



DIN RAIL MOUNTED UNIVERSAL PROGRAMMABLE ANALOG SIGNAL ISOLATOR

Current, Voltage Analog, mV Input, PROGRAMMABLE

4-20mA, 0-10mA, 0-20mA, 0-5VDC, 1-5VDC, RS485, OUTPUT

Model No.: MSC90AS



Ver2.0

General Specifications

GS 19A16D01-01EN

ANALOG SIGNAL ISOLATOR DIN RAIL MOUNTED MSC90AS

Overview

MSC90AS DIN Mounted Analog Signal Isolator, Signal Converter

Programmable current, voltage, mv input by key, input-output-power Photo-electrical isolation, with LED display, transmitting and isolating mA, VDC signal to various instruments or DCS, PLC etc control systems.

Feature

- 1 input 1 output, 1 input 2 outputs, 2 inputs 2 outputs
- Transmission accuracy (20°C): (0.2%FS+1) digit
- Temperature shift: 0.0075%FS/°C
- Power-Input-Output isolation: 1.5KVrms, 1min, 50HZ
- Universal Input: mAdc, Vdc, mv 16 types signal input
- Output signal: 4-20ma, 0-20ma, 0-5VDC, 1-5VDC; RS485
- With LED display for input, output PV, SV setting by key
- With optional math function: plus, sub, multiple divide
- Standard 35mm Rail Installation with pluggable terminals
- Size:109x116.5x18.5mm
- Wide power supply: DC/AC 20-260V

