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SmartGen SG485-2CAN Communication Interface Conversion Module User Manual

Communication Interface Conversion Module
User Manual

Table 1 Software Version

Date	Version	Note
2021-08-18	1.0	Original release.
2021-11-06	1.1	Modify some descriptions.
2021-01-24	1.2	Modify the error in Fig.2.

Contents

OVERVIEW

SG485-2CAN is a communication interface conversion module, which has 4 interfaces, namely RS485 host interface, RS485 slave interface and two CANBUS interfaces. It is used to convert 1# RS485 interface to 2# CANBUS interfaces and 1# RS485 interface by DIP switch to set address, providing convenience for customers to monitor and collect data.

PERFORMANCE AND CHARACTERISTICS
Its main characteristics are as follows:
— With 32-bit ARM SCM, high hardware integration, and improved reliability;
— 35mm guide rail installation method;
— Modular design and pluggable connection terminals; compact structure with easy mounting.

SPECIFICATION

Table 2 Performance Parameters

Items	Contents
Working Voltage	DC8V~DC35V
RS485 Interface	Baud rate: 9600bps Stop bit: 2-bit Parity bit: None
CANBUS Interface	250kbps
Case Dimension	107.6mmx93.0mmx60.7mm (LxWxH)
Working Temperature	(-40~+70)°C
Working Humidity	(20~93)%RH
Storage Temperature	(-40~+80)°C
Protection Level	IP20
Weight	0.2kg

WIRING
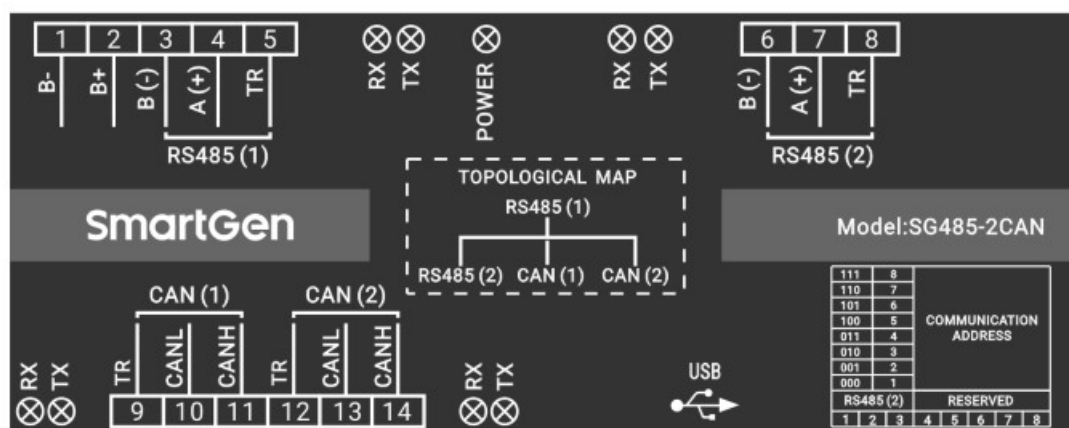
Fig.1 Mask Diagram
Table 3 Indicators Description

