MOSFET test program (VGSTH, BVDSS, RDSON, 2 VGSON and GFS calculation) takes approximately 96 milliseconds to run and provides a throughput of up to 37,440 devices per hour.

5000E & 5300HX FEATURES

- Proven Technology
- High Speed Datalog
- 1 KHZ Zener Impedance
- 2NA to 50 Standard, 100A Optional
- 500A / 1000A / 1200A (available only on 5300HX)
- 1KV Standard, 2KV Optional
- 0.1NA Resolution
- RDSON to .01mΩ Resolution
- 96 Tests
- 99 Sorts
- Branching
- Optional Handler Interface
- Optional Prober Interface
- Programmable Relay Drivers
- Auto Calibration
- Self Test
- Data Management

Optional tests can be created for connection to external test equipment

model 5300HX

TEST METHODS

The 5000E and 5300HX systems incorporate single test measure techniques to assure a measured value with only one application of stimulus, including tests such as hFE. This minimizes test time, minimizes internal device heating and maximizes throughput.

High resolution assures tests like RDSON to an accuracy of ± 0.5 milliohm at 1 A test current.

RANGE EXTENSIONS

available on 5300HX

EXTENDED HIGH CURRENT

- HC-500 (500A)
- HC-1000 (1000A)
- HC-1200 (1200A)

On-state current tests such as VT, VF, VCESAT, VDSON and RDSON can be extended to the limits indicated above by use of the High Current Deck (pictured).

EXTENDED LOW CURRENT

- LC-1000

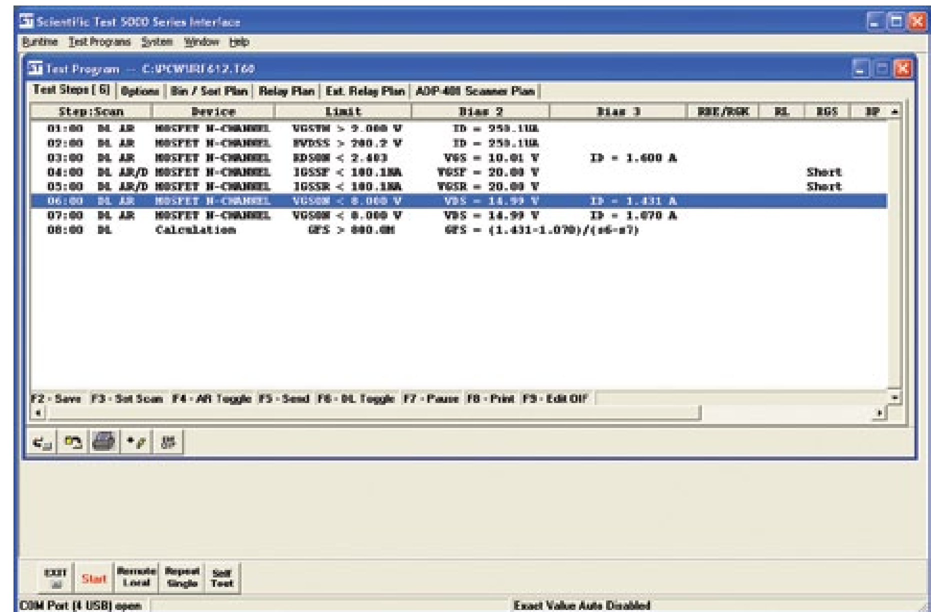
Leakage test low end can be extended downward to measurements as low as 20pA with a 1pA resolution using the Low Current Deck (pictured). Low Current Deck is also shown connected to the tester for testing from the handler.

TEST PROGRAMMING

Creating and editing test programs for the STI 5000E and 5300HX are both easy and intuitive. Each test program contains a series of test steps (these steps can be actual device tests or calculations), bin/sort plan, and if required, relay plan. Test steps are added or edited with a single or double mouse click. A device test window or calculation window is opened. In the device test window the limit parameter value is entered along with, if applicable, other bias voltages or currents (one of the biases can be a calculation), load resistors, etc. In the calculation window the calculation limit is entered along with the name and units to be used in displaying the results and then the actual calculation which may reference any test result from a previously entered device test.

