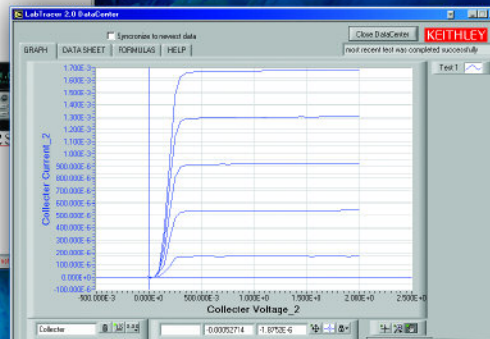
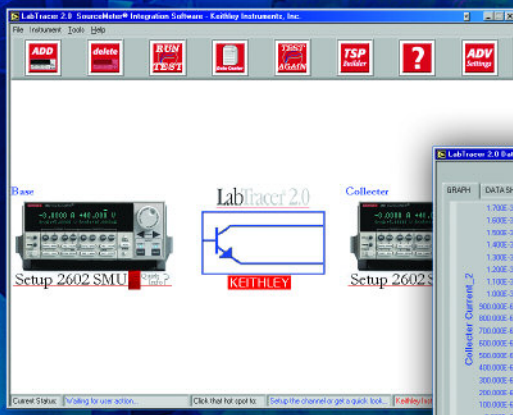


The scalable solution for high speed R&D and functional testing

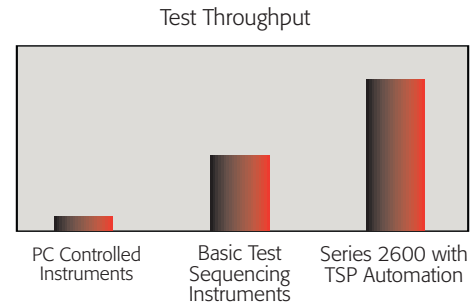
Series 2600 System SourceMeter® Multi-Channel I-V Test Instruments



Cut your test times in **half** to cut your test **costs** to the minimum

Keithley's new **Series 2600 System SourceMeter**® instruments let you make precision DC, pulse, and low frequency AC source-measure tests faster, easier, and more economically than ever before. They offer you two to four times the test speed of competitive products for I-V functional testing by combining:

- Keithley's high speed, third-generation Source-Measure Unit (SMU) design
- An embedded Test Script Processor (TSP™)
- TSP-Link™, a fast triggering and inter-unit communication bus



Get **all** the test functions you need—all in **one** package

Series 2600 System SourceMeter instruments pack a lot of testing capability into one half-rack, 2U instrument:

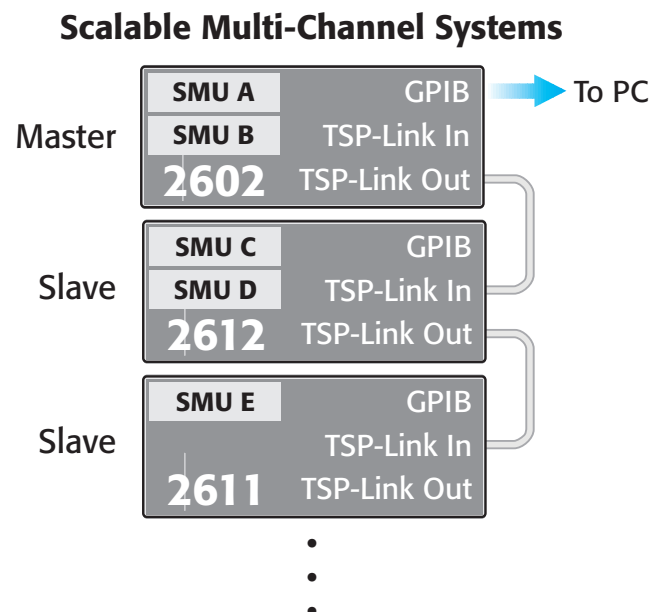
- A precision power supply
- A true current source
- A 5½-digit multimeter
- A voltage or current pulse generator with measurement
- A low frequency arbitrary waveform generator
- An electronic load
- A trigger controller

The Model 2602 packs twice the source-measure channel density of the Model 2601 in the same size enclosure, so you can configure multi-channel systems in very little rack space. Each 40W, 3A channel is electrically isolated to ensure high measurement integrity and wiring flexibility.

