



5B Module Selection Guide

for the DBK & WBK Signal Conditioning Options

Used with DBK42™, DBK44™, DBK207™, DBK207/CJC™, or WBK15™, the 5B modules let you employ IOtech PC-based data acquisition systems in applications with a diverse range of signal conditioning requirements. These applications include LVDT, potentiometer, isolated current loop inputs, ±10 mV to ±40V inputs, linearized RTD, thermocouple, frequency-to-voltage inputs, and all popular strain gage configurations. The following is a complete listing of the 5B modules available for IOtech products.

Note: 5B modules are not returnable.

Analog Voltage-Input Modules, (4-Hz BW)

IOtech Part #	Input Range	Output Range
SC-5B30-01	±10 mV	±5V
SC-5B30-02	±50 mV	±5V
SC-5B30-03	±100 mV	±5V
SC-5B30-04	±10 mV	0 to +5V
SC-5B30-05	±50 mV	0 to +5V
SC-5B30-06	±100 mV	0 to +5V
SC-5B31-01	±1V	±5V
SC-5B31-02	±5V	±5V
SC-5B31-03	±10V	±5V
SC-5B31-04	±1V	0 to +5V
SC-5B31-05	±5V	0 to +5V
SC-5B31-06	±10V	0 to +5V
SC-5B31-07	±20V	±5V
SC-5B31-08	±20V	0 to +5V
SC-5B31-09	±40V	±5V
SC-5B31-10	±40V	0 to +5V

Isolated True RMS Input Modules

IOtech Part #	Input (RMS)	Output (DC)
<i>NEW</i> SC-5B33-01	0 to +100 mV	0 to +5V
<i>NEW</i> SC-5B33-02	0 to +1V	0 to +5V
<i>NEW</i> SC-5B33-03	0 to +10V	0 to +5V
<i>NEW</i> SC-5B33-04	0 to +150V	0 to +5V
<i>NEW</i> SC-5B33-05	0 to +300V	0 to +5V
<i>NEW</i> SC-5B33-06	0 to +1A	0 to +5V
<i>NEW</i> SC-5B33-07	0 to +5A	0 to +5V

Linearized 2- or 3-Wire RTD Input Modules, (0 to +5V Output, 4-Hz)

IOtech Part #	Type	Input Range
SC-5B34-01	100 Ohm Pt	-100°C to +100°C
SC-5B34-02	100 Ohm Pt	0°C to +100°C
SC-5B34-03	100 Ohm Pt	0°C to +200°C
SC-5B34-04	100 Ohm Pt	0°C to +600°C
SC-5B34-C-01	10 Ohm Cu at 0°C	0°C to +120°C
SC-5B34-C-02	10 Ohm Cu at 25°C	0°C to +120°C
SC-5B34-C-03	10 Ohm Cu at 0°C	0°C to +160°C
SC-5B34-N-01	120 Ohm Ni	0°C to +300°C

Linearized 4-Wire RTD Input Modules, (0 to +5V Output, 4-Hz BW)

IOtech Part #	Type	Input Range
SC-5B35-01	100 Ohm Pt	-100°C to +100°C
SC-5B35-02	100 Ohm Pt	0°C to +100°C
SC-5B35-03	100 Ohm Pt	0°C to +200°C
SC-5B35-04	100 Ohm Pt	0°C to +600°C
SC-5B35-C-01	10 Ohm Cu at 0°C	0°C to +120°C
SC-5B35-C-02	10 Ohm Cu at 25°C	0°C to +120°C
SC-5B35-C-03	10 Ohm Cu at 0°C	0°C to +160°C
SC-5B35-N-01	120 Ohm Ni	0°C to +300°C

Potentiometer-Input Modules, (4-Hz BW)

IOtech Part #	Input Range	Output Range
SC-5B36-01	0 to 100 Ohm	0 to +5V
SC-5B36-02	0 to 500 Ohm	0 to +5V
SC-5B36-03	0 to 1K Ohm	0 to +5V
SC-5B36-04	0 to 10K Ohm	0 to +5V

Thermocouple-Input Modules, (0 to +5V Output, 4-Hz BW)

IOtech Part #	Type	Input Range
SC-5B37-J-01	J	-100°C to +760°C
SC-5B37-K-02	K	-100°C to +1350°C
SC-5B37-T-03	T	-100°C to +400°C
SC-5B37-E-04	E	0°C to +900°C
SC-5B37-R-05	R	0°C to +1750°C
SC-5B37-S-05	S	0°C to +1750°C
SC-5B37-B-06	B	0°C to +1800°C
SC-5B37-C-01	C	+350°C to +1300°C
SC-5B37-N-01	N	-100°C to +1300°C

2-Wire Transmitter Interface Modules, (4-Hz and 100-Hz BW)

