Series 2600
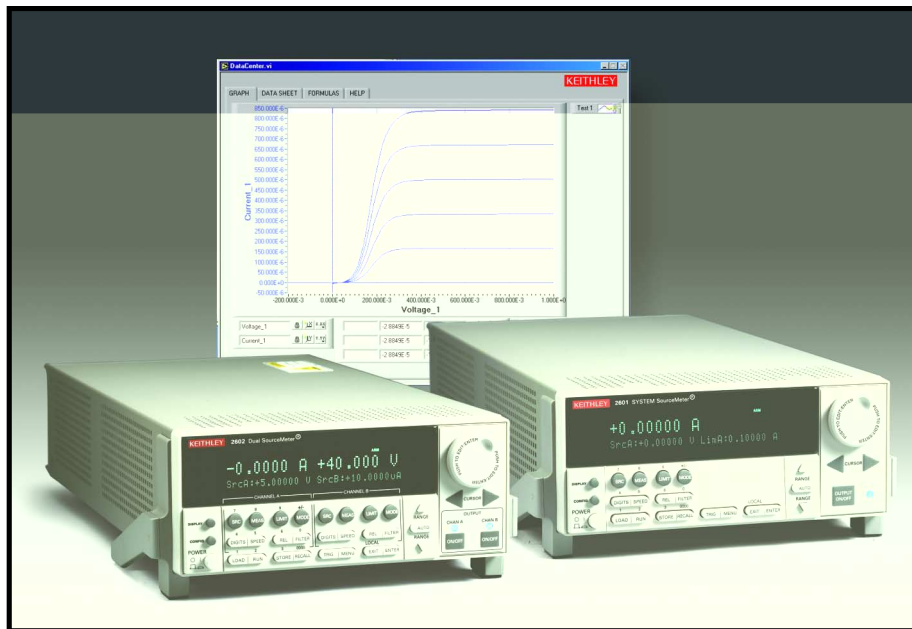
System SourceMeter®
Multi-Channel I-V Test Solutions

- **Combines a precision power supply, true current source, DMM, arbitrary waveform generator, V or I pulse generator with measurement, electronic load, and trigger controller—all in one instrument**

- **>10,000 readings/s and >5,000 source-measure points/s to memory provide faster test times**

- **The embedded Test Script Processor (TSP™) offers unparalleled system automation and two to four times the test throughput of competitive products in I-V functional test applications**

- **TSP-Link™ master/slave connection seamlessly integrates multiple Series 2600 SourceMeter channels into a system that can be programmed and controlled as a single instrument**

- **Free Test Script Builder software simplifies creating powerful test scripts for programming custom test functions**

- **Free LabTracer™ 2.0 software available for curve tracing and fast, easy startup**

- **Each 40W, 3A channel is electrically isolated for high integrity measurements and wiring flexibility**

- **Industry's highest SMU rack density for automated test applications**

Series 2600 System SourceMeter instruments offer electronic component and semiconductor device manufacturers a scalable, high throughput, highly cost-effective solution for precision DC, pulse, and low frequency AC source-measure testing. Building on the tightly integrated source-measure technology originally developed for Keithley's popular Series 2400 SourceMeter line, Series 2600 instruments provide from two to four times the test speed of competitive solutions in I-V functional test applications. They also offer higher source-measure channel density and a significantly lower cost of ownership than competing products. Patented analog-to-digital converters provide simultaneous I and V measurements in less than 100µs (10,000 rdgs/s) and source-measure sweep speeds of less than 200µs per point (5,000 points/s). This high speed source-measure capability, plus advanced automation features and time-saving software tools make Series 2600 SourceMeter instruments an ideal solution for I-V testing of a wide range of devices.

System scalability without a mainframe

Series 2600 instruments incorporate an innovative technology that makes it possible to create multi-channel I-V test systems economically, but without sacrificing test throughput. TSP-Link™ is a high speed system expansion interface, which test system builders can use to connect multiple
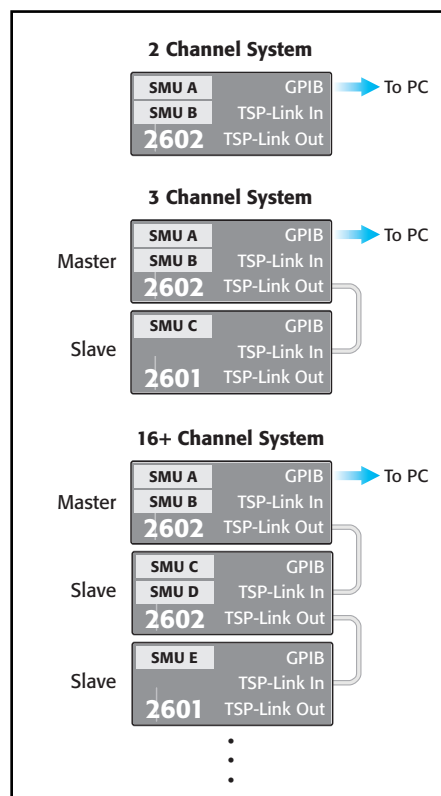
TSP-Link makes it easy to scale the system's channel count to match the application.