NEW **Model 2612 Dual-Channel and Model 2611 Single-Channel SourceMeter** instruments now add 200V and 10A capability to the product family.

Scale up your systems without running out of chassis slots

A Series 2600-based system can stand alone as a complete measurement and automation solution, with the master unit controlling sourcing, measuring, pass/fail decisions, test sequence flow control, binning, and the component handler or prober. The new TSP-Link high speed system expansion interface lets you connect multiple 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 all housed in the same chassis. But there's no chassis needed—the TSP-Link gives you virtually unlimited flexibility to scale the system's channel count up or down to match changing application needs. Plus, your system's size won't be limited by the number of chassis slots available. While the optimal system size is three to 16 channels, the TSP-Link bus supports connections for up to 128 channels.

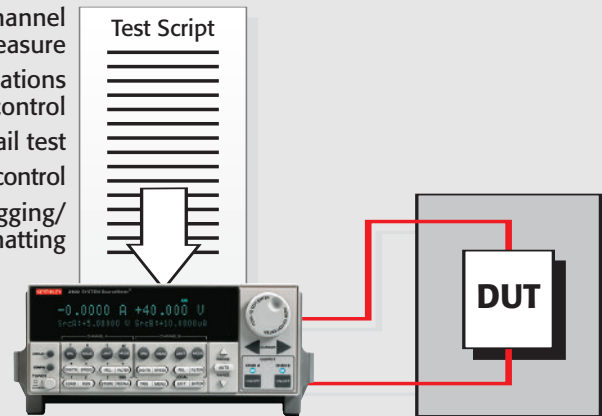


Create high performance test systems in a fraction of the development time

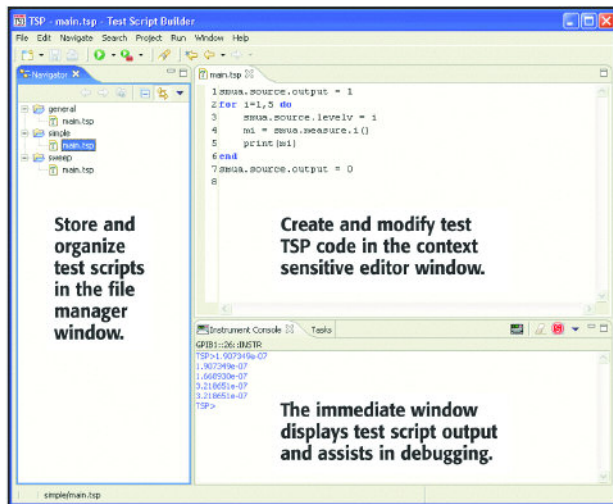
The on-board Test Script Processor found in every Series 2600 instrument can process and run complex test sequences right from the instrument. Test scripts can give you up to 10x greater throughput.

Create custom measurement functions for components such as varistors, diodes, and BJTs/FETs, or algorithm-based tests like I-V sweeps with power compliance, linearity and latch-up test sequences, and thermal response tests.

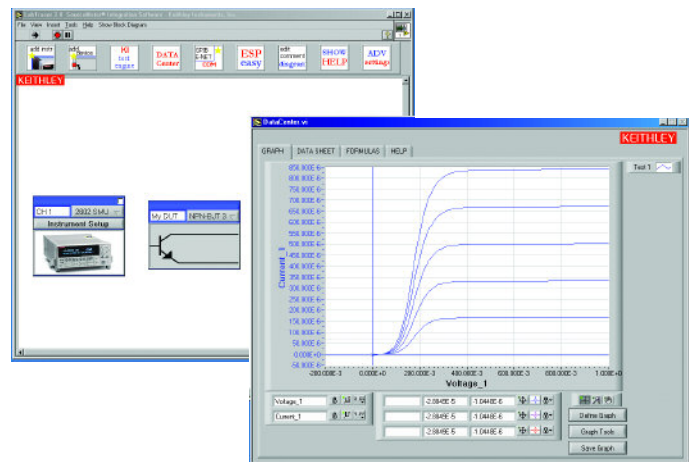
- Multi-channel Source-Measure
- Advanced calculations and flow control
 - Pass/Fail test
- Prober/Handler control
- Datalogging/Formatting