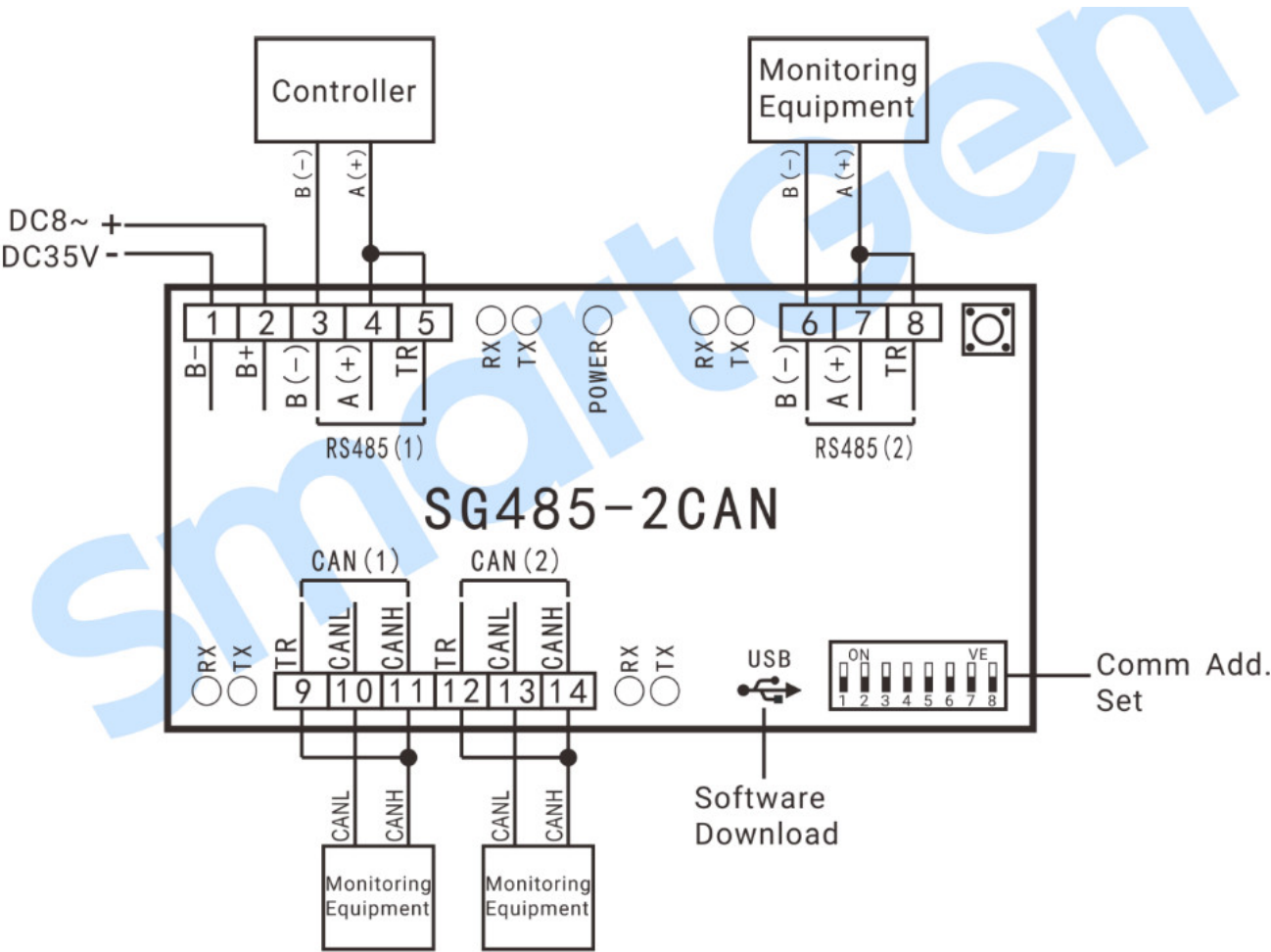| No.	Indicator	Description
1.	POWER	Power indicator, always on when powered on.
2.	TX	RS485/CANBUS interface TX indicator, it flashes 100ms when sending data.
3.	RX	RS485/CANBUS interface RX indicator, it flashes 100ms when receiving data.

Table 4 Wiring Terminals Description

No.	Function		Cable Size	Remark
1.	B-		1.0mm2	DC power negative.
2.	B+		1.0mm2	DC power positive.
3.	RS485(1)	B(-)	0.5mm2	RS485 host interface communicates with controller, TR can be short connected with A(+), which is equivalent to connecting 120Ω matching resistance between A(+) and B(-).
4.		A(+)		
5.		TR		
6.	RS485(2)	B(-)	0.5mm2	RS485 slave interface communicates with PC monitoring interface, TR can be short connected with A(+), which is equivalent to connecting 120Ω matching resistance between A(+) and B(-).
7.		A(+)		
8.		TR		
9.	CAN(1)	TR	0.5mm2	CANBUS interface, TR can be short connected with CANH, which is equivalent to connecting 120Ω matching resistance between CANL and CANH.
10.		CANCEL		
11.		CANH		
12.	CAN(2)	TR	0.5mm2	CANBUS interface, TR can be short connected with CANH, which is equivalent to connecting 120Ω matching resistance between CANL and CANH.
13.		CANAL		
14.		CANH		
/	USB	Software download and upgrade interface	/	/

