



UNIVERSAL SIGNAL ISOLATOR (Unipolar & Bipolar 3-way isolated)

BSI 704

- ◆ Isolated >1000V (3-way)
- ◆ Bipolar or Unipolar input/output
- ◆ DIN-rail mounting
- ◆ Signal converter, isolator, mV transmitter
- ◆ Accepts linear current and voltage signals
- ◆ Linear resistance 0-100k Ω
- ◆ Built-in digital filter
- ◆ Direct or reverse conversion
- ◆ Full digital technology - no analog adjustments
- ◆ 0-50 to 100mV or 0-10, -10 to +10VDC input
- ◆ Linearity better than 0,05%
- ◆ Accuracy error better than 0.1%
- ◆ Transmitter supply 24V/30mA
- ◆ Custom linear input/output
- ◆ Supply 12-24VAC/DC



DESCRIPTION

BASI's signal isolator BSI704 is an active triple-isolated transmitter with separate isolated power supply with 1000 VAC isolation level. The input part is internally powered and generates 24 VDC auxiliary power supply for external devices connected to BSI704 input (current loops, transmitters, etc.). The input accepts various mA, mV, V as well as resistive linear signals. The output part is internally energized and generates standard or custom specified linear current or voltage (positive or negative) signals. Thanks to the use of high sophisticated electronics for its manufacturing, the BSI704 isolator offers some special features that can be activated by the user via internal programming jumpers:

- direct or reversed conversion;
- upscale or downscale output status at input failure;
- custom specified non-linear conversions.

BSI704 is available in a case for mounting on a 35 mm DIN rail according to EN50022.

SPECIFICATIONS GENERAL

Construction : DIN-rail mounting
Wiring : Screw terminals
Housing material : "Noryl" grey
Isolation : Input to output to supply (3-way) >1000V

INPUT

Current : 0-5, 0-20, 4-20mA max 400mA
Custom current : 0 to max 400mA
Input resistance : Min 10 Ω
Linear resistance : 0-1k Ω , max 0-100 Ω to 100k Ω
Voltage : 0-50 to 100mV, 0-10V, -10 to +10VDC
Custom Voltage : -10 to max 450V
Input resistance : Min 1G Ω (1M Ω for range span > 1,5V)
Custom linear : Specify
Bipolar : Min -10 to max +10VDC

OUTPUT

Current : 0(1)...5 mA, 2...10 mA, 0(4)...20 mA
Load : Max 0 - 600 Ω
Voltage : 0...1 V, 0...2 V, 0(1)...5 V, 0(2)...10 V
 0-50mV, 0-100mV, -10...+10VDC
Load : Min 1k Ω
Bipolar : Min -10 to max +10VDC
Custom : Specify
Transmitter supply : 24VDC max 30mA
Direct or reverse : Jumper selectable
Output at input failure: up/down-scale (jumper selectable)

INSTALLATION

Supply : 12-24VAC/DC
Ambient temp : -25 to 70°C
Humidity : 0-95% RH
Configuration : Factory set
Protection class : IP20
Dimension : 23 x 90 x 58mm
Weight : 80g

PERFORMANCE (% of span)

Linearity error : < $\pm 0.05\%$ FS
Accuracy error : < $\pm 0.1\%$ FS
Temp drift : 0.01% from span for 1°C
Power consumption : 100mA
Offset : Within range
Damping : Factory set.
Isolation : Input to output to supply
 (3way) 1000VDC/AC peak



ORDER INFORMATION

BSI704R1

SUPPLY	INPUT	OUTPUT
Q 12-24VAC/DC	Z Specify	Z Specify
	A 0-5mA	B 0-5mA
	B 0-20mA	C 1-5mA
	C 4-20mA	D 2-10mA
	F 0-50mV	E 0-20mA
	G 0-10mV	F 4-20mA
	H 0-1V	G 0-1V
	I 0-2V	H 0-2V
	J 0-5V	I 0-5V
	K 0-10V	J 1-5V
	L 2-10V	K 0-10V
	K1 -10 to +10V	L 2-10V
		K1 -10 to +10V



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UNIVERSAL BIPOLAR SIGNAL ISOLATER

BSI 704

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