

# Replacement Products

This table includes a list of older Keithley products and suggested replacement models that can be used to upgrade the capabilities of these older products. Many of these products are at or near the end of their serviceable life. To ensure adequate replacement, please review the replacement instrument's specifications in this catalog or on the Keithley Web site. If the suggested replacement does not meet specific application requirements or if the model being upgraded is not listed, check the Web site FAQs for upgrade options, or contact the Keithley Applications Department or your local Keithley representative for assistance.

OLDER MODELS	DESCRIPTION	SUGGESTED REPLACEMENTS
<b>ELECTROMETERS</b>		
200, 200A, 200B, 210, 220	Electrometer Voltmeters	6514
236, 487, 610, 610A, 610B, 610C, 610R	Electrometers	6514, 6517B, 6487
236, 487, 614, 615, 616, 617, 6512, 6517, 6517A	Digital Electrometers	6514, 6517B, 6487
236, 486, 603, 604, 619	Dual Electrometers	6514, 6517B, 6485
640, 642, 642LN	10 <sup>-17</sup> A Electrometer	6430
<b>PICOAMMETERS</b>		
409, 410, 410A, 411, 414, 414A, 414S, 415, 480, 485, 486, 487, 614	Picoammeters	6514, 6485, 6487
412, 413, 26000	Log Picoammeters	6485
418, 419, 440, 445, 486, 487	Digital Picoammeters	6485, 6487
416, 417, 427, 486, 487	High Speed Picoammeters	428-PROG with 2000 or 2100
<b>LOW VOLTAGE INSTRUMENTS</b>		
140, 147, 148, 149, 150, 181, 182, 1801	Nanovoltmeters	2182A
150A, 150B, 155, 180, 181, 182, 303	Null Detectors	2182A
151, 151C, 153, 155	Microvoltmeters/Null Detectors	2182A
<b>DIGITAL MULTIMETERS</b>		
190, 191, 195, 195A, 199	DMMs (5½ digits)	2000, 2100, 2700, 2701
172, 172A, 173, 176, 178, 179, 179-20A	DMMs (4½ digits) (10µV)	2000, 2100, 2700, 2701
192, 193, 193A, 196, 197A, 199	System DMMs	2000, 2100, 2001, 2002, 2010, 2700, 2701
<b>RESISTANCE MEASURING INSTRUMENTS</b>		
164, 502, 502A, 505, 580	Milliohmmeters	2010, 2750, 2182A + 2400, 622x + 2182A
487, 500, 501, 510, 515, 520, 6517, 6517A	High-Resistance Instruments	6517B, 6487
<b>CURRENT SOURCES</b>		
220, 224, 225, 236	Current Source	Series 2400, Series 2600A, 6220, 6221
261, 263	Current Source	6220, 6221, 6430
227, 228, 238	Current Source	2420
<b>VOLTAGE SOURCES</b>		
240, 240A, 241, 242, 247, 244, 245, 246, 2004, 2004A	High Voltage Supplies	237, 248, 2410
<b>SWITCHES</b>		
702	Scanner	7001, 2700, 2701, 2750
703, 706	Scanner	7002, 2700, 2701, 2750
705	Scanner	7001, 2700, 2701, 2750
<b>SWITCHING AND CONTROL CARDS</b>		
7036-D	7001/7002 Isolated Switch Card	7036
7037	7001/7002 Control Card	7037-D
7052	4x5 Matrix Switch Card	7019-C, 7012-S
7054	7001/7002 High Voltage Card	7154
7056	General-Purpose Scanner Card	7011-S, Integra 7702
7057A	7001/7002 Thermocouple Card	7014
7058	Low Current Scanner Card	7158, 7152, 7153, 6521 (with 6517A or 6517B), 6522 (with 6517A or 6517B)
7059	7001/7002 Low Voltage Card	7067
7062, 7063	7001/7002 RF Switching Card	7016A
7064	Low Voltage Scanner Card	7168, 7067
7066	10-Channel Isolated Switch Card	7013-S, 7036, Integra 7705
7074-D	707A/708A Multiplexer Card	7075
7076	Dual 4x12 Two-Pole Matrix Card	7002-HD
7077	707A/708A Matrix Card	7002-HD and 7002-HD-MTXL
7090-4-1, 7090-4-2BH, 7090-8-3, 7090-8-5, 7090-16-7	Optical Switch Cards	7090-8-4, 7090-16-6
7156-D	7001/7002 General Purpose Card	7011-C, 7002-HD-MDXI, 7701
7164-D	Dry Reed Scanner Card	7011-C, 7002-HD-MUX1
7999-4, 7999-5	RS-232 Switch/Controller	S46