Table 5 Communication Address Setting

Communication Address Setting								
Address	RS485(2)			Reserved				
DIP Switch No.	1	2	3	4	5	6	7	8
the corresponding relation between dial switch combination and communication address	000: 1			Keep the DIP address, it has no effect on communication no matter how it is set.				
	001: 2							
	010: 3							
	011: 4							
	100: 5							
	101: 6							
	110: 7							
	111: 8							

ELECTRICAL CONNECTION DIAGRAM

OVERALL DIMENSION AND INSTALLATION
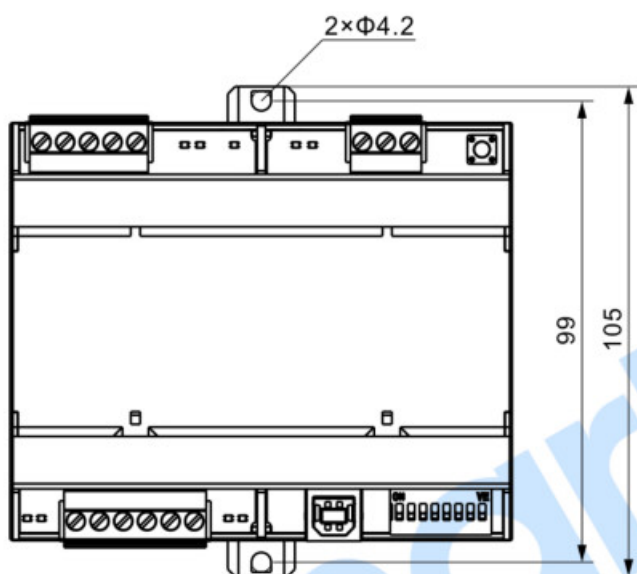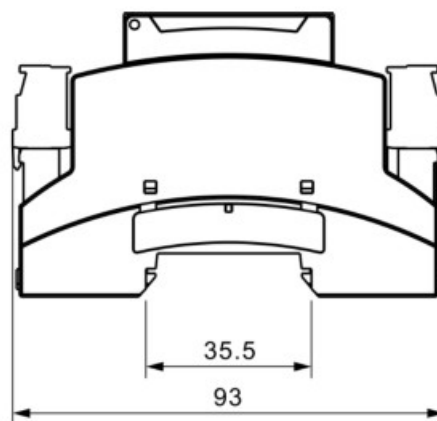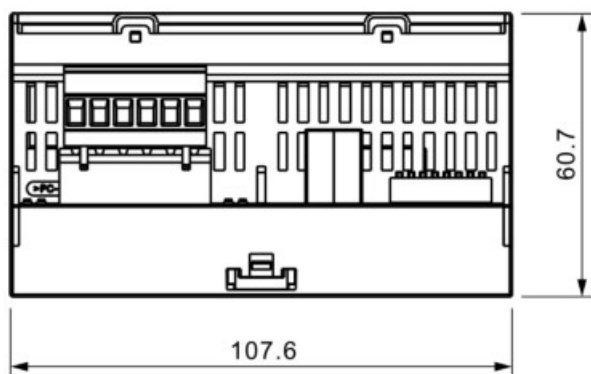
Fig.3 Overall Dimension and Installation (Unit: mm)

Documents / Resources

 SmartGen SG485-2CAN Communication Interface Conversion Module [pdf] User Manual
SG485-2CAN Communication Interface Conversion Module, SG485-2CAN, Communication Interface Conversion Module, Interface Conversion Module, Conversion Module, Module

References

- 众智____
- 众智____

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