

SystempaK (Analog Type)

Isolator Module

Model J-SSD 60/65

Introduction

The Isolator Modules (J-SSD60/65) accept a 1 to 5V DC or 4 to 20 mA DC input and converts it into an isolated 1 to 5V DC or 4 to 20 mA DC output signal. The Isolator Modules are available for one-output (J-SSD60) or two-output (J-SSD65) model. The Isolator Module with integrated transmitter power supply is also available.

Complete isolation is employed between the power, input, and output circuits. In the two-output model, isolation is employed also between the two output circuits.

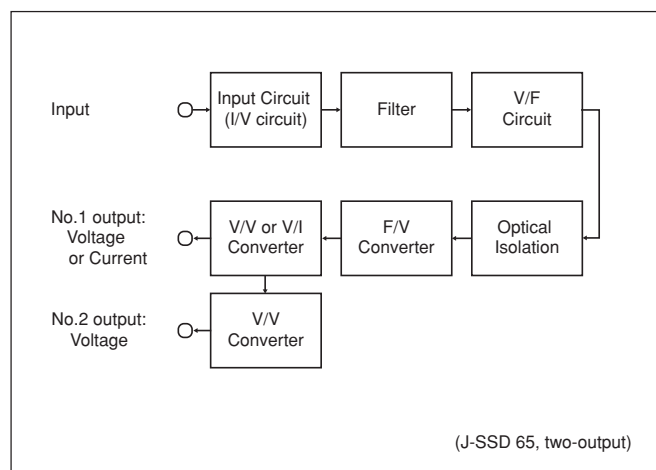
Specification

- Input signal: 1 to 5V DC or 4 to 20 mA DC
- Input impedance: 250 Ω (current), 1 M Ω (voltage)
- Output signal:
 - No. 1 output; 1 to 5V DC or 4 to 20 mA DC
 - No. 2 output; 1 to 5V DC
 - No. 1 and No. 2 outputs are isolated.
- Edge connector output; 1 to 5V DC (No. 1 output must be 1 to 5V DC when connecting the signal with the A-MC I/O cable.)
- Output impedance:
 - Voltage output; 250 Ω or less (No. 1 and No. 2 outputs)
 - Current output; 250 k Ω or more (No. 1 output)
- Load: 0 to 600 Ω
- Output accuracy: $\pm 0.15\%$ FS (No. 1 and No. 2 outputs)
- Insulation resistance:
 - 500V DC, 100 M Ω min (Mutual between input - output - GND - power terminal)
- Withstand voltage:
 - 1000V AC, 1 min (Mutual between input - output - GND - power terminal)
- Power supply: 24V DC $^{+10}_{-15}\%$
- Transmitter power supply:
 - 24V DC $\pm 10\%$, 25 mA (w/ current-limiting circuit 40 mA)
- Current consumption:
 - w/o transmitter power supply ... 140 mA max. (at 24V)
 - w/ transmitter power supply ... 160 mA max. (at 24V)
- Ambient temperature:
 - Normal operating condition; 5 to 45 $^{\circ}$ C
 - Operation limit; -5 to 55 $^{\circ}$ C
- Ambient humidity: 0 to 90%RH (No condensation allowed)
- Mounting: File
- Front mask color: Black
- Weight: 250 g
- Operating influence:
 - Supply voltage effect; $\pm 0.1\%$ FS/24V DC $^{+10}_{-15}\%$
 - Temperature effect; $\pm 0.15\%$ FS/10 $^{\circ}$ C



Theory of Operation

An input is converted into an appropriate mV (for amplification) by the Measuring circuit, and the Filter circuit removes any AC noise. The input voltage (converted into a rippleless DC voltage) is converted again into 1 to 5V DC by the ultra-low drift high performance amplifier. The 1 to 5V DC (passing through the V/I and F/V converters) is isolated by the photocoupler and is V/V- or V/I- converted for voltage or current output.



Model Number Table

One-output model:

Basic Model Number	Selections		Additions	Description
	I	II		
J-SSD60				Isolator Module (One-output model)
	X			No varnish coated
	C			Varnish coated
		-1		Input signal: 1 to 5V DC
		-2		Input signal: 4 to 20 mA DC
		-3		Input signal: 4 to 20 mA DC (w/ transmitter 24V DC power supply)
			1	Output signal: 1 to 5V DC
			2	Output signal: 4 to 20 mA DC
			-0	Without test report
			-1	With test report

Example: J-SSD 60X-32-0

Two-output model

Basic Model Number	Selections		Additions	Description
	I	II		
J-SSD65				Isolator Module (Two-output model)
	X			No varnish coated
	C			Varnish coated
		-1		Input signal: 1 to 5V DC
		-2		Input signal: 4 to 20 mA DC
		-3		Input signal: 4 to 20 mA DC (w/ transmitter 24V DC power supply)
			1	No. 1 output signal: 1 to 5V DC, No. 2 output signal: 1 to 5V DC
			2	No. 1 output signal: 4 to 20 mA DC, No. 2 output signal: 1 to 5V DC
			-0	Without test report
			-1	With test report

Dimensions and Wirings

• Terminal screws: M3.5
• Use ther pressured terminals with insulation sheath.

No.	Description
1*2	Input (-)
2*2	Input (+)
3	—
4	No.1 output (+)
5	No.1 output (-)
6	No.2 output (+)
7	No.2 output (-)
8	—
9	GND

No.	Description
1*2	—
2*2	Transmitter input (-)
3	Transmitter input (+)
4	No.1 output (+)
5	No.1 output (-)
6	No.2 output*1 (+)
7	No.2 output*1 (-)
8	—
9	GND

*1 : For two-output molel.
*2 : 250Ω resistor is added for current input.

Please read the "Terms and Conditions" from the following URL before ordering or use:

<http://www.azbil.com/products/bi/order.html>

Specifications are subject to change without notice.

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Azbil Corporation

Advanced Automation Company

1-12-2 Kawana, Fujisawa

Kanagawa 251-8522 Japan

URL: <http://www.azbil.com/>

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