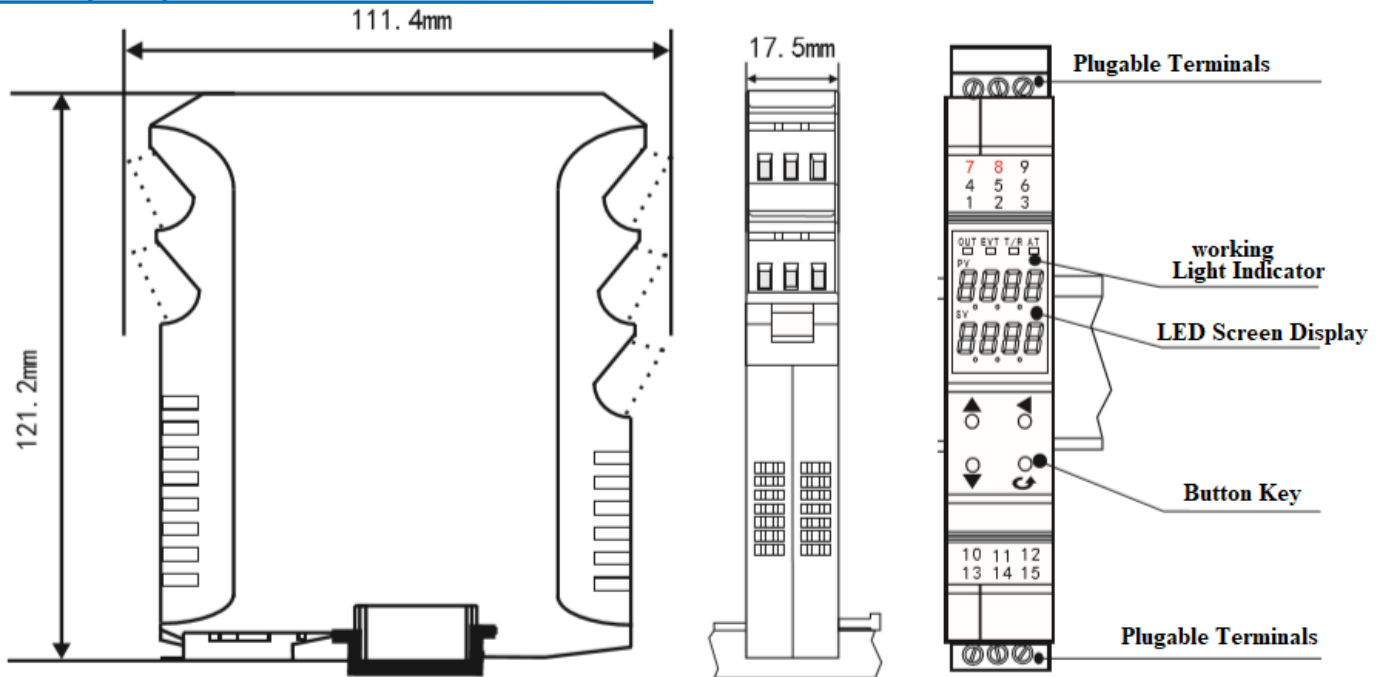
Specification

Type	1 input 1 output, 1 input/ 2input 2 outputs	● Accuracy	(+0.2%FS +1)(20°C)
● Input Signal	Isolated power distributed for transmitter	● Temperature shift	0.0075%/°C
	4-20mA,0-10mA,0-20mA;	● Isolated ability	Input-output-power isolation
	1-5V,0-5V,0-10V, -5 to 5V,	● Insulation resistance	1.5KVrms,1min, no sparking
	-10 to 10V ,0-20mv,0-40mv,0-100mv,	● Response time:	Input-output-power ≥100MΩ(500VDC)
Input impedance	-20 to 20mv, -100 to 100mv, 0-75mv,	● Math Function	50ms up to 90% of final PV value
	-40 to 40mv, -75 to 75 mv	● Display /key	plus: +, sub:-,multiple: x, divide: /
Max. Input mA/V	≤50 Ω when current mA input;	● Power supply	LED display, 4 button key
	≥250K Ω when voltage VDC input	● Consumption	DC/AC 20-260V (50/60Hz)
Distributed power	≤30mA, ≤10.5V	● (DC/AC20-260V)	<1W/(1 input 1 output);
	19-25VDC, ≤30mA	● Case material/Protection	<1.4W (1 or 2 input 2 outputs)
● Output	4-20mA,0-10mA;0-20mA;1-5V,0-5V,0-10V	● EMC	PC/ IP20
	4-20mA,0-10mA,0-20Ma: ≤500K Ω	● Size/N.W.	GB/T18268 (IEC61326-1)
Load resistance	0-5V,1-5VDC: ≥250K Ω; 0-10V≥500K Ω	● Working T&H	175x111.4x121.2/0.14kg
	● Communication	● Storage temperature	-10 to 50°C/25% to 85%RH
Rate/Distance	RS485 MODBUS-RTU Protocol		-10 to 60°C
	≤19.2kps, ≤1Km for RS485		

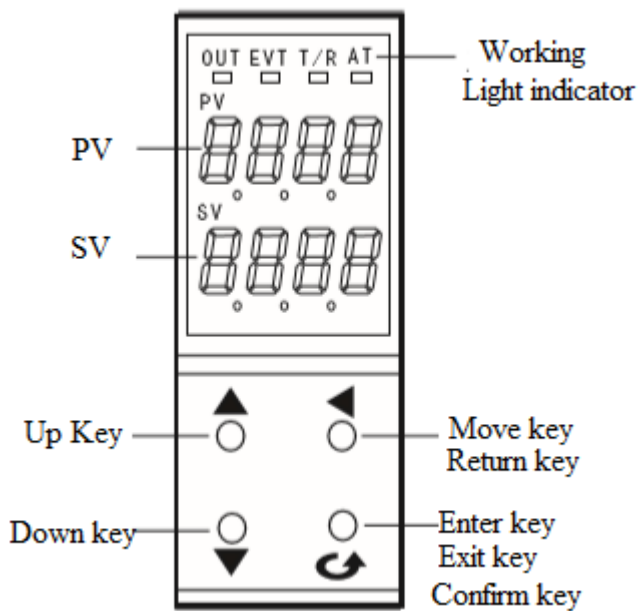


MSC90AS Smart Programmable Analog Signal Isolator, DIN Rail Mounting, with LED display and button key DC/AC 20-260V Wide Power Supply