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1

Series 2600

Ordering Information

2601 Single-channel System SourceMeter Instrument

2602 Dual-channel System SourceMeter Instrument

ACCESORIES SUPPLIED

Test Script Builder software

IVI/VISA drivers for Visual Basic, VC/C++, LabVIEW, TestPoint, and LabWindows™/CVI

Mating screw terminal connectors with strain relief and covers

TSP-Link cable (CA-180-3A)

Factory and custom TSP test scripts

The Test Script Processor is programmed with a simple BASIC-style programming language that runs in real time on the instrument. Keithley provides built-in test scripts for:

- Sweeping.
- Pulsing.
- Waveform generation.
- Common component tests like binary search, V_F, V_{TH}, LIV (light intensity/current/voltage).

A number of test scripts are included in the instrument, while others can be downloaded at no charge from www.keithley.com. These pre-written factory test scripts can be used as provided or easily customized for a given application, so production users can get their systems up and running faster than ever before.

Users can also create custom test scripts in several different ways, including a programming tool called Test Script Builder. Custom scripts can be downloaded from the PC to the master SourceMeter unit and saved in non-volatile memory. Both models provide 16 megabytes of non-volatile memory for storing up to 50,000 lines of TSP code and more than 100,000 readings.

System SourceMeter®
Multi-Channel I-V Test Solutions

Series 2600 instruments in a master/slave configuration. Once connected, all the Series 2600 instruments in a system can be programmed and operated under the control of the master unit, just as if they were housed in the same chassis. By eliminating the need for a chassis/mainframe, the TSP-Link provides virtually unlimited flexibility to scale a test system's channel count up or down as the application requires, while ensuring seamless integration.

New capabilities for increasing test speed and lowering test cost

The Test Script Processor (TSP™)

Any Series 2600-based system can run high speed, embedded test scripts on the master unit's Test Script Processor (TSP), the other major new technology on which the Series 2600 is based. The test sequence is processed and run on the embedded computer in the instrument, rather than from an external PC controller, so delays due to GPIB traffic congestion are eliminated. TSP test scripts allow throughput gains of up to 10× over equivalent PC-based programs controlling the same instruments via GPIB. TSP test scripts can be loaded and run from the front panel or over the system's GPIB interface. A single TSP test script, running on the master unit, can control all the SourceMeter channels in the system and acquire data from any Series 2600 instrument connected to the TSP-Link, which supports connections for up to 64 Series 2600 instruments.

TSP for advanced automation

A Series 2600-based system can stand alone as a complete measurement and automation solution for semiconductor device or component testing, with the master unit controlling sourcing, measuring, pass/fail decisions, test sequence flow control, binning, and the component handler or prober. In contrast with existing embedded test sequencers for instrumentation, the TSP test scripts offer far greater programming flexibility, including support for:

- Instrument command queuing.
- Modular subroutines with passable parameters.
- Pass/fail and limit testing.
- A wide range of math operations.
- Flexible branching and looping capability.
- Flexible external triggering.
- Intelligent digital I/O read and write capability.
- RS-232 communication.

ACCESSORIES AVAILABLE

CABLES AND CONNECTORS

2600-BAN	Banana Test Leads/Adapter Cable. For a single Series 2600 SourceMeter channel (two needed for use with Model 2602)
8606	High Performance Modular Probe Kit. For use with 2600-BAN
2600-KIT	Extra screw terminal connector, strain relief and cover for a single SourceMeter channel (two needed for use with Model 2602)
2600-TRIAX	Triax Adapter. For a single Series 2600 SourceMeter channel (two needed for use with Model 2602)
7078-TRX-*	3-Slot, Low Noise Triax Cable. For use with 2600-TRIAX adapter
SC-200	Shielded Twisted Pair Cable. Recommended for general-purpose use with Series 2600 System SourceMeter instruments.

