SEID-3I0A(G)

User Manual V1.0

1. Functions and features

1.1 Special development environment

LM studio, a configuration software independently developed by RISING, has the following characteristics：

- Language model for embedded real-time control system development
- High security and confidentiality
- Modular structure is adopted

Short entry cycle, easy to use

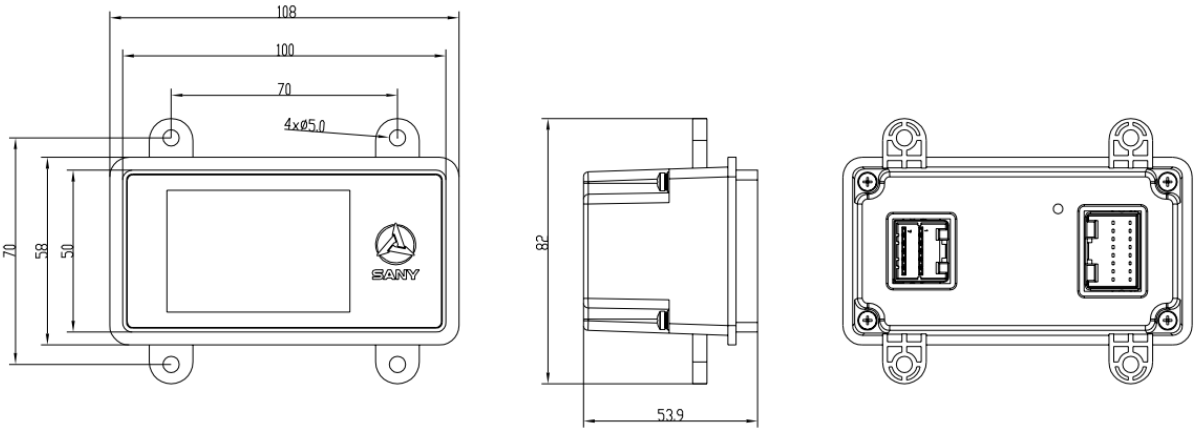
1.2 Adapt to harsh environment

- Can be used in cold and hot environment: - 20 ℃ low temperature, 65 ℃ high temperature
- Anti reverse connection design of power supply
- It is suitable for strong vibration, dusty rain, lightning and other environment of field operation

2. Product appearance structure function description

2.1 Product appearance

2.2 Product installation size



3. Product port function details

NAME		FUNCTION	Pin	NOTE
Analog input	Power input	AI_V_1	J3-1	Analog voltage AI_ V sampling: sampling range 0-10V DC, sampling accuracy 0.5%, resolution 0.025%;
		AI_V_2	J3-9	
	Resistor input	AI_R_1	J2-10	0-200Ω, Accuracy 1%
		AI_R_2	J2-13	
Digital output	PWM	PWM_1	J3-3	PWM output: frequency: 50 ~ 2kHz, current: 0 ~ 2A, accuracy: 1%, resolution: 0.025%;
		PWM_2	J3-4	
		PWM_3	J3-5	
		PWM_4	J3-6	
	DO	DO_1	J2-5	When output, the corresponding do is about the supply voltage; DC 1.5A
		DO_2	J2-14	
Digital input	DI_H/L	DI_H_1	J2-2	Low level effective threshold voltage (0 - 4.5V), high level effective threshold voltage (5 - 36V)
		DI_H_2	J2-3	
		DI_H_3	J2-4	
		DI_H_4	J2-7	
		DI_H_5	J2-12	
		DI_L_1	J2-8	
		DI_L_2	J2-11	
		DI_L_3	J2-16	
Reset	Reset		J3-8	Arm reset, power on and ground short circuit for 5S
GND	GND		J2-1、J3-7	GND
+5V output	+5VOUT		J3-2	5V±200mV power supply output,, Max output is300mA

DC Input	+12VIn		J3-11,12	Rating: 12V, range: 9V-16V
communication	CAN	CAN_H	J2-6	There is no 120 inside Ω Terminal resistance;
		CAN_L	J2-15	

4. Product parameters and environmental indicators

NO.	NAME	Detail
1	Kernel	STM32F429IG（32 bit ARM）
2	Kernel frequency	180MHz
3	Working cycle	≤5 ms
4	CAN channel	1， ISO11898 CAN 2.0B、J1939
5	Voltage input	9～16V.DC（Recommended voltage 12V.DC）
6	Output	5V.DC，300mA
7	Current	0.12A.DC（12V.DC）（NO LOAD）
8	Power	≤5W
9	Working Temperature	-20～+65℃
10	Storage temperature	-25～+80℃
11	RS	3V/m，80MHz~6GHz
12	ESD	Air discharge ±8kV Contact discharge ±4kV
13	Anti vibration level	6.8g
14	Shock resistance	50g，6ms
15	Relative humidity	≤95%
16	Dimensions	108×82×54（mm）
17	Weight	0.23Kg

5.NOTE

All the sensors, loads and other input and output points connected with the display screen must be connected into a closed loop, that is, all the input and output ground must be connected with the corresponding ground of the controller.

FCC Statement：

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference,and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator& your body.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However,there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

—Reorient or relocate the receiving antenna.

—Increase the separation between the equipment and receiver.

—Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

—Consult the dealer or an experienced radio/TV technician for help.