BINNING / SORTING

By default all programmed test steps are set to pass on SORT/BIN 1. Each test step may be set for pass, fail or do not care for each sort. Each sort may be set to any of the logical bins. Binning and sorting can be as simple as running all of the programmed test steps and then finding the first qualifying sort or as complex as branching on the first non-qualifying test to the next valid sort. In this more complex mode it is quite possible that only a subset of the programmed tests will be run on a given device and that all devices tested may not run the same subset of test steps.



EXTERNAL RELAYS

Four to fifteen (depending upon options supplied with the STI tester) relay drivers can be assigned to any programmed test step. These relay drivers can be used to provide external loads or connections for a given device test.

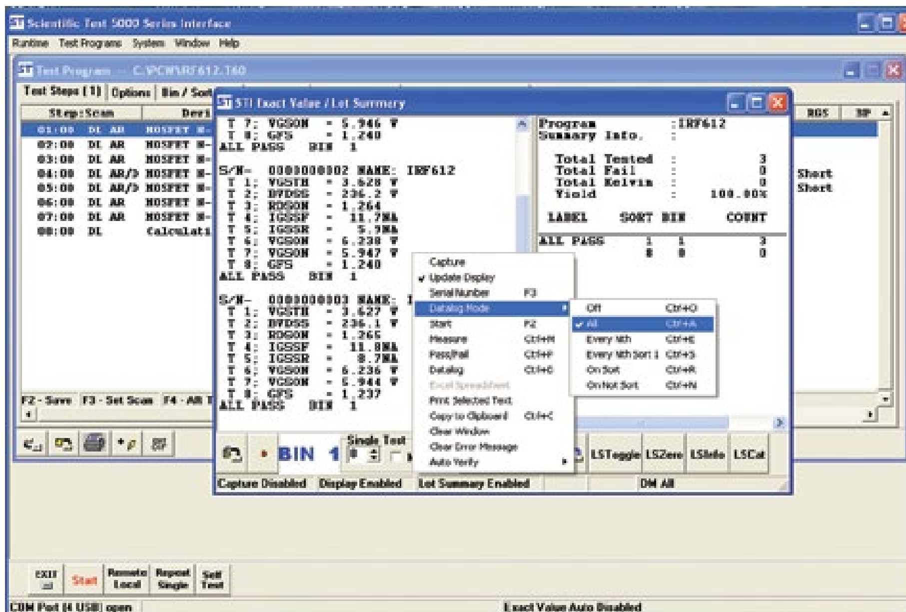
DATALOGGING / DATA MANAGEMENT

Datalogging is defined as capturing the actual test values for later use. The STI Testers use the USB port (or serial port) to send the test results to the PC for storage and use. Datalog can be selected individually per test. The entire test program can be set to Off (no Datalog), All (Datalog for all test steps selected), Every Nth (Datalog on every Nth device), Every Nth Sort 1 (Datalog on every Nth Sort 1), On Sort (Datalog each time the specified sort is found), or On Not Sort (Datalog each time the specified sort is not found).

The logged data may be stored to disk, displayed on the PC screen, sent directly to Excel® or any combination of the three. Data stored to disk can be used to create a columnar print file (data printed in columnar format), a statistics file (number, high, low, average and sigma), or converted into a file that can be imported into Excel.

Macros for use with Excel to produce statistics, histograms, columnar format, and other data analysis and formats are available.