DIGITAL I/O, TRIGGER LINK AND TPS-LINK

2600-TLINK	Digital I/O to TLINK Adapter Cable, 1m
CA-126-1	Digital I/O and Trigger Cable, 1.5m
CA-180-3A	CAT5 Crossover Cable for TSP-Link

GPIB INTERFACES AND CABLES

7007-1	Double Shielded GPIB Cable, 1m (3.3 ft.)
7007-2	Double Shielded GPIB Cable, 2m (6.6 ft.)
KPCI-488	GPIB/IEEE-488 Interface Board for the PCI Bus
KPC-488.2AT	GPIB/IEEE-488 Interface Board for the ISA Bus/XT
KUSB-488	GPIB/IEEE-488 Interface Module for the USB Bus

SWITCHING

7002-HD	High Density Switch Mainframe
7002-HD-MTX1	Differential 6×32 Matrix Card
7002-HD-MUX1	Differential Quad 1×40 Multiplexer Card

RACK MOUNT KITS

4299-1	Single Rack Mount Kit with front and rear support
4299-2	Dual Rack Mount Kit with front and rear support

SOFTWARE

LabTracer™ 2.0	Curve Tracing Software (downloadable)

EXTENDED WARRANTIES

2601-EW	1 Year Extended Warranty for Model 2601
2602-EW	1 Year Extended Warranty for Model 2602

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Series 2600

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Third-generation SMU design ensures faster test times

The Series 2600's new SMU design enhances test speed in several ways. For example, while earlier designs used a parallel current ranging topology, the Series 2600 uses a series ranging topology (patent pending), which provides faster and smoother range changes and outputs that settle more quickly. It also allows the current output limit to be programmed independently of the measurement current range for fast charging of capacitive loads and more intuitive operation during bench use.

Each Series 2600 SourceMeter channel offers a highly flexible, four-quadrant source coupled with precision voltage and current meters/limiters. Each channel can be configured as a:

- Precision power supply (6V @ 3A, 40V @ 1A output with 1pA readback resolution).
- True current source (3A @ 6V, 1A @ 40V).
- DMM (DCV, DCI, ohms, power, with 5½-digit resolution).
- Power V or I pulse generator (Pulse width: 150µs and longer—source only; 250µs and longer—source and measure).
- Power V or I waveform generator (20-point sine wave up to 400Hz in a TSP test script).
- Electronic load (with sink mode capability).

High speed and precision A/Ds with simultaneous source-readback

All Series 2600 instruments provide four-quadrant operation and can be connected in series or in parallel to extend their dynamic range. In the first and third quadrants, they operate as a source, delivering power to a load. In the second and fourth quadrants, they operate as a sink, dissipating power internally. They measure voltage and current simultaneously with up to 5½-digit resolution and display voltage, current, resistance or power readings.

Two analog-to-digital converters per channel (one for I, one for V) can run simultaneously, providing precise source-readback without sacrificing test throughput. These A/D converters offer the flexibility of programmable integration rates, allowing the user to optimize for either high speed (>10,000 rdgs/s at 0.001 NPLC setting) or for high resolution (up to 24 bits at 10 NPLC setting) to make high accuracy measurements.

Digital I/O Interface

A back panel port on every Series 2600 instrument provides 14 bits of universal digital I/O to link the instrument to a variety of popular handlers for sorting and binning components after testing. These I/O lines are also backward-compatible with Keithley's earlier Trigger Link instrument triggering technology. These lines simplify integrating Series 2600 instruments into systems that employ other external instrumentation, including Series 2400 SourceMeter instruments, Series 7000 switch mainframes, and Series 2700 Integra data acquisition/multimeter systems.