Size (mm)



Front Panel Description



PV: PV Display Window

- . Under measurement status, it displays content by parameters "PdiS" setting
- . Under parameter setting status, it displays parameter character

SV: SV display window

- . Under measurement status, it displays content by parameters "SdiS" setting
- . Under parameter setting status, it displays SV setting value

OUT: Reserved;

EVT: power light indicator

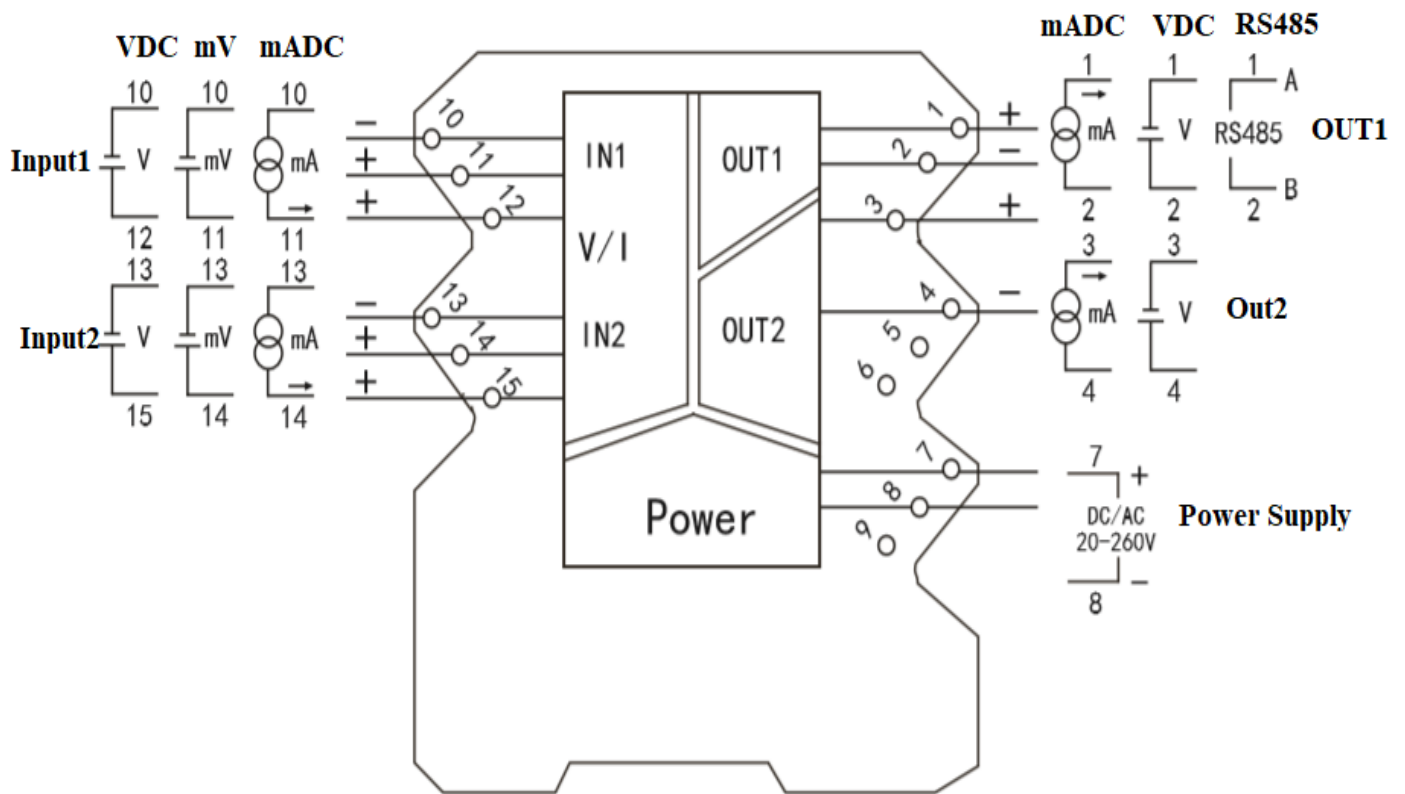
T/R: channel light indicator

- When light indicator is on, PV display is value for Input 1
- light indicator is not off, PV display is value for Input 2