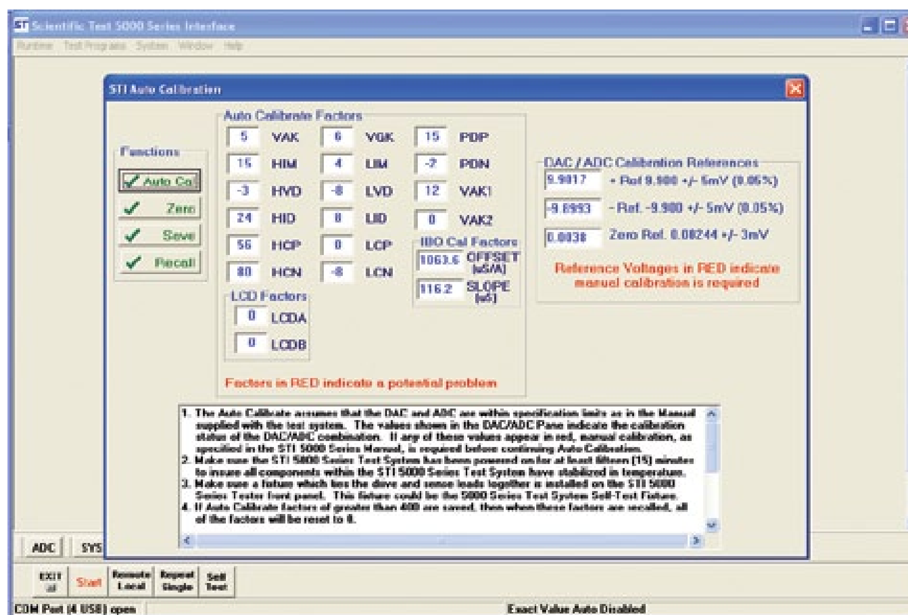
Windows® and Excel® are registered trademarks or trademarks of Microsoft Corporation in the United States and other countries.



DIAGNOSTICS / AUTO CALIBRATION

The STI Tester provides extensive diagnostics for the Mainframe, Low Current Deck, Pin Programmable Scanner and OVP/Gated OVP adaptor. These self test diagnostics are built into the tester code, and with the supplied self test fixture, can be run at any time.

In addition, the STI Tester has an extensive auto calibration procedure that provides the user the ability to track calibration trends, verify that the DAC/ADC combination is functioning correctly, and supply calibration factors that will automatically correct the test result.



ADAPTORS

PIN PROGRAMMABLE SCANNER 30A/1200V

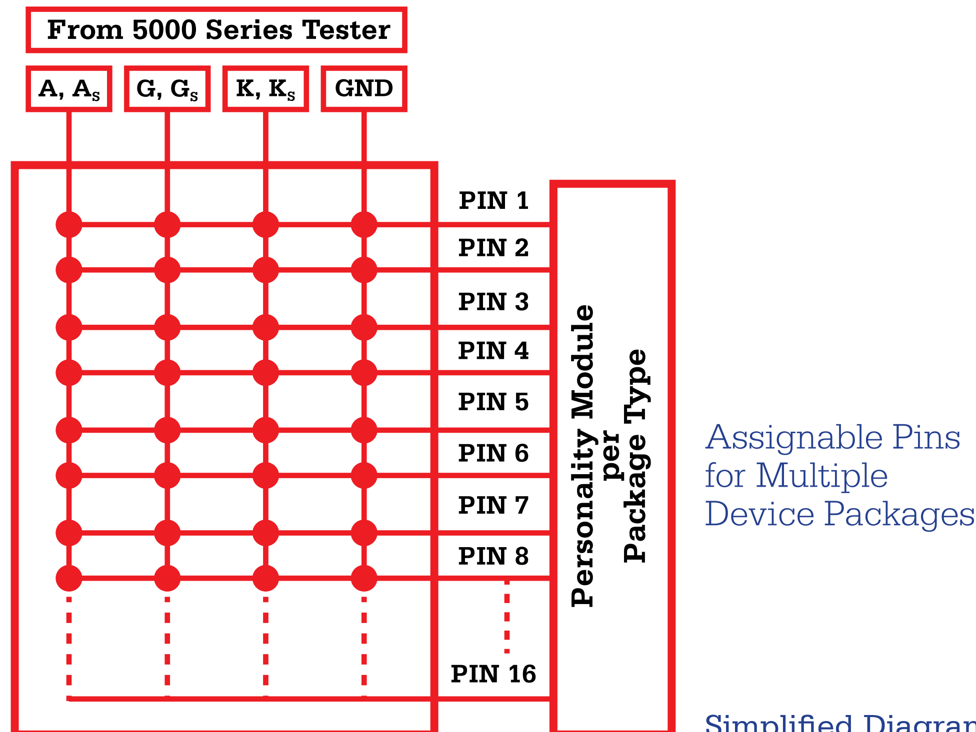
- ADP401A-8 (4x8 Matrix)
- ADP401A-16 (4x16 Matrix)

The Pin Programmable Scanner is used for testing multiple devices, mixed pin packages, opto-couplers, opto-logic, and other similar devices.