### Dramatic throughput improvements for production test

Series 2600 instruments help component manufacturers improve their test throughput dramatically, as well as provide test solutions that can handle today's devices, which often have higher pin counts and more analog circuitry than earlier designs. In the past, manufacturers have been forced by the lack of optimized test solutions for multi-channel source-measure applications to choose between bulky, expensive mainframe-based systems, slow instrument-based systems employing PC control, or fast instrument-
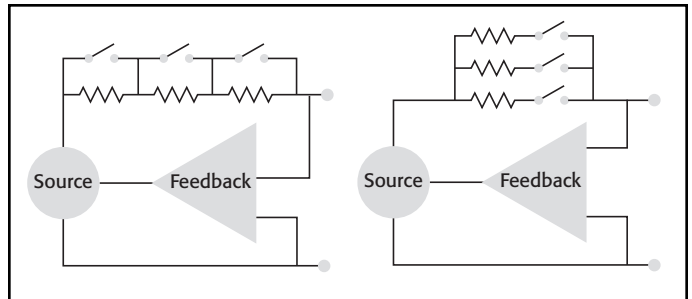
Series vs. parallel ranging topologies
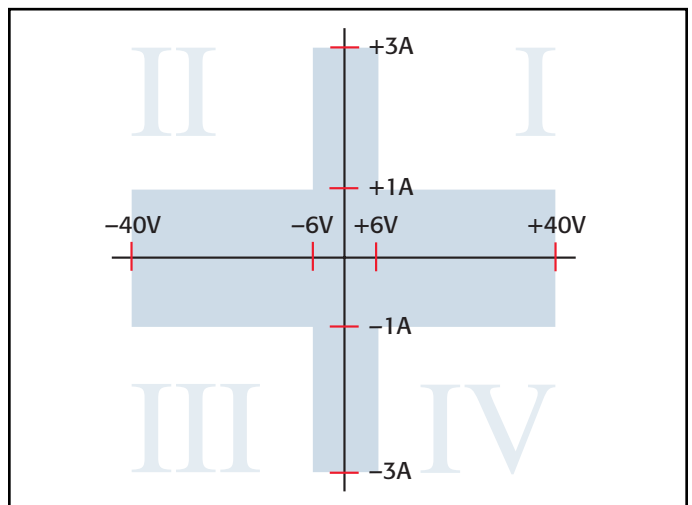
Models 2601 and 2602 I-V capability
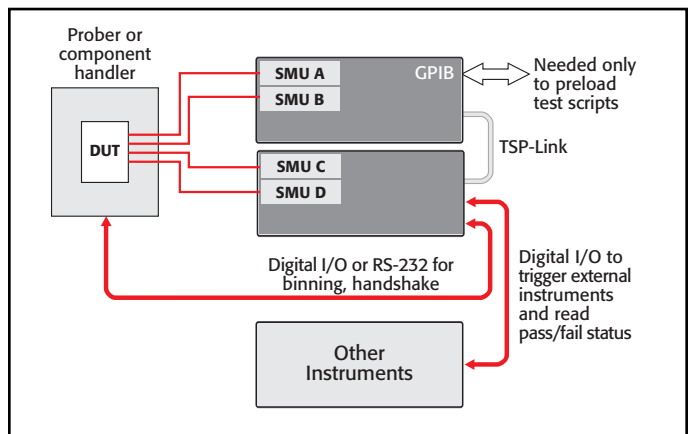
Automated testing. With all the capability available in a TSP test script, a Series 2600-based system can run high throughput I-V functional test routines, completely independent of PC operating system and communications delays.

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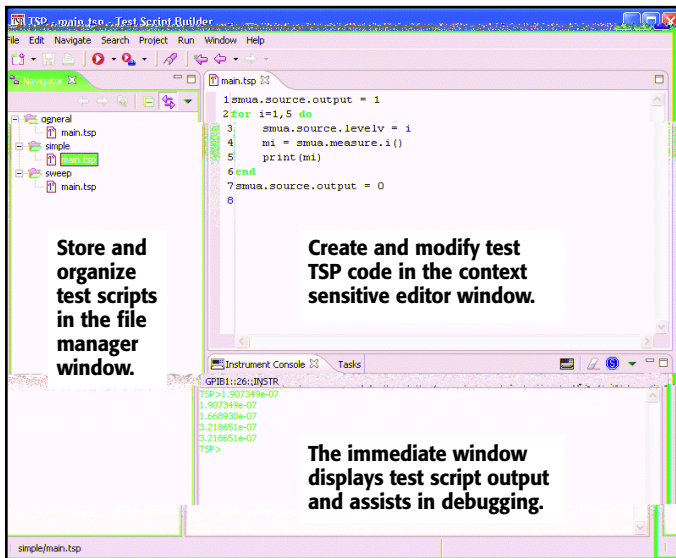
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System SourceMeter®
Multi-Channel I-V Test Solutions

based systems that require complex development. The Model 2601 and 2602 offer:

- The highest density available in any SMU-based system to address growing pin counts.

- The industry's fastest throughput, which helps reduce the cost of test. The speed of the on-board processor and TSP test scripts, combined with the tight triggering synchronization offered by the TSP-Link bus, makes high speed parallel testing practical.

- A lower capital investment. By eliminating the need for a mainframe/chassis, they allow test engineers to configure a readily scalable system at a significantly lower cost per channel than other solutions.

Test Script Builder software

Test Script Builder is a free software tool that is provided with all Series 2600 SourceMeter instruments to help users create, modify, debug, and store TSP test scripts. It provides a project/file manager window to store and organize test scripts, a text-sensitive program editor (like Visual Basic) to create and modify test TSP code, and an immediate instrument control window to send GPIB commands and receive data from the instrument. The immediate window allows viewing the output of a given test script and simplifies debugging.