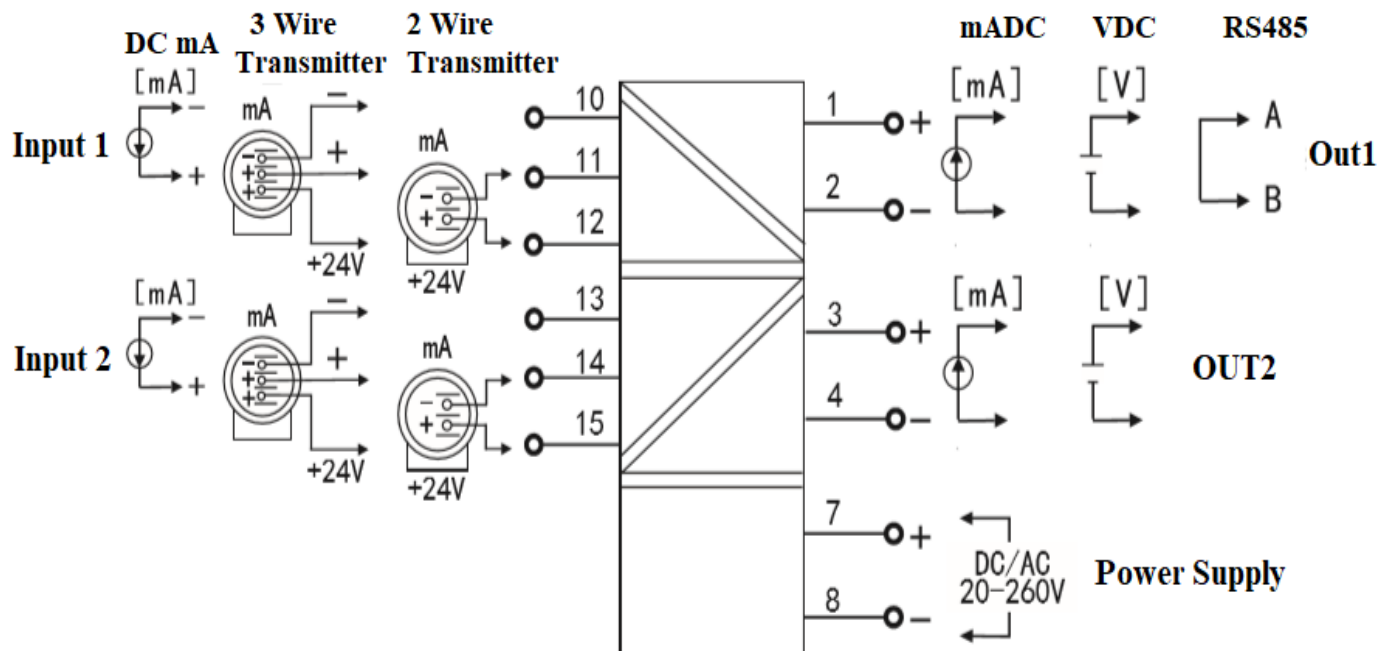
	Confirm key: confirmation for parameter and number setting Page key: go to next parameter key Exit key: exit configuration setting screen to normal PV screen by kept continuous 3 seconds
	Move key: move the cursor in left one by one Return key: go to pre-parameter key
	Down key, number or value down setting
	Up key: number or value up setting