Programming Series 2600 instruments is just as easy as connecting them. Software tools that simplify making measurements, curve tracing, and creating custom test scripts are supplied. Keithley also provides factory test scripts for a variety of functions and common component tests, which can be downloaded to the master SourceMeter unit and saved in non-volatile memory. Sixteen megabytes of non-volatile memory are available for storing up to 50,000 lines of TSP code and more than 200,000 readings.



Test Script Builder is a free software tool that helps you create, modify, debug, and store TSP test scripts. It's ideal for developing high speed scripts for use in automated production test environments.

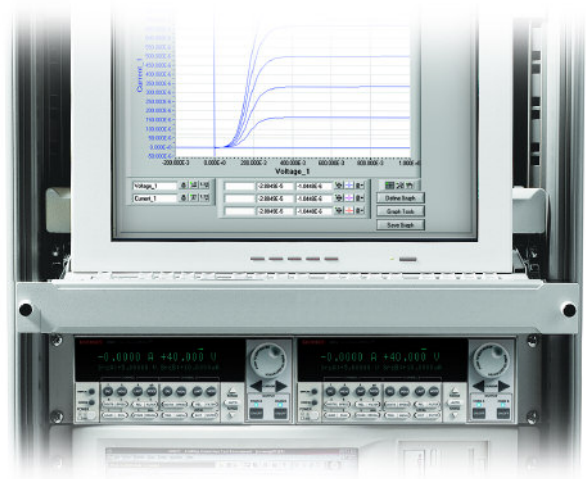


*Free LabTracer™ 2.0 software makes it simple to configure and control up to eight Series 2600 or 2400 SourceMeter channels for curve tracing or device characterization with a simple GUI for setup, control, data acquisition, and graphing of DUT data. Dropdown menus in the instrument setup window allow configuring any SourceMeter channel for fixed point or sweeping operation. **No programming is required.***

Cut your capital equipment **costs** without cutting back on test system performance

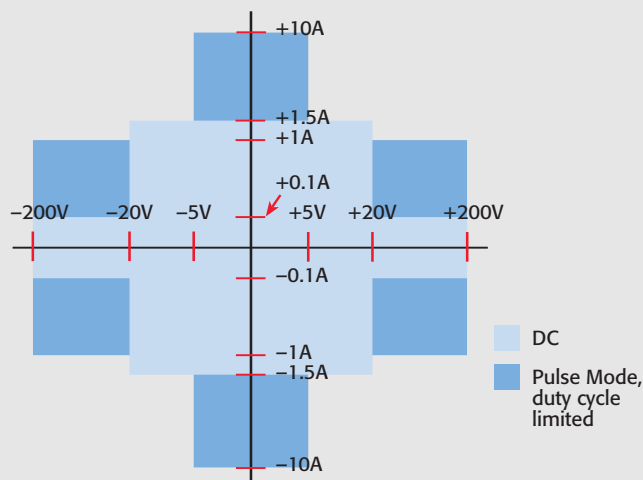
Today's devices often have higher pin counts and more analog circuitry than those of just a few years ago. Series 2600 instruments can help you improve your test throughput dramatically by providing:

- The highest channel density available in SMU-based systems for automated test to handle today's higher pin counts.
- The industry's fastest throughput, which helps reduce the cost of test.
- A lower capital investment. By eliminating the need for a main-frame/chassis, you can configure a readily scalable system at a significantly lower cost per channel than other solutions.