Store and organize test scripts in the file manager window.

Create and modify test TSP code in the context sensitive editor window.

The immediate window displays test script output and assists in debugging.

## High power and simplicity for R&D applications

In R&D and device characterization environments, Series 2600 instruments offer high testing versatility for both interactive and automated testing. The free downloadable LabTracer 2.0 software allows users to configure and control up to eight Series 2600 or 2400 SourceMeter channels quickly and easily for curve tracing or device characterization. It provides a simple graphical user interface for setup, control, data acquisition, and graphing of DUT data from SourceMeter instruments. When used together, LabTracer and SourceMeter instruments offer lab users a powerful, easy-to-use, and economical alternative to chassis-based solutions.

TYPICAL APPLICATIONS

- **I-V functional test and characterization of a wide range of devices, including:**
  - **Discrete and passive components.**
  - **Two-leaded – Resistors, disk drive heads, metal oxide varistors (MOVs), diodes, zener diodes, sensors, capacitors, thermistors.**
  - **Three-leaded – Small signal bipolar junction transistors (BJTs), field-effect transistors (FETs), and more.**
  - **Parallel test – Two- and three-leaded component arrays.**
  - **Simple ICs – Optos, drivers, switches, sensors.**
- **Integrated devices – Small Scale Integrated (SSI) and Large Scale Integrated (LSI).**
  - **Analog ICs.**
  - **Radio frequency integrated circuits (RFICs).**
  - **Application specific integrated circuits (ASICs).**
  - **System on a chip (SOC) devices.**
- **Optoelectronic devices such as light-emitting diodes (LEDs), laser diodes, high brightness LEDs (HBLEDs), vertical cavity surface-emitting lasers (VCSELs), displays.**
- **R&D and device characterization of these types of devices.**
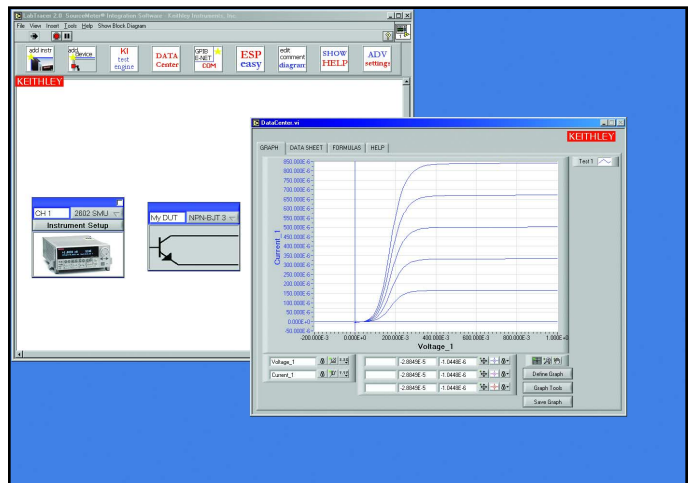
Graphical instrument setup. LabTracer 2.0 supports up to eight Series 2600 SourceMeter channels. Model 2400 and Model 2410 SourceMeter instruments are also supported for extended voltage capability. Drop-down menus in LabTracer 2.0's instrument setup window allow configuring any channel of a SourceMeter instrument for fixed point or sweeping operation. Once the instrument is configured, a single key press is all it takes to execute a test. Once a test is complete, data is displayed in the spreadsheet panel and graphing panel. Measurement data can be manipulated in the spreadsheet by applying a formula to the results. For more detailed analysis, data can also be exported to Microsoft® Excel with a simple cut and paste.

Series 2600

System SourceMeter® Multi-Channel I-V Test Solutions

SPECIFICATION CONDITIONS

This document contains specifications and supplemental information for the Models 2601 and 2602. Specifications are the standards against which the Models 2601 and 2602 are tested. Upon leaving the factory the 2601 & 2602 meet these specifications. Supplemental and typical values are non-warranted, apply at 23°C, and are provided solely as useful information.

The source and measurement accuracies are specified at the SourceMeter CHANNEL A (2601 and 2602) or SourceMeter CHANNEL B (2602) terminals under the following conditions:

1. 23°C ± 5°C, <70% relative humidity.