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<b>PLUG-IN BOARDS</b>		
CTM-05, CTM-05/A, CTM-10	Counter/Timer Boards	KPCI-3140
DAS-802	8 Channel, 12-Bit, A/D Board	KPCI-3101, KPCI-3103, KPCI-3116, KUSB-3102, KUSB-3108, KUSB-3116
DAS-1201, DAS-1202	16 Channel, 12-Bit A/D Boards	KPCI-3101, KUSB-3100, KUSB-3102
DAS-1401, DAS-1402	16 Channel, 12-Bit A/D Boards	KPCI-3101, KPCI-3102, KUSB-3102
DAS-1700 Series	16 Channel, 12-Bit A/D Boards	KPCI-3101, KPCI-3102, KPCI-3103, KPCI-3104, KUSB-3102, KUSB-3116
DAS-1801AO, DAS-1801ST-DA	16 Channel, 12-Bit A/D Boards, w/DACs	KPCI-3104, KPCI-1801HC, KUSB-3102
DAS-1801HC	64 Channel, 12-Bit A/D Board, w/DACs	KPCI-1801HC, KUSB-3116
DAS-1801ST	16 Channel, 12-Bit A/D Boards	KPCI-3103, KPCI-1801HC, KUSB-3102
DAS-1802AO	16 Channel, 12-Bit A/D Boards, w/DACs	KPCI-3104, KPCI-1802HC, KUSB-3102
DAS-1802HR, DAS-1802HR-DA	16 Channel, 16-Bit A/D Boards, w/DACs	KPCI-3116, KUSB-3116
DAS-1802ST-DA	16 Channel, 12-Bit A/D Board, w/DACs	KPCI-3104, KPCI-1802HC, KPCI-3116, KUSB-3102, KUSB-3116
DDA-06, DDA-08, DDA-16	Analog Output Boards	KPCI-3130, KPCI-3132
ERB-24	24-Channel Relay Board	SSIO-24, PB-24SM
KPC-488.2AT, KPC-488.2	IEEE-488 Interface Board	KPCI-488, KUSB-488
KPCI-3107, KPCI-3108	Wide Gain Multifunction Boards	KPCI-3116, KUSB-3108, KUSB-3116
KPCMCIA-12AI-C	16 Channel, 12-Bit A/D Card	KUSB-3100, KUSB-3102
KPCMCIA-16AI-C	16, Channel, 16-Bit A/D Card	KUSB-3108, KUSB-3116
KPCMCIA-PIO24-C	24-Bit Digital I/O Card	KUSB-3160
MB-02, MB-03	Signal Conditioning Module Racks	MB-01, MB-04, MB-05
PDMA-16, PDMA-32	16-Line High Speed Digital I/O Board	KPCI-PIO24, KPCI-PIO96, KPCI-3160. Call Factory.
PIO-32IN, PIO-32OUT	Isolated, 32 Channel Boards	KPCI-PIO32IOA
PIO-96, PIO-96/CE	96 Line Digital I/O Boards	PIO-96J, KPCI-PIO96, KPCI-3160, KUSB-3160
PIO-SSR-24	Solid State Relay Digital I/O Board	PIO-SSR-120
PIO-SSR-48	48 Line, Digital I/O Board	PIO-SSR-120
REL-16	Relay Output Board	KPCI-PDISO8A, KPCI-PIO32IOA
<b>SEMICONDUCTOR PROCESS MONITORING SOLUTIONS</b>		
S400 Series, S600 Series, S900 Series	Parametric Test Systems	S530 Series

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