IOtech Part #	Input Range	Output Range
4-Hz BW		
SC-5B32-01	4 to 20 mA	0 to +5V
SC-5B32-02	0 to 20 mA	0 to +5V
100-Hz BW		
SC-5B42-01	4 to 20 mA	+1 to +5V

Strain Gage Input Modules, (±5V Output, 4-Hz or 10-kHz BW)

IOtech Part #	Input Range	Excitation
10-kHz BW		
SC-5B38-01	±10 mV full (3 mV/V) 100 to 10K Ohm	3.333V
SC-5B38-02	±30 mV full (3 mV/V) 300 to 10K Ohm	10.000V
SC-5B38-03	±10 mV half (3 mV/V) 100 to 10K Ohm	3.333V
SC-5B38-04	±30 mV half (3 mV/V) 300 to 10K Ohm	10.000V
SC-5B38-05	±20 mV full (2 mV/V) 300 to 10K Ohm	10.000V
SC-5B38-06	±33.3 mV full (10 mV/V) 100 to 10K Ohm	3.333V
SC-5B38-07	±100 mV full (10 mV/V) 300 to 10K Ohm	10.000V
4-Hz BW		
SC-5B38-31	±10 mV full (3 mV/V) 100 to 10K Ohm	3.333V
SC-5B38-32	±30 mV full (3 mV/V) 300 to 10K Ohm	10.000V
SC-5B38-33	±10 mV half (3 mV/V) 100 to 10K Ohm	3.333V
SC-5B38-34	±30 mV half (3 mV/V) 300 to 10K Ohm	10.000V
SC-5B38-35	±20 mV full (2 mV/V) 300 to 10K Ohm	10.000V
SC-5B38-36	±33.3 mV full (10 mV/V) 100 to 10K Ohm	3.333V
SC-5B38-37	±100 mV full (10 mV/V) 300 to 10K Ohm	10.000V



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Analog Voltage-Input Modules, (10-kHz BW)

IOtech Part #	Input Range	Output Range
SC-5B40-01	±10 mV	±5V
SC-5B40-02	±50 mV	±5V
SC-5B40-03	±100 mV	±5V
SC-5B40-04	±10 mV	0 to +5V
SC-5B40-05	±50 mV	0 to +5V
SC-5B40-06	±100 mV	0 to +5V
SC-5B41-01	±1V	±5V
SC-5B41-02	±5V	±5V
SC-5B41-03	±10V	±5V
SC-5B41-04	±1V	0 to +5V
SC-5B41-05	±5V	0 to +5V
SC-5B41-06	±10V	0 to +5V
SC-5B41-07	±20V	±5V
SC-5B41-08	±20V	0 to +5V
SC-5B41-09	±40V	±5V
SC-5B41-10	±40V	0 to +5V

Displacement Transducer Input Modules, DC-LVDT Transducer, (1-kHz BW)

IOtech Part #	Input Range	Output Range
SC-5B43-01	±1V	±5V
SC-5B43-02	±2V	±5V
SC-5B43-03	±3V	±5V
SC-5B43-04	±4V	±5V
SC-5B43-05	±5V	±5V
SC-5B43-06	±6V	±5V
SC-5B43-07	±7V	±5V
SC-5B43-08	±8V	±5V
SC-5B43-09	±9V	±5V
SC-5B43-10	±10V	±5V

Frequency-Input Modules, (TTL or zero crossing input)

IOtech Part #	Input Range	Output Range
SC-5B45-01	0 to 500 Hz	0 to +5V
SC-5B45-02	0 to 1 kHz	0 to +5V
SC-5B45-03	0 to 3 kHz	0 to +5V
SC-5B45-04	0 to 5 kHz	0 to +5V
SC-5B45-05	0 to 10 kHz	0 to +5V
SC-5B45-06	0 to 25 kHz	0 to +5V
SC-5B45-07	0 to 50 kHz	0 to +5V
SC-5B45-08	0 to 100 kHz	0 to +5V

Linearized Thermocouple-Input Modules, (0 to +5V Output, 4-Hz BW)

IOtech Part #	Type	Input Range
SC-5B47-J-01	J	0°C to +760°C
SC-5B47-J-02	J	-100°C to +300°C
SC-5B47-J-03	J	0°C to +500°C
SC-5B47-K-04	K	0°C to +1000°C
SC-5B47-K-05	K	0°C to +500°C
SC-5B47-T-06	T	-100°C to +400°C
SC-5B47-T-07	T	0°C to +200°C
SC-5B47-E-08	E	0°C to +1000°C
SC-5B47-R-09	R	+500°C to +1750°C
SC-5B47-S-10	S	+500°C to +1750°C
SC-5B47-B-11	B	+500°C to +1800°C
SC-5B47-J-12	J	-100°C to +760°C
SC-5B47-K-13	K	-100°C to +1350°C
SC-5B47-K-14	K	0°C to +1200°C
SC-5B47-N-15	N	-100°C to +1300°C