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Series 2600 Specifications

SOURCE AND MEASURE

METER SPECIFICATIONS

VOLTAGE MEASUREMENT ACCURACY [1]

RANGE	DISPLAY RESOLUTION[3]	INPUT RESISTANCE	ACCURACY (1 Year) 23°C ±5°C ±(% rdg. + volts)
100.000 mV	1 μV	>10 GΩ	0.015% + 150 μV
1.00000 V	10 μV	>10 GΩ	0.015% + 200 μV
6.00000 V	10 μV	>10 GΩ	0.015% + 1 mV
40.0000 V	100 μV	>10 GΩ	0.015% + 8 mV

TEMPERATURE COEFFICIENT (0°–18°C & 28°–50°C): ±(0.15 × accuracy specification)/°C.

CURRENT MEASUREMENT ACCURACY

RANGE	DISPLAY RESOLUTION[3]	VOLTAGE BURDEN [2]	ACCURACY (1 Year) 23°C ±5°C ±(% rdg. + amps)
100.000 nA	1 pA	<1 mV	0.05 % + 100 pA
1.00000 μA	10 pA	<1 mV	0.025% + 300 pA
10.0000 μA	100 pA	<1 mV	0.025% + 600 pA
100.000 μA	1 nA	<1 mV	0.02 % + 12 nA
1.00000 mA	10 nA	<1 mV	0.02 % + 60 nA
10.0000 mA	100 nA	<1 mV	0.02 % + 1.2 μA
100.000 mA	1 μA	<1 mV	0.02 % + 6 μA
1.00000 A	10 μA	<1 mV	0.03 % + 700 μA
3.00000 A	10 μA	<1 mV	0.05 % + 1 mA

TEMPERATURE COEFFICIENT (0°–18°C & 28°–50°C): ±(0.15 × accuracy specification)/°C.

ADDITIONAL METER SPECIFICATIONS

LOAD IMPEDANCE: Stable into 10,000pF typical.

COMMON MODE VOLTAGE: 250VDC.

COMMON MODE ISOLATION: >1GΩ, <4500pF.

OVERRANGE: 101% of source range, 102% of measure range.

MAXIMUM SENSE LEAD RESISTANCE: 1kΩ for rated accuracy.

SENSE INPUT IMPEDANCE: >10GΩ.

NOTES

1. Add 50μV to source accuracy specifications per volt of HI lead drop.
2. Four-wire remote sense only.
3. Applies when in single channel display mode.

GENERAL

HOST INTERFACES: Computer control interfaces.

IEEE-488: IEEE-488.1 compliant. Supports IEEE-488.2 common commands and status model topology.

RS-232: Baud rates from 300 bps to 115200 bps. Programmable number of data bits, parity type, and flow control (RTS/CTS hardware or none). When not programmed as the active host interface, the SourceMeter can use the RS-232 interface to control other instrumentation.

EXPANSION INTERFACE: The TSP-Link expansion interface allows TSP enabled instruments to trigger and communicate with each other.
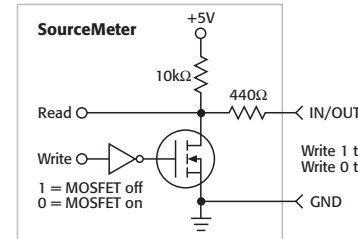
Cable Type: Category 5e or higher LAN crossover cable.

Length: 3 meters maximum between each TSP enabled instrument.

DIGITAL I/O INTERFACE:

Connector: 25-pin female D

Input/Output Bits: 14 I/O bits. See figure below.

CAUTION

An external device pulls an I/O line low (0) by shorting it to ground. Therefore, the external device must be capable of sinking a minimum of 480μA (5V/10440Ω) per I/O line.

Write 1 turns FET off – In/Out pulled high (5V)
Write 0 turns FET on – In/Out pulled low (0V)

Output Enable Pin: Active high input. When the output enable input has been activated, each SourceMeter output will be disabled when Output Enable is <1.5V.

5V Power Supply Pin: Limited to 600mA, solid state fuse protected.

POWER SUPPLY: 100V to 240VAC, 50–60Hz (manual setting), 240VA max.

COOLING: Forced air. Side intake and rear exhaust. One side must be unobstructed when rack mounted.

WARRANTY: 1 year.

EMC: Conforms to European Union Directive 89/336/EEC, EN 61326-1.

SAFETY: Conforms to European Union Directive 73/23/EEC, EN 61010-1, and UL 61010-1.

DIMENSIONS: 89mm high × 213mm wide × 460mm deep (3½ in × 8⅜ in × 17½ in). Bench Configuration (with handle & feet): 104mm high × 238mm wide × 460mm deep (4⅛ in × 9⅜ in × 17½ in).