Any input (drive/sense) can be programmed to any of 8 or 16 output pins. A personality module contains a socket for a specified package type. The pins of the package can be connected to any of the input drives for a given test step.

Bias supplies can be added.

ADP-401A-8 with Personality



Assignable Pins for Multiple Device Packages

Simplified Diagram ADP-401A-8/16

ADAPTORS continued...

OVP / SIDAC / DIAC TEST Adaptor

ADP-360

Single device adaptor for Solid State OVP (SSOVP), Sidac and Diac devices.

ADP-360 connected to tester with manual fixture

MULTIPLE OVP

ADP-340-5 Adaptor

FOR: 5 Pin Modules (2 OVPs, 2 Heat Coils)

ADP-340-5G Adaptor

FOR: All ADP-340-5 Devices
Programmable OVP
Gated Devices (SLIC Protector)
Dual Programmable OVP
Dual Polarity OVP

ADP-340-5G with test fixture connected (Available on 5300HX only)

FIXTURES

A selection of fixtures is available, including:

- TO-220/218
- TO-72
- TO-5/18
- TO-92
- TO-3/66
- Axial (small and large)
- DP-4/5
- 8 Pin DIP
- 6 Pin TO-5
- SOT-23, SOT-24, SOT-25, SOT-26
- D-PAK
- TO-252
- SOT-89
- TO-243
- D2-PAK
- SOT-223
- TO-261
- SMA
- SMB
- SMC
- MELF (MINI-MELF, MICRO-MELF)
- SO-4, SO-6, SO-8, SO-16
- SOD-123, SOD-323, SOD-80
- Custom Fixtures
  (made for any device type for which a socket is commercially available)
- Blank

HANDLER / PROBER INTERFACE

A 16 bin handler interface and Logic Prober interface are available as options. Customer may specify handler and interface requirements. Bins or Sorts can be binary coded for use with wafer probers.

TEST SPECIFICATIONS

SCIENTIFIC TEST, INC. TEST SPECIFICATIONS 5000E/5300HX

	TEST		SPECIFICATION		
	PARAMETER	V RANGE	I RANGE	MAX RES.	ACCURACY
LEAKAGE	I_R, I_{CBO}, $I_{CEO/R/S/X}$, $I_{DSS/X}$, I_{DOFF}, I_{DRM}, I_{RRM}	.10V to 999V (2000V)[1]	2NA (20PA)[2] to 50MA	1 NA (1PA)[2]	1% + 2NA + 20PA/V[8] (1% + 200PA + 2PA/V)[2,8]
	I_{EBO}, I_{GSSF}, I_{GSSR}, I_{GSS}, I_{GKO}, I_R (OPTO)	.10V to 20V (80V)[3]	2NA (20PA)[2] to 3A	1 NA (1PA)[2]	1% + 2NA + 20PA/V[8] (1% + 200PA + 2PA/V)[2,8]
BREAKDOWN	BV_{CEO}, BV_{CES} (IGBT) (300µS Pulse above 10mA)	.10V to to 450V (900V)[1] to 700V (1400V)[1] to 800V (1600V)[1]	100µA to 200MA to 100MA to 50MA	1 MV	1% + 100MV
	BV_{DSS}, V_D, BV_{CBO}, V_{DRM}, V_{RRM}, V_{BB}	.10V to 999V (2000V)[1]	100NA to 50MA	1 MV	1% + 100MV
	BV_R, BV_Z	.10V to 5.00V to 9.999V to 50.00V to 700V (1400V)[1] to 999V (2000V)[1] BVZ Soak - 50V (100V) 0-50 ms to 99 secs	10µA to 49.9A (500A)[4] to 25A (250A)[4] to 9.99A to 100 MA to 50MA to 400mA to 80mA	1 MV	0.4% + 2 LSB
	BV_{EBO}, BV_{GSS}, BV_{GKO}	.10V to 20V (80V)[3]	100NA to 3A	1 MV	1% + 10MV
VCESUS	V_{CEOSUS}, V_{CERSUS}, V_{CEVSUS}	V_{CE}: TO 1500V Inductive Kickback, 35mH choke	I_C: to 4A	0.5V	2% + 0.5V
IMPEDANCE	ZZ (1 kHZ) 0.1Ω to 20 KΩ	0.1V to 200V DC (measure 50µV to 300mV rms)	100µA to 300mA DC	0.001 Ω 1µV	1% + 1% Range
GAIN	h_{FE} (1 to 99,999) CTR (.01 to 99,999)	V_{CE}: .10V to 5.00V[5] to 9.99V to 49.9V	I_E: 10µA to 49.9A (500A)[4] derate to 25A (250)[4] derate to 9.99A I_F, I_B: 100NA to 10A	.01 h_{FE} .0001 CTR	V_{CE}: 1% + 10MV I_C: 1% + 100NA I_F, I_B: 1% +5NA

