

Isolated Analog Current/Voltage Signal Converter

BRT IAD

Features	Applications
● Accuracy grade: 0.1, 0.2, Non-linearity$\leq$0.2%. ● Have ZERO and Gain adjusting buttons. ● 3-way (power/input/output) isolation:1500VAC. ● Auxiliary operating power supply: 12VDC/24VDC, etc. ● 0-75mV/0-2.5V/0-5V/0-10V/0-10mA/0-20mA/4-20mA linear conversion and isolation. ● Industrial temperature range: -25~+75℃. ● In strong EMC (electromagnetism disturb) conditions need adopt shield measures. ● Standard 35mm DIN rail-mounting.	● DC current or voltage signal isolated conversion and transmission. ● Non-distortion in long distance transmission. ● Analog signal data acquisition ● 4-20mA (0-20mA)/0-5V/0-75mV signal isolation and transmission. ● PLC, DCS, sensor or meter signal acquisition ● Electric power, distant control, isolated safety bar. ● 4-20mA sensor analog signal transmission ● Ground interference control and filtering.

Available Input /Output/ Power Supply Options

Input signal	Working power supply	Output
1:4-20mA	1: DC24V	1:4-20mA
2:0-20mA	2: DC12V (Optional)	2:0~20mA
3:0-10mA	8: User-defined (Optional)	4:0~5V
4:0-2.5V		5:0~10V
5:0-5V		6:1~5V
6:0-10V		7:0~±5V
7:0-75mV		8: User-defined
8: 0-100mV		9: -20~+20mA
9: User-defined input		10: 0~±10V



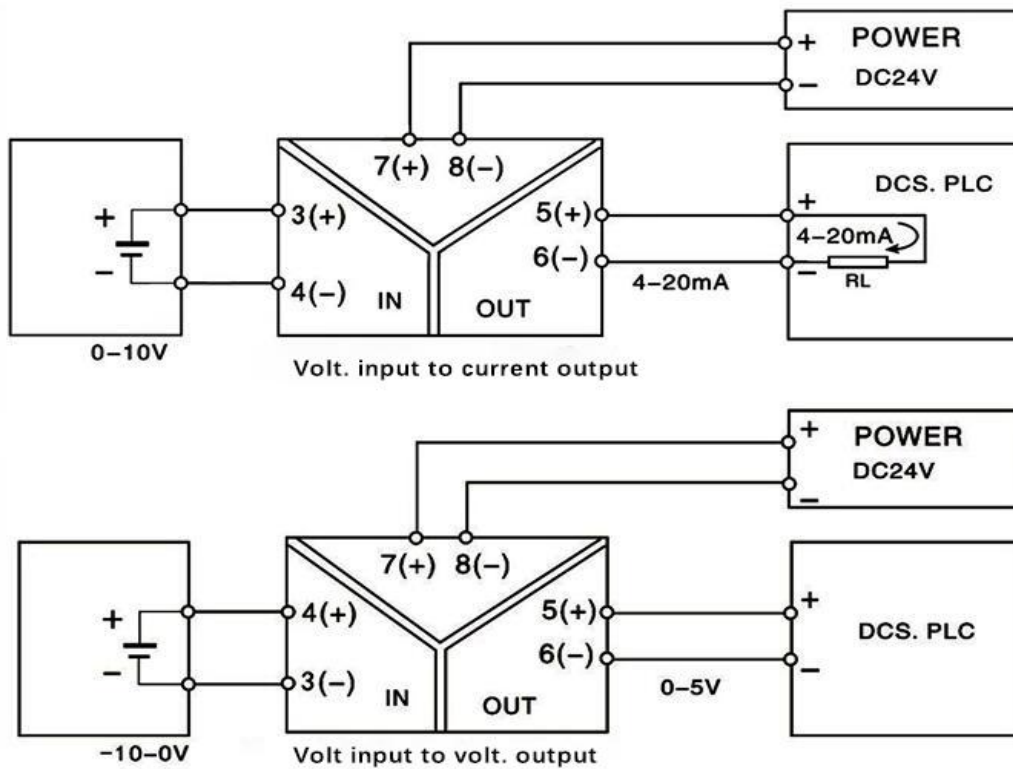
Technical parameters

Accuracy----- 0.1%, 0.2% F.S.	Isolation -----1500VAC among signal input/output / power supply
Accessorial power supply: DC24V/12VDC , ±10%	Insulated resistance ----- $\geq$ 100MΩ among input/output/ auxiliary power
Current consumption: $\leq$ 50mA, when input is current, output 20mA @24VDC power supply.	Isolation capacity ----- Signal input/output/ power supply 1500VAC/min, (50Hz/1min, leak current 1mA)
Current consumption: $\leq$ 30mA, when input is voltage, output 20mA @24VDC power supply.	Response time: $\leq$ 10mS (0-90%) (TYP)
Operating Temperature----- -25 ~ +75℃	Endure impaction voltage ----- 3KV , 1.2/50us(peak)
Operating humidity----- 10 ~ 90% (No condensation)	Temperature drift: 0.005% F.S./℃ (-20℃--+55℃)
Storage temperature ----- -45 ~ +85℃	EMC Compatibility: in compliance with IEC61326-1
Storage humidity ----- 10 ~ 95% (No condensation)	Applied in: 2-wire, 3-wire current signal input. DC current or voltage output.

Note: If special higher load capability of voltage/current is required, please notify us when placing orders.

Input Parameters				Output Parameters		
Output terms	Input impedance	Power loss	Input over-loaded	Output terms	Output over-loaded capability	Response
0-5V	≥300KΩ	Vout < 0.3W Iout <0.75W	2.0 times:	4-20mA	Loaded resistance ≤500Ω	≤10mS (0-90%) TYP
0-10V			Continuous	0-20mA		
	1.5 times: Continuous 3.0 times:1S					
0-10mA			0-5V	≥10KΩ		
0-20mA			0-10V			
4-20mA		1-5V				

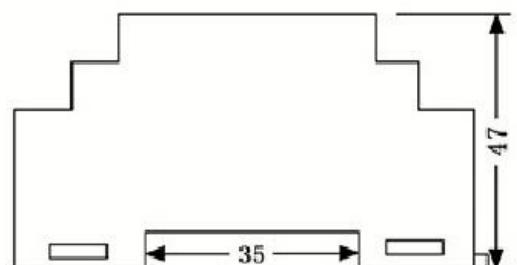
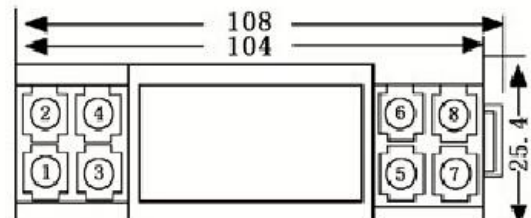
Typical Wiring Diagram



Unit:mm

Terminal Description & Dimension

Pin No.	Function
1	NC
2	NC
3	Signal input +
4	Signal input GND-
5	Signal output +
6	Signal output-
7	Operating power supply +
8	Operating power supply GND



* The specification is subject to change without notice.

For more production information, please visit: www.brightwintech.com.