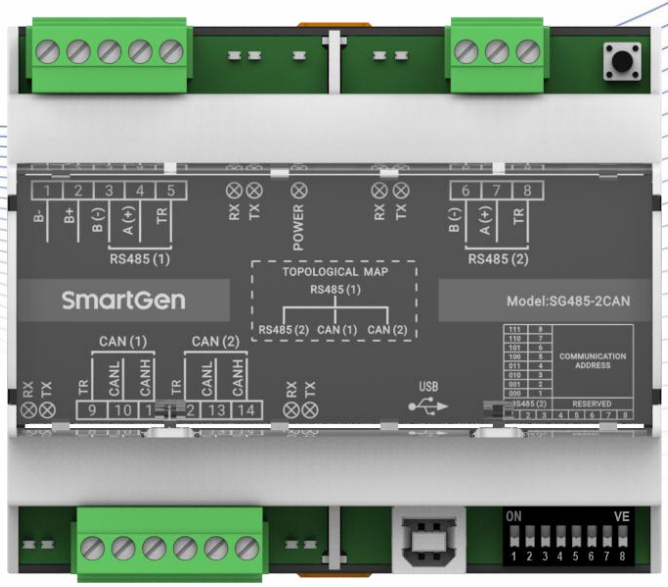
SmartGen

MAKING CONTROL SMARTER

SG485-2CAN

COMMUNICATION INTERFACE CONVERSION MODULE

USER MANUAL



郑州众智科技股份有限公司

SMARTGEN(ZHENGZHOU)TECHNOLOGY CO.,LTD.

SmartGen众智 **Chinese trademark**

SmartGen **English trademark**

SmartGen — make your generator ***smart***
SmartGen Technology Co., Ltd.
No.28 Jinsuo Road
Zhengzhou
Henan Province
P. R. China
Tel: +86-371-67988888/67981888/67992951
+86-371-67981000(overseas)
Fax: +86-371-67992952
Web: www.smartgen.com.cn/
www.smartgen.cn/
Email: sales@smartgen.cn

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

1 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.

2 PERFORMANCE AND CHARACTERISTICS

Its main characteristics are as follows:

- With 32-bit ARM SCM, high hardware integration, improved reliability;
- 35mm guide rail installation method;
- Modular design and pluggable connection terminals; compact structure with easy mounting.

3 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

4 WIRING

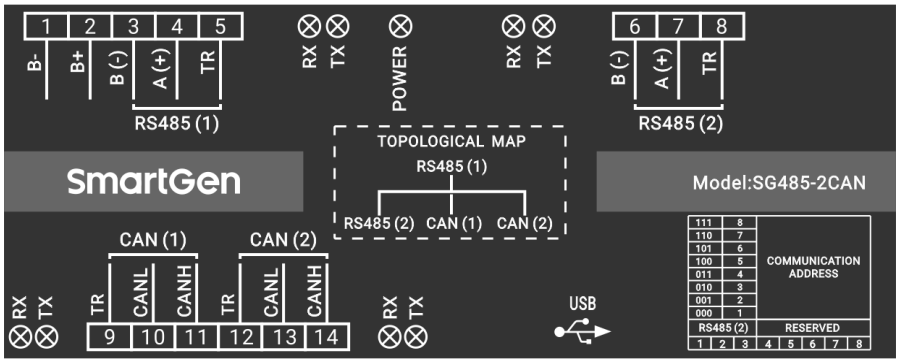


Fig.1 Mask Diagram

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.		CANL		
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.		CANL		
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
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							