	TEST		SPECIFICATION		
	PARAMETER	V RANGE	I RANGE	MAX RES.	ACCURACY
ON STATE	V_{CESAT}, V_{BESAT}, V_{BEON} V_F, V_T V_{DSON}, I_{DON}, V_{GSON} V_{GEON} V_F (Opto-Diode)	V_{CE}, V_D, V_F, V_T: .10V to 5.00V to 9.99V V_{GS}, V_{GE}, V_{BE}, V_F: .10V to 9.99V	I_E, V_T, I_F, I_D: 10µA to 49.9A (500A)[4] derate to 25A (250A)[4] I_B, I_F, I_{GT}: 100NA to 10A (40A)[7]	1MV	V: 1% + 10MV I_E, I_F, I_D, I_T: 1% + 100NA I_B, I_{GT}: 1% + 5NA
	V_{GSTH}, V_{GETH}	.10V to 49.9V	I_D: 100µA to 3A	1MV	1% + 10MV
	V_O (Regulator)	V_O: .10V to 20V (50V)[3] V_{IN}: .10V to 49.9V Load: Resistive or Electronic	I_O: 1MA to 5A	1MV	1% + 10MV
	I_{IN} (Regulator)	V_{IN}: .10V to 20V (80V)[3] Load: R_{GK}, 1K, 10K, EXT, OPEN, SHORT	I_{IN}: 1MA to 3A	10NA	1% + 5NA
	V_C	.10V to 49.9V	10MA to 10A	1MV	1% + 10MV
OFF	V_{GSOFF}	V_O: .10V to 20V (80V)[3]	I_D: 100NA (20PA)[2] to 3A V_{DS}: .10V to 50V	1MV	1% + 10MV
TRIGGER	I_{GT} V_{GT} V_{OPER} (Relay)	V_D: 5V to 49.9V V_{GT}: .10V to 20V (80V)3 .10V to 50V	I_{AK}: to 3A I_{GT}: 100NA to 3A R_L: 12, 30, 100Ω, EXT	10NA 1MV .10V	1% + 5NA 1% + 10MV 1% + .10V
HOLD	I_H $V_{RELEASE}$ (Relay)	V_D: 5V to 49.9V .10V to 50V	I_H: 1.5A I_{GT}: 100NA to 3A R_L: 12, 30, 100Ω, EXT (Initial I_{AK} set by R_L)	1µA .10V	1% + 2µA 1% + .10V
LATCH	I_L (Tested indirectly, no exact value)	V_D: 5V to 49.9V	I_L: 100µA to 3A I_{GT}: 100NA to 3A R_L: 12, 30, 100Ω, EXT	N/A	N/A
BREAKOVER	V_{BO}, I_{BO} (SSOVP) V_{BO}, I_{BO} (STS, DIAC) V_{BO}, I_{BO} (SIDAC) V_S, I_S (SBS, STS)	0.10 to 400V[1] 0.10 to 20V (80V)[3] 0.10 to 400V[1] 0.10 to 20V (80V)[3]	10mA to 900mA 1µA to 200µA 1µA to 1mA 1µA to 200µA	1mV	1% + 100mV 1% + 10mV 1% + 100mV

Accuracy specifications are in addition to ± 1 digit in readout.