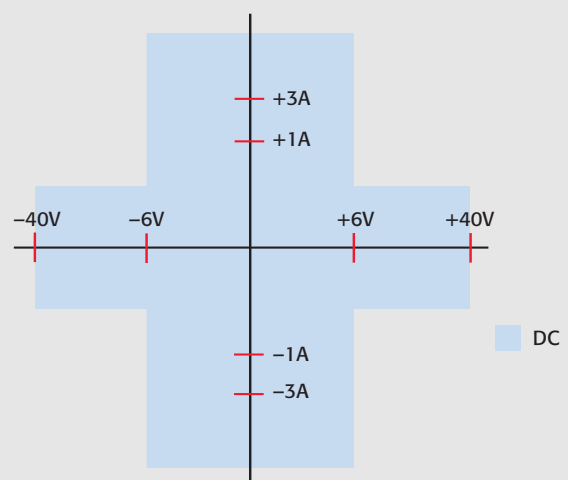


Condensed Specifications

Source/Measure Accuracy	2601, 2602	2611, 2612
• Current measure range (per channel)	1pA to 3A	DC, 1pA to 1.5A; pulsed, 1pA to 10A
• Current source range (per channel)	5pA to 3A	DC, 5pA to 1.5A; pulsed, 5pA to 10A
• Basic current programming accuracy	0.03%	0.03%
• Basic current measurement accuracy	0.02%	0.02%
• Voltage measure range (per channel)	1μV to 40V	1μV to 200V
• Voltage source range (per channel)	5μV to 40V	50μV to 200V
• Basic voltage programming accuracy	0.02%	0.02%
• Basic voltage measurement accuracy	0.015%	0.015%
Speed		
• Readings to memory		10,000/s
• Sweep source change and reading to memory		5,500/s
• Sweep source change and reading to GPIB		3,600/s
• Spot readings to GPIB		1,100/s
• Spot source change and reading to GPIB		880/s
• Pulse capability	200μs minimum source/measure pulse	



Models 2611 and 2612 (per channel)



Models 2601 and 2602 (per channel)

So **many** capabilities—so **little** rack space

Configure the two electrically isolated sources independently for voltage (2611 and 2612: 1 μ V to 200V) (2601 and 2602: 1 μ V to 40V) or current (2611 and 2612: DC 1pA to 1.5A; Pulsed 1pA to 10A) (2601 and 2602: 1pA to 3A).

Charge capacitive loads quickly using the instrument's fast, accurate over-voltage and over-current compliance limits. Limits are independent of measurement range for easy, reliable operation.

View the source and measure values for both channels simultaneously on the dual-line vacuum fluorescent display.

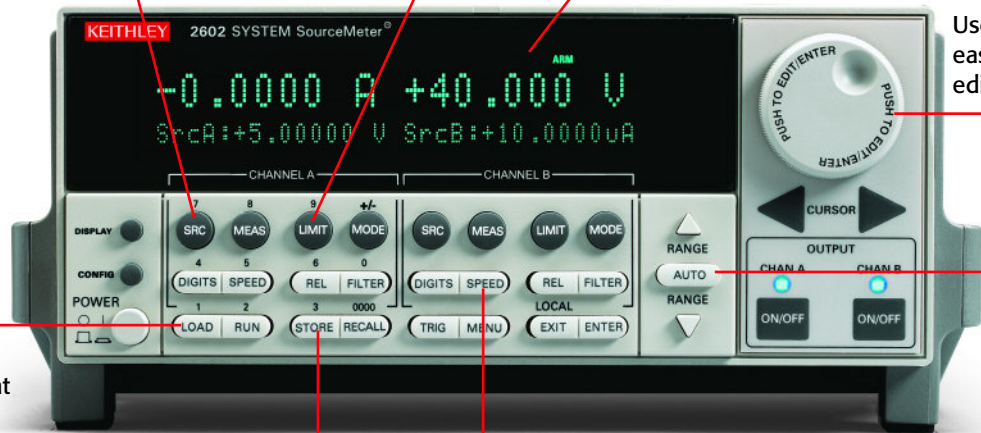
Use the push-button knob for easy and intuitive source editing and menu navigation.

Load and run test scripts on the embedded Test Script Processor (TSP™); factory scripts are available for a variety of functions and common component tests.

Ensure repeatable timing and high throughput with the high speed auto-ranging (patent pending) function.

