

DETERMINE WHICH KEITHLEY SMU IS RIGHT FOR YOU

Need help selecting the SMU that's right for your needs?

Let these selector tables be your guide!

Keithley 24xx Standard and Graphical SMUs

MODEL		Keithley 24xx Standard and Graphical SMUs								
		2400	2401	2410	2420	2440	2450	2460	2461	2470
Display		VFD, 2 line	VFD, 2 line	VFD, 2 line	VFD, 2 line	VFD, 2 line	Touchscreen 5 in. (12.7 cm)	Touchscreen 5 in. (12.7 cm)	Touchscreen 5 in. (12.7 cm)	Touchscreen 5 in. (12.7 cm)
Channels		1	1	1	1	1	1	1	1	1
Digits		6½	6½	6½	6½	6½	6½	6½	6½	6½
Quadrants of Operation		4	4	4	4	4	4	4	4	4
Max Output Power		20 W	20 W	20 W	60 W	50 W	20 W	100 W	1000 W Pulse, 100 W DC	20 W
SOURCE / MEASURE										
I	min	±1 pA	±1 pA	±1 pA	±10 pA	±10 pA	±10 fA	±10 pA	±1 pA	±10 fA
	max	±1 A	±1 A	±1 A	±3 A	±5 A	±1 A	±7 A	±10 A Pulse, ±7 A DC	±1 A
V	min	±100 nV	±100 nV	±100 nV	±100 nV	±100 nV	±10 nV	±100 nV	±100 nV	±100 nV
	max	±200 V	±20 V	±1100 V	±60 V	±40 V	±200 V	±100 V	±100 V	±1100 V
Basic Accuracy	I	0.025%	0.025%	0.025%	0.025%	0.025%	0.020%	0.020%	0.020%	0.020%
	V	0.012%	0.012%	0.012%	0.012%	0.012%	0.012%	0.012%	0.012%	0.012%
GENERAL FEATURES										
Digitizers		No	No	No	No	No	No	No	Dual 18-bit 1 MS/s Digitizers	No
Reading Speed		2,000 rdgs/s	2,000 rdgs/s	2,000 rdgs/s	2,000 rdgs/s	2,000 rdgs/s	3,000 rdgs/s	3,000 rdgs/s	3,000 rdgs/s, 1 MS/s with Digitizer	3,000 rdgs/s
Programming	SCPI	✓	✓	✓	✓	✓	✓ Plus 2400 Emulation	✓	✓ Plus 2420, 2425, 2430, 2440 Emulation	✓
	TSP						✓	✓	✓	✓
TSP-Link		No	No	No	No	No	Yes	Yes	Yes	Yes
Digital I/O		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Contact Check		No	No	No	No	No	No	No	Yes	No
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 1.4 IEEE-488	USB 2.0 LAN/LXI 1.4 IEEE-488	USB 2.0 LAN/LXI 1.4 IEEE-488	USB 2.0 LAN/LXI 1.4 IEEE-488
Compliance		CE, UL	CE, UL	CE	CE	CE	CE, NRTL listed	CE, NRTL listed	CE, NRTL listed	CE, NRTL listed



SMU SELECTOR TABLE

Keithley 26xxB Series High Speed System SMUs for Demanding Applications

MODEL		Keithley 26xxB Series High Speed System SMUs								
		2601B	2602B	2604B	2611B	2612B	2614B	2634B	2635B	2636B
Display		VFD, 2 line	VFD, 2 line	VFD, 2 line	VFD, 2 line	VFD, 2 line	VFD, 2 line	VFD, 2 line	VFD, 2 line	VFD, 2 line
Channels		1	2	2	1	2	2	2	1	2
Digits		6½	6½	6½	6½	6½	6½	6½	6½	6½
Quadrants of Operation		4	4	4	4	4	4	4	4	4
Max Output Power		200 W Pulse, 40 W DC	200 W Pulse, 40 W DC / Channel	200 W Pulse, 40 W DC / Channel	200 W Pulse, 30 W DC	200 W Pulse, 30 W DC / Channel	200 W Pulse, 30 W DC / Channel	200 W Pulse, 30 W DC / Channel	200 W Pulse, 30 W DC	200 W Pulse, 30 W DC / Channel
SOURCE / MEASURE										
I	min	±100 fA	±100 fA	±100 fA	±100 fA	±100 fA	±100 fA	±0.1 fA	±0.1 fA	±0.1 fA
	max	±10 A Pulse, ±3 A DC	±10 A Pulse, ±3 A DC	±10 A Pulse, ±3 A DC	±10 A Pulse, ±1.5 A DC	±10 A Pulse, ±1.5 A DC	±10 A Pulse, ±1.5 A DC	±10 A Pulse, ±1.5 A DC	±10 A Pulse, ±1.5 A DC	±10 A Pulse, ±1.5 A DC
V	min	±100 nV	±100 nV	±100 nV	±100 nV	±100 nV	±100 nV	±100 nV	±100 nV	±100 nV
	max	±40 V	±40 V	±40 V	±200 V	±200 V	±200 V	±200 V	±200 V	±200 V
Basic Accuracy	I	0.020%	0.020%	0.020%	0.020%	0.020%	0.020%	0.020%	0.020%	0.020%
	V	0.015%	0.015%	0.015%	0.015%	0.015%	0.015%	0.015%	0.015%	0.015%
GENERAL FEATURES										
Digitizers		No	No	No	No	No	No	No	No	No
Reading Speed		20,000 rdgs/s	20,000 rdgs/s	20,000 rdgs/s	20,000 rdgs/s	20,000 rdgs/s	20,000 rdgs/s	20,000 rdgs/s	20,000 rdgs/s	20,000 rdgs/s
Programming	SCPI									
	TSP	✓	✓	✓	✓	✓	✓	✓	✓	✓
TSP-Link		Yes	Yes	No	Yes	Yes	No	No	Yes	Yes
Digital I/O		Yes	Yes	No	Yes	Yes	No	No	Yes	Yes
Contact Check		Yes	Yes	No	Yes	Yes	No	No	Yes	Yes
Computer Interface		USB 2.0 LAN/LXI-C IEEE-488 RS-232	USB 2.0 LAN/LXI-C IEEE-488 RS-232	USB 2.0 LAN/LXI-C IEEE-488 RS-232	USB 2.0 LAN/LXI-C IEEE-488 RS-232	USB 2.0 LAN/LXI-C IEEE-488 RS-232	USB 2.0 LAN/LXI-C IEEE-488 RS-232	USB 2.0 LAN/LXI-C IEEE-488 RS-232	USB 2.0 LAN/LXI-C IEEE-488 RS-232	USB 2.0 LAN/LXI-C IEEE-488 RS-232
Compliance		CE, UL	CE, UL	CE, UL	CE, UL	CE, UL	CE, UL	CE, UL	CE, UL	CE, UL