GATED DEVICE TEST SPECIFICATIONS

SCIENTIFIC TEST, INC. 5300HX TEST SPECIFICATIONS GATED DEVICES

	TEST		SPECIFICATION		
	PARAMETER	V RANGE	I RANGE	MAX RES.	ACCURACY
LEAKAGE	I_G, I_{GKS}, I_{GAS}, I_D, I_R	.10V to 600V	100NA (20PA)[2] to 200MA	NA (1PA)[2]	1% + 10NA + 20PA/V (1% + 200PA + 2PA/V)[2]
ON STATE	V_F, V_T	.10V to 5.00V to 9.99V	10µA to 49.9A derate to 25A	1MV	V: 1% + 10MV
TRIGGER	I_{GT} V_{GT}	V_{GG}: .10V to 600V V_{GT}: .10V to 20V (80V)[3]	10µA to 3A RL: 12, 30, 100 Ω, EXT @V_{GA} < 50V, RL=100 Ω	10NA 1mV	1% + 5NA 1% + 10mV
HOLD	I_H	V_{GA}, V_{GK}: .10V to 600V	1MA to 999MA I_{BO}: 10MA to 900MA	.01MA	1% + .05MA
BREAKOVER	I_{BO} V_{BO}	0.10 to 600V to 400V 0.10 to 600V to 400V	V_{BO}: 10mA to 600mA to 900MA I_{BO}: 10MA to 600MA to 900MA	1mV	2% + .05MA 1% + 100mV

Accuracy specifications are in addition to ± 1 digit in readout.

1. 2000V Hi Voltage (Anode/Collector) Option
2. Lo Current Deck Option — Also adds programmable soak time from 1 mS to 99 secs. for current under 1µA. (Not available on 5000E)
3. 80V Lo Source (Gate/Base) Option
4. 500 Amp Hi Current Deck Option. (Not available on 5000E)
5. Voltage @ front panel terminals; allow for drop in cables
6. Optional 100V Hi Source
7. 40A Lo Source Option
8. Hi Deck or Adaptor: 1% + 2NA + 40PA/V

WEIGHT AND DIMENSIONS

MODEL	DIMENSIONS (mm)	WEIGHT (kg)	POWER
MODEL 5000 SERIES **Tester Mainframe**	17” (432) x 20” (508) x 10.5” (267)	55 lbs (25)	120/240 VAC (+5%, -15%) 50/60 Hz, Fused 2A/1A
MODEL LC-1000 **Lo Current Deck**	16.5” (419) x 10.5” (267) x 8” (203)	11 lbs (5)	Powered from 5000 Series Tester
MODEL HC-500 **Hi Current Deck**	17” (432) x 20” (508) x 10.5” (267)	35 lbs (15.9)	Powered from 5000 Series Tester

SELECTING A TESTER

QUESTIONS TO ASK

- Is programming easy? Will vendor give you software to evaluate?
- Are current and voltage ranges sufficient?
- Can current/voltage ranges be extended later?
- Are a wide selection of fixtures available?
- Is test/datalog speed adequate?
- Will vendor benchmark your samples for speed and correlation?
- Is the test method “single measure”?
- Does system include self-test with convenient troubleshooting guide?
- Is auto-calibrate included?
- Is vendor experienced? How many systems have they installed?
- Is tester limited to single device type/family? (latent cost)
- Is curve trace available?

PRODUCT LIST

5000 SERIES SYSTEMS

PART NUMBER	DESCRIPTION
5000C	Curve Tracer 2NA to 50A, 20v, 1Kv
5000E	Discrete Semiconductor Tester 2NA to 50A, 20v, 1Kv
5300C	Curve Tracer 2NA to 50A, 20v, 1Kv (extended ranges available)
5300HX	Discrete Semiconductor Tester 2NA to 50A, 20v, 1Kv (extended ranges available)

(All 5000 Series Testers include 1 TO-220 GAK fixture, may be substituted for a different fixture at customer request.)
RACK MOUNT AVAILABLE