■ Diagram

Signal isolator without distrusted power supply for transmitter



Isolated signal isolator with distributed power supply for Transmitter in Input Part



Order Code

MSC90AS: Smart Programmable DIN Rail Mount Analog Signal Isolator										
Order Code: E.g.: MSC90AS-NN11-1N1N-N								Description		
MSC90AS	-X	X	X	-X	X	X	X	-X	MSC90AS: Smart DIN Rail Mount Analog Signal Isolator	
Display	-D								With LED display indicator	
Type		N							Signal isolator without distrusted power supply for transmitter	
		P							Signal isolator with distributed power supply for transmitter	
Input-Output NO.			11						1 Input 1 output	
			12						1 input 2 output	
			22						2 Input 2 Output	
Input 1 (When type code: P, input type only 1,2,3: 4-20ma,0-10ma,0-20ma input)				-1					4-20mA(default)	
				-2					0-10mA	
				-3					0-20mA	
				-4					0-5VDC	
				-5					1-5VDC	
				-6					0-10VDC	
				-V5					-5 to 5V	
				-V6					-10 to 10V	
				-M					0-20mV	
				-M1					0-40mV	
				-M2					0-100mV	
				-M3					-20 to 20mV	
				-M4					-100 to 100mV	
				-M5					0-75mV	
				-M6					-40 to 40mV	
				-M7					-75 to 75mV	
Input 2 (When type code: P, input type only 1:4-20ma, 0-10ma,0-20ma input)				N					None	
				...					Please choose correct input type as Input 1's order code	
				M7					-75 to 75mV	
OUT1				1					4-20mA (default)	
				2					0-10mA	
				3					0-20mA	
				4					0-5VDC	
				5					1-5VDC	
				6					0-10VDC (specified, not switched)	
				C					RS485 Output, MODBSU-RTU (OUT2 without output)	
OUT 2				N					None	
				1					4-20ma (default)	
				2					0-10mA	
				3					0-20mA	
				4					0-5VDC	
				5					1-5VDC	
				6					0-10VDC (specified, not switched)	
Math Function								-N	None	
								-M	Math function when 2 channels inputs	

Note:

1) Input signals

*Input signals mA, V, mV dc can be set by key directly. The input order code is only for calibrated signal ex-work

2) P type

Order code: P, input type is only 4-20ma,0-10ma,0-20ma input signals

3) Outputs signals

*mA dc, V dc ,0-10vdc, RS485 output cannot be shifted, whose hardware is independent and different ex-work;

*mA dc or Vdc ex-work can programable as follows:

e.g., 1: 4-20ma output, can be set as 0-10ma, 0-20ma but cannot be switched to 0-5vdc, 1-5vdc,0-10vdc, rs485

e.g., 2: 0-10ma output, can be set as 0-20ma, 4-20ma but cannot be switched to 0-5vdc, 1-5vdc, 0-10vdc, rs485

e.g. 3: 0-20ma output, can be set as 0-20ma, 4-20ma but cannot be switched to 0-5vdc, 1-5vdc, 0-10vdc, rs485

e.g. 4 :0-5vdc output, can be set as 1-5vdc but cannot be switched to 4-20ma, 0-10ma, 0-20ma, 0-10vdc, rs485

e.g. 5 :1-5vdc output, can be set as 0-5vdc but cannot be switched to 4-20ma, 0-10ma, 0-20ma, 0-10vdc, rs485

e.g.6: 0-10vdc output specified, cannot be set to any other signals output

e.g.7: rs485 output, can be not be set to any other signals output, which is only on OUT1 ex-work



Xiamen Madincos Automation Co., Ltd

Add.: No. C303, 3rd Floor, Kechuang Building, No.321 Torch Road, Torch Park, Torch High-tech Zone, Xiamen,China,361006

URL: www.madincos.com
Email: info@madincos.com
Mobile:+86-17750003689