SMU SELECTOR TABLE

Keithley Specialty SMUs

MODEL		Very Low Current	Fast Pulser/ SMU	High Density SMUs	High Power SMUs		Optical SMUs		
		6430	2601B-PULSE	2606B	2651A	2657A	2510	2510-AT	2520
Display		VFD, 2 line	VFD, 2 line	no display	VFD, 2 line	VFD, 2 line	VFD, 2 line	VFD, 2 line	VFD, 2 line
Channels		1	1	4	1	1	1	1	1
Digits		6½	6½	6½	6½	6½	5½	5½	4½
Quadrants of Operation		4	4	2	4	4	2	2	1
Max Output Power		2 W	SMU Function: 200 W Pulse, 40 W DC Fast Pulser Function: 3 W	20 W / Channel	2000 W Pulse, 200 W DC	180 W DC	50 W DC	50 W DC	50 W Pulse, 10 W DC
SOURCE / MEASURE									
I	min	±1 aA	SMU Function: ±100 fA Pulser Function: 10 µA	±100 fA	±1 pA	±1 fA	±200 µA	±200 µA	10 µA
	max	±100 mA	SMU Function: ±10 A Pulse, ±3 A DC Pulser Function: ±10 A	±3 A Pulse, ±3 A DC	±50 A Pulse, ±20 A DC	±120 mA	± 5 A	± 5 A	5 A Pulse, 1 A DC
V	min	±100 nV	SMU Function: ±100 nV Pulser Function: 10 µV	±100 nV	±1 µV	±100 µA	±500 µV	±500 µV	330 µV
	max	±200 V	SMU Function: ±40 V Pulser Function: ±10 V	±20 V	±40 V	±3000 V	±10 V	±10 V	10 V
Basic Accuracy	I	0.025%	SMU Function: 0.02% Pulser Function: 0.12%	0.020%	0.020%	0.020%	0.400%	0.400%	0.200%
	V	0.012%	SMU Function: 0.015% Pulser Function: 0.05%	0.015%	0.020%	0.025%	0.100%	0.100%	0.300%
GENERAL FEATURES									
Digitizers		No	Dual 18-bit 1 MS/s Digitizers (Pulser Function Only)	No	Dual 18-bit 1 MS/s Digitizers	Dual 18-bit 1 MS/s Digitizers	No	No	Dual 14-bit 10 MS/s Digitizers
Reading Speed		2,000 rdgs/s	SMU Function: 20,000 rdgs/s Pulser Function: 1 µs on Digitizers	20,000 rdgs/s	20,000 rdgs/s, 1 MS/s with Digitizer	20,000 rdgs/s, 1 MS/s with Digitizer	60 rdgs/s	60 rdgs/s	188 rdgs/s (to memory)
Programming	SCPI	✓					✓	✓	✓
	TSP		✓	✓	✓	✓			
TSP-Link		No	Yes	Yes	Yes	Yes	No	No	No
Digital I/O		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Contact Check		No	Yes	Yes	Yes	Yes	No	No	No
Computer Interface		IEEE-488 RS-232	USB 2.0 LAN/LXI-C IEEE-488 RS-232	USB 2.0 LAN/LXI-C only	LAN/LXI-C IEEE-488 RS-232	LAN/LXI-C IEEE-488 RS-232	IEEE-488 RS-230	IEEE-488 RS-231	IEEE-488 RS-232
Compliance		CE	CE, NRTL listed	CE, NRTL listed	CE, NRTL listed	CE, NRTL listed	CE	CE	CE