HIGH VOLTAGE OPTIONS FOR ABOVE

PART NUMBER	DESCRIPTION
HVA-2000	2000 Volt Anode/Collector Option (Factory Installation Required)
HVG-80	80V Gate/Base Option, Recommended for High Gate Voltage MOSFET's. (Factory Installation Required)
AUX-150	Auxiliary 150V Power Supply for Impulse Reset Test and 10x1000 µS

HIGH CURRENT OPTIONS FOR ABOVE

PART NUMBER	DESCRIPTION
HC-100	100 Amp Mainframe
HC-1.5/400	1.5 Amp High Current Option (@400V for IBO)
LO-40	Extends Low Source to 40A (80V Gate ONLY)

5300C AND 5300HX ONLY OPTIONS

PART NUMBER	DESCRIPTION
LC-1000	Low Current Deck (20PA/1PA Resolution) Adds soak to 99 seconds for current less than 1uA
HC-500	500 Amp High Current Deck
HC-1000	1000 Amp High Current Deck
HC-1200	1200 Amp High Current Deck, 10V@1200A, at the terminals
ADP-340-4	Transient Surge 5 Pin Module Test Station
ADP-340-5	Transient Surge 5 Pin Module (or SSOVP) Test Station with Tip-Com, Ring-Com, Tip-Ring, includes 100V/us test. (VBO, IBO, IH, VT, RCOIL, VL, VB, VZ, and ID) (Requires HVA-2000)

PART NUMBER	DESCRIPTION

5300C AND 5300HX ONLY OPTIONS

ADP-340-5G	Same as ADP-340-5 plus Gated Device Option (IGT, VGT, VF, ID, VBO, IBO, IH, VT, IR, IG) (Requires HVA-2000)
ADP-SURG	Adds 10x1000 µS 10A test to ADP-340
ADP-410	Inductive Sustaining Test Adaptor (VCEOSUS, VCERSUS, VCESUS, ICEV) to 4A, 1600V

SCANNER OPTIONS FOR ALL SYSTEMS (SCANNERS REQUIRE A HANDLER BOARD & CABLE OR PERSONALITY FIXTURE)

ADP-401A-8	Scanner for 8 pins Totally Programmable, 30A, 1200V
ADP-401A-16	Scanner for 16 pins Totally Programmable, 30A, 1200V

SOFTWARE OPTIONS FOR ALL SYSTEMS

SW-MAP	Wafer Mapping Option (Includes Software/Firmware) Map of Bin, Sort or Test Result Requires X-Y Coordinates from Prober via RS-232
SW-HIREL	Hi Rel Software Option (Delta percent testing including on-line delta testing with re-test capability)
SW-CURVE	Auto Generate Curve Trace (Add Curve Trace to any system, included with a 5000C)
THRML-VBE	Delta VBE for Thermal Transistor Test; Programmable to 10A, 50V, 50MS; requires hardware
DUAL-VBE	Differential VBE Matching; requires scanner/hardware

DEVICE ADAPTORS

ADP-310	Opto-Coupler Adaptor, (Requires Opto-Test Fixture) (See Opto-Test Fixtures)
ADP-320	Regulator (3 terminal) Adaptor, (Requires a Test Fixture) (See Test Fixtures)
ADP-350	Quadrac/Diac Test Adaptor, (Requires a Test Fixture) (HVG-80 recommended)
ADP-360	Adaptor to Test: 1.Transient Surge devices (SSOVP) 2.Sidacs 3.Diacs (Requires HVA-2000)
ADP-370	8 pin Dip Opto-Logic Device Adaptor
ADP-380	Kelvin Adaptor (Accepts standard Test Fixtures)
ADP-390	Relay Test Adaptor (RCOIL, VOPER, VREL, RCONT, OPTIME, RELTIME)
ADP-506	I Latch Load Box for Exact Latching Measurements
ADP-508	Adaptor for 5 Lead Device with Current Sense to 10MA and Kelvin Pins, also Called HEX Sense
ADP-ICEV	Banana Plug Resistor Cap

PRODUCT LIST continued...

