

Selector Guide SourceMeter® Source Measurement Unit (SMU) Instruments

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	20–100W BENCH SMU INSTRUMENTS					20–100W SYSTEM SMU INSTRUMENTS		100–200W POWER SMU INSTRUMENTS			LOW CURRENT SMU INSTRUMENTS	
MODEL	2400, 2401 2400-C 2400-LV	2410 2410-C	2420 2420-C	2425 2425-C	2440 2440-C	2601B 2602B 2604B	2611B 2612B 2614B	2430 2430-C	2651A	2657A	2634B 2635B 2636B	6430
POWER OUTPUT	22 W	22 W	66 W	110W	55 W	40 W/channel	30 W/channel	1100 W ¹	2,000W pulsed/200W DC	180 W	30 W/channel	2 W
CURRENT CAPABILITY												
Min.	±1 pA	±1 pA	±10 pA	±10 pA	±10 pA	±100 fA	±100 fA	±10 pA	±100 fA	±1 fA	±0.1 fA	±10 aA
Max.	±1.05 A	±1.05 A	±3.15 A	±3.15 A	±5.25 A	±3 A DC/10 A pulsed per channel	±1.5 A DC/10 A pulsed per channel	±10.5 A ¹	±50A (±100 A when two units are connected in parallel)	±120 mA	±1.5 A DC/10 A pulsed per channel	±105 mA
VOLTAGE CAPABILITY												
Min.	±100 nV	±100 nV	±100 nV	±100 nV	±100 nV	±100 nV	±100 nV	±100 nV	±100 nV	±100 nV	±100 nV	±1 μV
Max.	±21/±210 V ²	±1100 V	±63 V	±105 V	±42 V	±40 V	±200 V	±105 V	±40 V	±3000 V	±200 V	±210 V
OHMS RANGE³	<0.2 Ω to >200 MΩ	<0.2 Ω to >200 MΩ	<0.2 Ω to >200 MΩ	<0.2 Ω to >200 MΩ	<2.0 Ω to >200 MΩ	0.5 μΩ to 40 TΩ	0.5 μΩ to 100 TΩ	<0.2 Ω to >200 MΩ	<0.1 μΩ to 20 TΩ	<0.4 Ω to 100 PΩ	0.5 μΩ to 10 PΩ	<2.0 Ω to >20 TΩ
BASIC ACCURACY												
I	0.035%	0.035%	0.035%	0.035%	0.035%	0.02 %	0.02 %	0.035%	0.02 %	0.02 %	0.02 %	0.035%
V	0.015%	0.015%	0.015%	0.015%	0.015%	0.015%	0.015%	0.015%	0.015%	0.015%	0.015%	0.012%
Ω	0.06 %	0.07 %	0.06 %	0.06 %	0.06 %	Based on V and I range	Based on V and I range	0.06 %	Based on V and I range	Based on V and I range	Based on V and I range	0.063%
READING SPEED	2,800 rdgs/s	2,800 rdgs/s	2,800 rdgs/s	2,800 rdgs/s	2,800 rdgs/s	20,000 rdgs/s	20,000 rdgs/s	2,800 rdgs/s	20,000 rdgs/s and 1μs per pt digitizer	20,000 rdgs/s and 1μs per pt digitizer	20,000 rdgs/s	2,000 rdgs/s
FEATURE SUMMARY												
Pulse Mode	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No
Embedded Scripting/Execution	Source-Memory List	Source-Memory List	Source-Memory List	Source-Memory List	Source-Memory List	Test Script Processor (TSP®)	Test Script Processor (TSP®)	Source-Memory List	Test Script Processor (TSP®)	Test Script Processor (TSP®)	Test Script Processor (TSP®)	Source-Memory List
Contact Check	-C version	-C version	-C version	-C version	-C version	Yes (not available for 2604B)	Yes (not available for 2614B)	-C version	Yes	Yes	Yes (not available for 2634B)	No
Selectable Front/Rear Inputs	Yes	Yes	Yes	Yes	Yes	Rear only	Rear only	Yes	Rear only	Rear Only	Rear only	Rear and Preamp
Test Leads/Cables	Banana	Banana	Banana	Banana	Banana	Screw terminal; adapters available for banana / or triax	Screw terminal; adapters available for banana / or triax	Banana	Screw terminal; adapters available for banana / or triax	HV triax	Triax	Triax
Computer Interface	IEEE-488, RS-232	IEEE-488, RS-232	IEEE-488, RS-232	IEEE-488, RS-232	IEEE-488, RS-232	USB 2.0, LAN/LXI-C, IEEE-488, RS-232	USB 2.0, LAN/LXI-C, IEEE-488, RS-232	IEEE-488, RS-232	LAN/LXI, IEEE-488, RS-232	LAN/LXI-C, IEEE-488, RS-232	USB 2.0, LAN/LXI, IEEE-488, RS-232	IEEE-488, RS-232
Digital I/O	1 In/4 Out with built-in component handler interfaces (except Model 2401).	1 In/4 Out with built-in component handler interfaces.	1 In/4 Out with built-in component handler interfaces.	1 In/4 Out with built-in component handler interfaces.	1 In/4 Out with built-in component handler interfaces.	14 digital I/O-trigger lines (no digital I/O available for 2604B)	14 digital I/O-trigger lines (no digital I/O available for 2614B)	1 In/4 Out with built-in component handler interfaces (except Model 2401).	14 digital I/O trigger lines	14 digital I/O trigger lines	14 digital I/O-trigger lines (no digital I/O available for 2634B)	1 In/4 Out with built-in component handler interfaces
Other	6½-digit resolution. 6 wire ohms mode. LabView drivers.	6½-digit resolution. 6 wire ohms mode. LabView drivers.	6½-digit resolution. 6 wire ohms mode. LabView drivers.	6½-digit resolution. 6 wire ohms mode. LabView drivers.	6½-digit resolution. 6 wire ohms mode. LabView drivers.	6½-digit resolution. Scalable to 64 channels with TSP-Link® (not available for 2604B). Built-in Web-based characterization software. LabView driver.	6½-digit resolution. Scalable to 64 channels with TSP-Link® (not available for 2614B). Built-in Web-based characterization software. LabView driver.	6½-digit resolution. 6 wire ohms mode. LabView drivers.	6½-digit resolution. Scalable to 32 channels with TSP-Link®. 6 wire ohms mode. Built-in Web-based characterization software. LabView drivers.	6½-digit resolution. Scalable to 32 channels with TSP-Link®. 6 wire ohms mode. Built-in Web-based characterization software. LabView drivers.	6½-digit measurement resolution. Scalable to 64+ channels with TSP-Link® (not available for 2634B). Built-in Web-based characterization software. LabView driver.	6½-digit resolution. 6 wire ohms mode. LabView drivers.
Compliance	CE, UL	CE	CE	CE	CE	CE, UL	CE, UL	CE	CE, UL	CE, ETL	CE, UL	CE

1. In pulse mode.
 2. Models 2401 and 2400-LV 21V max.
 3. Ohms measurements on Series 2600 instruments are user-calculated.

SMU INSTRUMENTS

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