WEIGHT: 2601: 4.75kg (10.4 lbs). **2602:** 5.50kg (12.0 lbs).

ENVIRONMENT: For indoor use only.

Altitude: Maximum 2000 meters above sea level.

Operating: 0°–50°C, 70% R.H. up to 35°C. Derate 3% R.H./°C, 35°–50°C.

Storage: –25°C to 65°C.

ACCESSORIES SUPPLIED:

Cables & Connectors: SourceMeter DUT interface connector kit for each SourceMeter channel. Kit includes one hooded screw terminal connector that mates with the SourceMeter measurement terminals. TSP-Link cable, power cable.

Printed Documentation: User's Manual.

Electronic Media: CD-ROMs containing
- User's and Reference manual .PDF files
- Test Script Builder script development software
- LabTracer™ 2.0 Characterization Software (downloadable)
- IVI/VISA drivers for VB, VC/C++, LabVIEW, and LabWindows/CVI.

Series 2600

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Multi-Channel I-V Test Solutions

SPEED SPECIFICATIONS [1]

MAXIMUM SWEEP OPERATION RATES (operations per second) FOR 60Hz (50Hz):

A/D CONVERTER SPEED	TRIGGER ORIGIN	MEASURE TO MEMORY	MEASURE TO GPIB	SOURCE MEASURE TO MEMORY	SOURCE MEASURE TO GPIB	SOURCE MEASURE PASS/FAIL TO MEMORY	SOURCE MEASURE PASS/FAIL TO GPIB
0.001 NPLC	Internal	10000 (10000)	8000 (8000)	5500 (5500)	3600 (3600)	4900 (4900)	3100 (3100)
0.001 NPLC	Digital I/O	2700 (2650)	2100 (2100)	2300 (2300)	1900 (1875)	2200 (2150)	1800 (1775)
0.01 NPLC	Internal	4000 (3500)	3600 (3200)	2750 (2700)	2300 (2100)	2800 (2500)	2100 (1975)
0.01 NPLC	Digital I/O	1900 (1775)	1600 (1500)	1700 (1600)	1450 (1400)	1600 (1500)	1400 (1325)
0.1 NPLC	Internal	565 (475)	555 (470)	540 (450)	510 (440)	535 (455)	505 (430)
0.1 NPLC	Digital I/O	490 (420)	470 (405)	470 (410)	450 (390)	470 (400)	450 (390)
1.0 NPLC	Internal	59 (49)	59 (49)	58 (49)	58 (48)	58 (49)	58 (48)
1.0 NPLC	Digital I/O	58 (48)	58 (48)	58 (48)	57 (48)	57 (48)	57 (48)

MAXIMUM SINGLE MEASUREMENT RATES (operations per second) FOR 60Hz (50Hz):

A/D CONVERTER SPEED	TRIGGER ORIGIN	MEASURE TO GPIB	SOURCE MEASURE TO GPIB	SOURCE MEASURE PASS/FAIL TO GPIB
0.001 NPLC	Internal	1110 (1000)	880 (880)	840 (840)
0.01 NPLC	Internal	950 (900)	780 (760)	730 (710)
0.1 NPLC	Internal	390 (345)	355 (320)	340 (305)
1.0 NPLC	Internal	57 (48)	56 (47)	56 (47)

MAXIMUM RANGE CHANGE RATE: >4500/second typical.

MAXIMUM SOURCE RANGE CHANGE RATE: >1000/second typical.

MAXIMUM SOURCE FUNCTION CHANGE RATE: >500/second typical.

EXTERNAL TRIGGER INPUT: The Digital I/O interface signals can be configured to behave as trigger inputs.

    Input Latency (time from trigger input to start of measurement or source change): <150µs, typical.

   **Input Jitter:** <100µs, typical.

COMMAND PROCESSING TIME: Maximum time required for the output to begin to change following the receipt of the smux.source.levelv or smux.source.leveli command. <1ms typical.
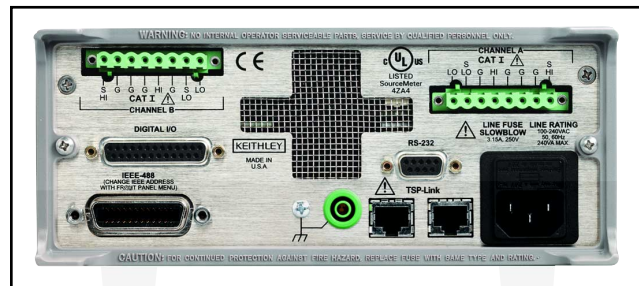
NOTES

1. See the Speed Specifications Test Conditions Appendix in the Series 2600 Reference Manual for more information regarding test conditions.