5000 SERIES SYSTEMS

PART NUMBER	DESCRIPTION
TEST FIXTURES - SELF-TEST	
ST-100	Self Test Fixture for 5000 Series (included w/purchase of new Tester)
ST-200	Self Test Fixture for Low Current Deck (included w/purchase of new Low Current Deck)
ST-300	Self Test Fixture for Multiplexer (included w/purchase of new Multiplexer)
ST-345	Self Test Fixture for ADP-340-5 or ADP-340-5-G (included w/purchase of new ADP-340-5)
ST-601	Self Test Fixture for ADP401A (included w/purchase of new ADP-401A)
TEST FIXTURES - DISCRETE / SURFACE MOUNT (SOME AVAILABLE W/ KELVIN DUAL CONTACTS FOR DRIVE AND SENSE)	
FXK-220	TO-220/218 (A Version Anode Center Pin) (G Version Gate Center Pin) **Please consult factory for any discrete or surface mount device test fixture not listed. If sockets are available STI can build a fixture per customer request.**
FX-UW	Any Fixture Wired for universal pin connection (Requires FX-CAB-UW)
FX-CAB-UW	Universally Wired Fixture Cable for universally wired fixtures
TEST FIXTURES - DISCRETE OPTO-COUPLER (ALL OPTO FIXTURES REQUIRE ADP-310)	
	Consult Factory for Pricing
TEST FIXTURES - PERSONALITY (FOR PROGRAMMABLE SCANNERS ADP-401 AND ADP401A'S)	
FX-8P-BLNK	8P Blank Test Fixture for ADP-401A-8
FX-16P-BLNK	16P Blank Test Fixture for ADP-401A-8
FX-8P	2 to 8 Pin Test Fixture for ADP-401A-8 (any available 2 to 8 pin socket)
FX-16P	2 to 16 Pin Test Fixture for ADP-401A-16 (any available 2 to 16 pin socket)
FX-VCC	Adds Pin Assignable VCC and Logic 1 and 0 to FX-8P, FX-16P

PART NUMBER	DESCRIPTION

TEST FIXTURES - ACCESSORIES

PART NUMBER	DESCRIPTION
FX-BLNK	Blank Fixture Enclosure drilled with Tester pattern (includes plugs, ferrite beads, coil and hardware)
FX-BLNKPCB	Blank Fixture Enclosure drilled with Tester pattern, and PCB cut out (includes pcb, plugs, ferrite beads, coil and hardware)
FX-COIL	Oscillation Suppression Coil
FX-SCKT	Replacement Sockets for Fixtures

CABLES (DEVICE CABLE AND CONTROL CABLE RECOMMENDED FOR USE WITH HANDLER/PROBER)

PART NUMBER	DESCRIPTION
HAC-100	9 Pin Null Modem Cable
HCB-125	LC-1000 Control Cable, 6’ (50p Centronics to 50p Centronics)
HCB-150	Handler Device Cable, 6’
HCB-200	Handler Control Cable, 6’ (SOT, EOT, Fail, Bins, etc…) (25p D-Sub P to 25p D-Sub S)
HCB-301	Interconnect Cable from Tester to HCD and Adaptors
HCB-301K	HCB-301 with Kelvin
HCB-340-5	Handler Device Cable for ADP-340-5G 6’
HCB-360	Cable for 9p D-Sub Plug to Socket 6’ or 10’
HCB-401-8	Handler Device Cable for ADP-401-8 Scanner
HCB-401-16	Handler Device Cable for ADP-401-16 Scanner
HCB-410	Handler Device Cable from ADP-410 (Adaptor to Un-terminated leads)
HCB-500	HC-500 Handler Device Cable 6’ (200A Max)
HCB-502	HC Anode and Cathode Cable for Device
HCB-A615	AUX Control Cable (6p Circular P to 6p Circular S)

INTERFACE BOARDS

PART NUMBER	DESCRIPTION
EXT-200	External Control Board, Provides SOT test receives EOT(U1-12) and Pass/Fail(U1-13), 15 Relay Drivers
PI-200	Prober Interface Card
HI-100	Handler Interface Card, Relay Closure, 16 Bins

CLIENT LIST

* Indicates that customer has multiple installations.

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