Store up to 50,000 lines of TSP code and more than 200,000 readings in 16MB of nonvolatile memory.

Measure I and V simultaneously on each channel at >10,000 readings/s. Execute a full source-measure cycle on any channel in just 200 μ s.

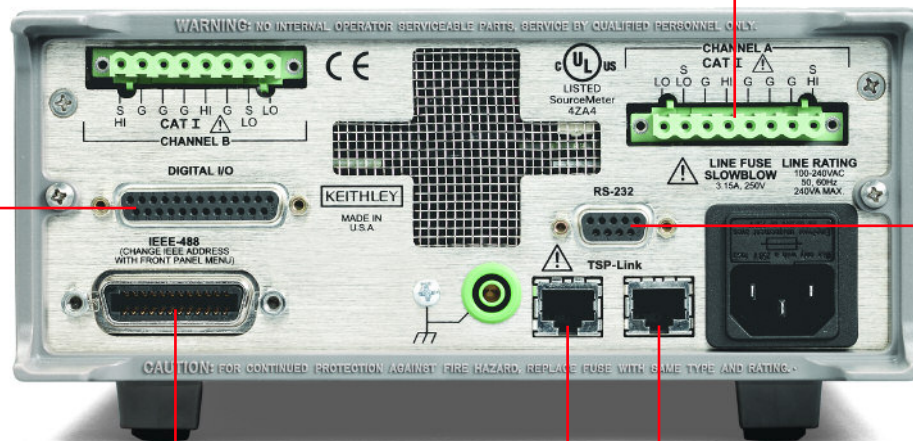


Models 2602 and 2612 are Dual-Channel System SourceMeter instruments. Models 2601 and 2611 provide a single source-measure channel.

Complete test setups quickly with separate oversize locking screw terminal connections for each channel. Connections provided for OUTPUT HI and LO, SENSE HI and LO, and GUARD. Banana and triax adapter cables are available for wiring flexibility.

The 14-bit digital I/O port provides flexible I/O and external triggering capability. Control binning and handler functions, trigger other instruments, and read back pass/fail status. I/O lines are also ideal for interfacing with Series 2400, 2700, or 7000 hardware using the Model 2600-TLINK adapter cable.

Control instruments or probers via 115kbaud RS-232 from automated test scripts.



Integrate GPIB instruments into test systems easily with the high speed GPIB interface.

Control and synchronize the operation of multiple SourceMeter channels via the TSP-Link™ trigger and communication bus. It ensures seamless master/slave coordination of from three to 16 channels (optimally), 128 channels maximum.

Need a **different** range or channel count?

Keithley offers more high speed I-V testing products, which may be more economical than Series 2600 instruments for specific applications. For example, Series 2400 SourceMeter instruments are well-suited for high speed testing in one- or two-channel systems. They also offer wider I-V dynamic range options—from 10pA to 10A, 1 μ V to 1100V, 20W to 1000W.

At 36 channels in a full-rack, 5U enclosure, the PCI mainframe-based Model 4500-MTS Modular Test System provides the highest density available for multi-channel, source-measure systems. The Model 4500-MTS's built-in PC and nine-slot open PCI backplane makes it easy to integrate other instruments, motor control, vision, or other automation cards into the system.



Keithley's Model 4200-SCS

This nearly universal semiconductor test tool has become the industry standard test system for running semiconductor characterization tests and stress-measure and reliability tests for device lifetime analysis and quality assurance.



A greater measure of confidence

With more than a half-century of expertise in making demanding measurements, Keithley offers you a greater measure of testing confidence on the production floor, in the QA lab, and in R&D. For more information on how Keithley test solutions can help you keep pace with changing technologies, call your local Keithley representative or visit our website. Our applications engineers are also available to assist you, both before and after the sale.

All the support you need

To learn more about how Series 2600 System SourceMeter instruments can help you boost your test throughput, minimize test system development times, and slash your capital equipment costs, contact your local Keithley sales representative or visit our website at www.keithley.com. To view a free online demonstration of Series 2600 instruments, visit www.keithley.com/be/023.html.

Specifications are subject to change without notice.

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