Specifications are subject to change without notice.

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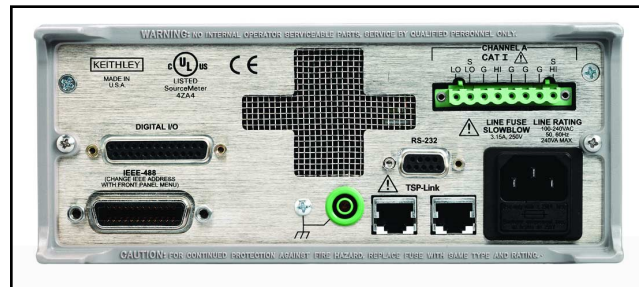
Model 2601 Rear Panel

Model 2602 Rear Panel

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Series 2600 Specifications

SOURCE AND MEASURE

SUPPLEMENTAL INFORMATION

FRONT PANEL INTERFACE: 2-line vacuum fluorescent display (VFD) with keypad and rotary knob.

Display:

- Show error messages and user defined messages.
- Display source and limit settings.
- Show current and voltage measurements.
- View measurements stored in non-volatile reading buffers.

Keypad Operations:

- Change host interface settings.
- Save and restore instrument setups.
- Load and run factory and user defined test scripts (i.e. sequences) that prompt for input and send results to the display.
- Store measurements into non-volatile reading buffers.

PROGRAMMING: Embedded Test Script Processor (TSP) accessible from any host interface. Responds to individual instrument control commands. Responds to high-speed test scripts comprised of instrument control commands and Test Script Language (TSL) statements (e.g. branching, looping, math, etc.). Able to execute high-speed test scripts stored in memory without host intervention.

Minimum Memory Available: 3 Mbytes (approximately 50,000 lines of TSL code).

Test Script Builder: Integrated Development Environment for building, running, and managing TSP scripts. Includes an Instrument Console for communicating with any TSP enabled instrument in an interactive manner. Requires:

- VISA (NI-VISA included on CD).
- Microsoft .NET Framework (included on CD).
- Keithley I/O Layer (included on CD).
- Pentium III 800MHz or faster personal computer.
- Microsoft Windows 98, NT, 2000, or XP.

Drivers: IVI/VISA drivers for VB, VC/C++, LabVIEW, TestPoint, and LabWindows/CVI.

READING BUFFERS: Non-volatile storage area(s) reserved for measurement data. Reading buffers are arrays of measurement elements. Each element can hold the following items:

- Measurement
- Measurement status
- Timestamp
- Source setting (at the time the measurement was taken)
- Range information

Two reading buffers are reserved for each SourceMeter channel. Reading buffers can be filled using the front panel STORE key and retrieved using the RECALL key or host interface.

Buffer Size, with timestamp and source setting: >50,000 samples.

Buffer Size, without timestamp and source setting: >100,000 samples.

Battery Backup: Lithium-ion battery backup. 30 days of non-volatile storage @ 23°C, and >4 hours of charge time. 3 year battery life @ 23°C. 1.5 year battery life @ 50°C.

FACTORY TSP SCRIPTS: See www.keithley.com for Keithley-supported application-specific scripts.

SYSTEM EXPANSION: The TSP-Link expansion interface allows TSP enabled instruments to trigger and communicate with each other. See figure below:
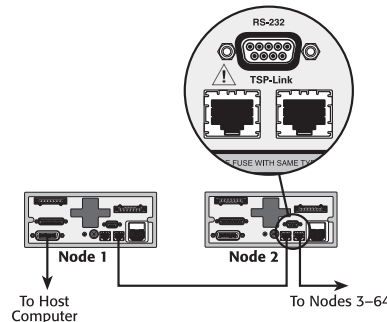
Each SourceMeter has two TSP-Link connectors to facilitate chaining instruments together.

- Once SourceMeters are interconnected via TSP-Link, a computer can access all of the resources of each SourceMeter via the host interface of any SourceMeter.
- A maximum of 64 TSP-Link nodes can be interconnected. Each SourceMeter consumes one TSP-Link node.

TIMER: Free running 47 bit counter with 1MHz clock input. Reset each time instrument powers up. Rolls over every 4 years.

Timestamp: TIMER value automatically saved when each measurement is triggered.

Resolution: 1μs.

Accuracy: 50ppm.

Specifications are subject to change without notice. Refer to **www.keithley.com** for the latest product information.
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A G R E A T E R M E A S U R E O F C O N F I D E N C E

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