5 ELECTRICAL CONNECTION DIAGRAM

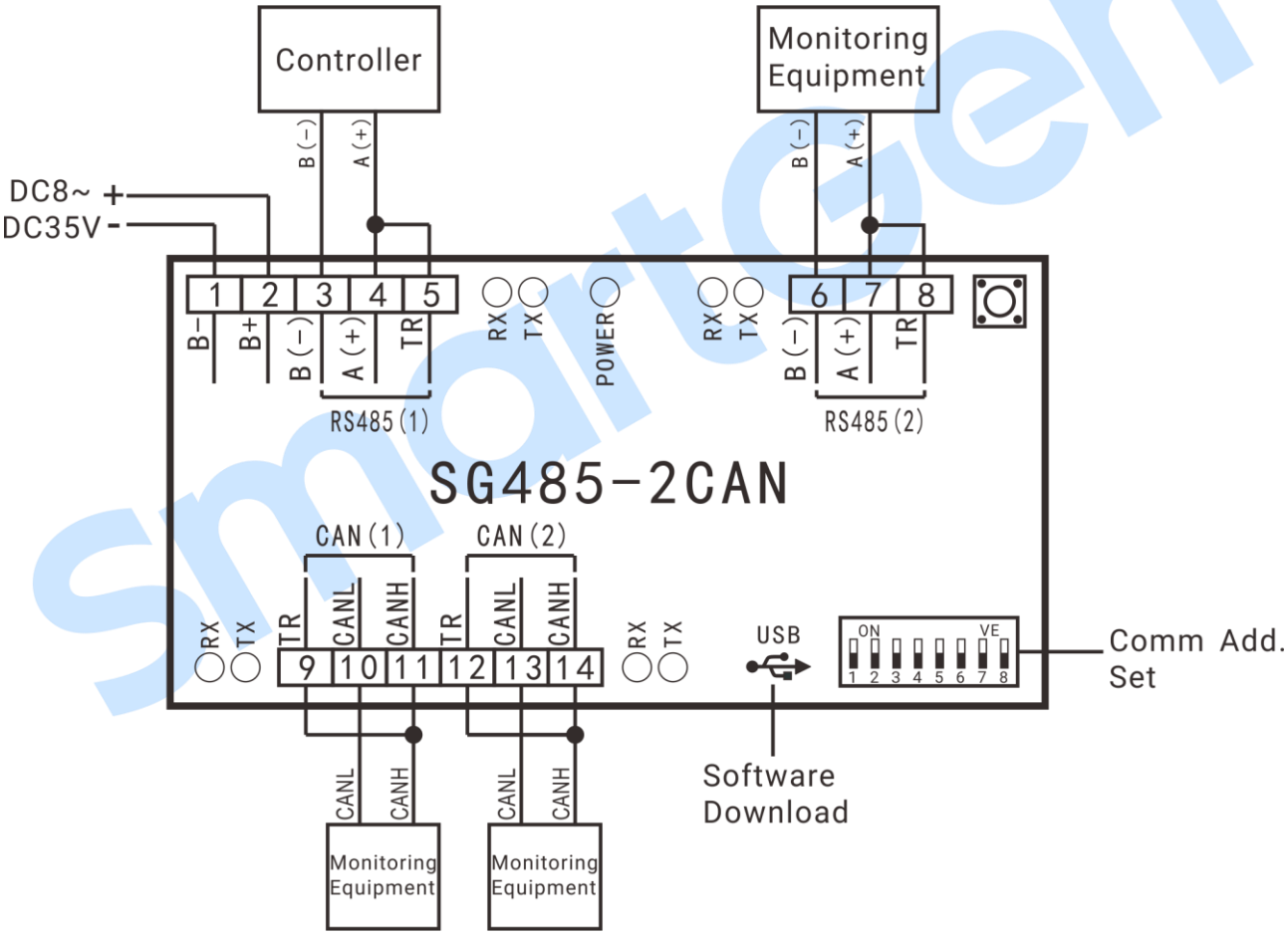


Fig.2 Electrical Connection Diagram

6 OVERALL DIMENSION AND INSTALLATION

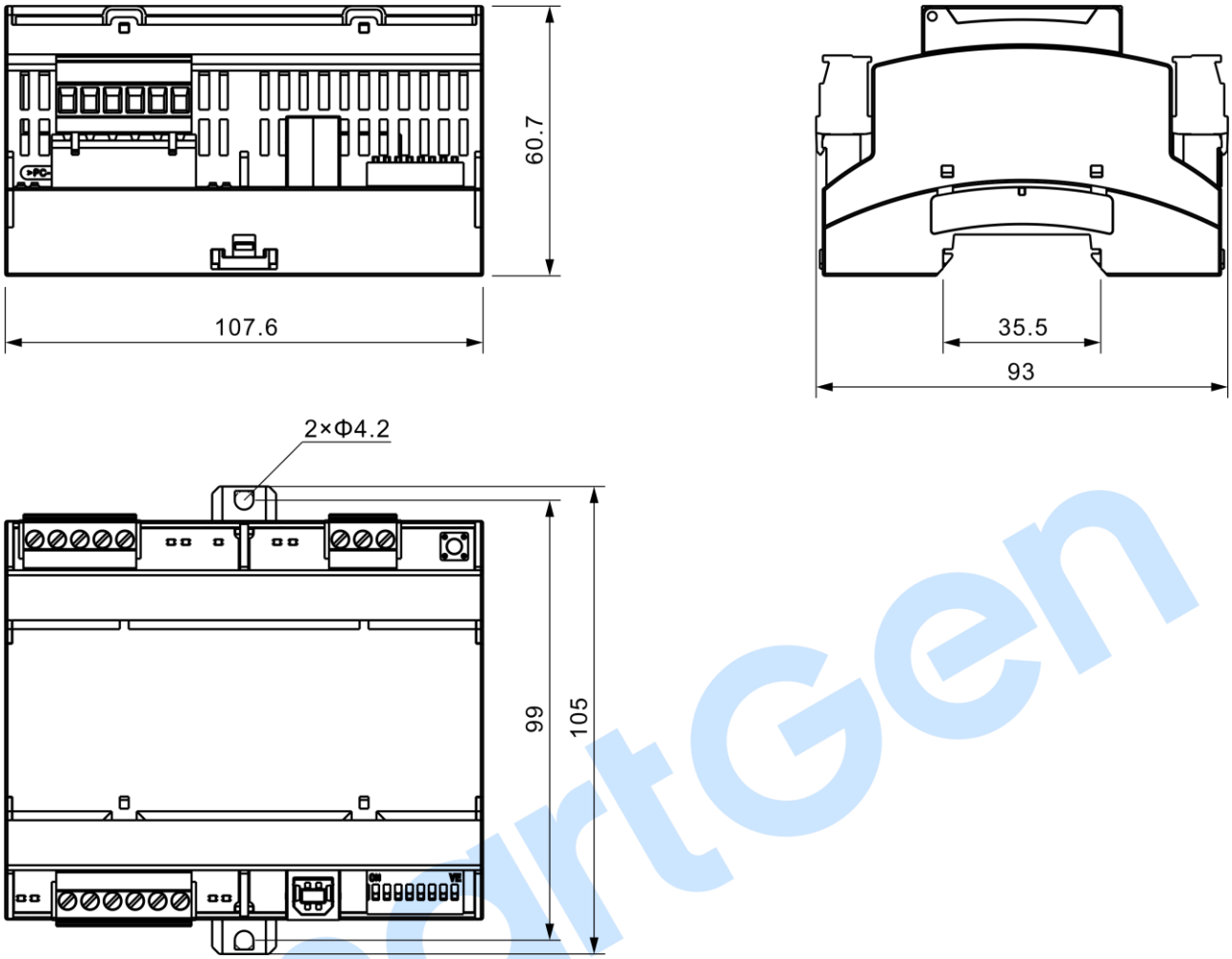


Fig.3 Overall Dimension and Installation (Unit: mm)