

# SCM-38I

## Serial Converter Module(RS232C↔RS485 convertable)

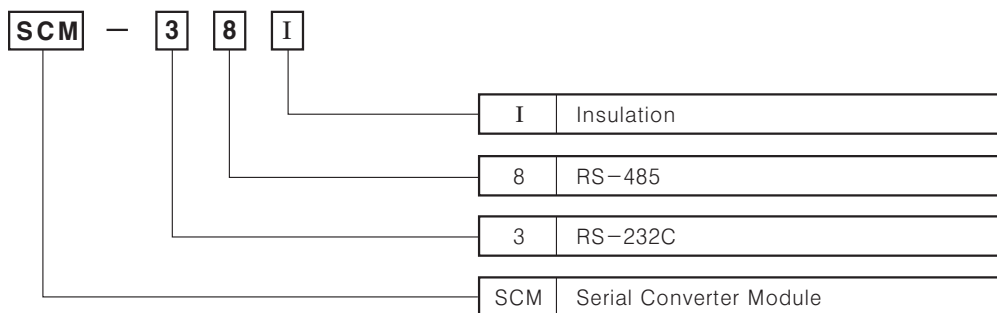
### ■ Features

- Built-in the circuit of surge protection.
- The insulation type of signal line (Insulating 232C and 485)
- Create Tx-Enable signal automatically



**⚠ Please read "Caution for your safety" in operation manual before using.**

### ■ Ordering information



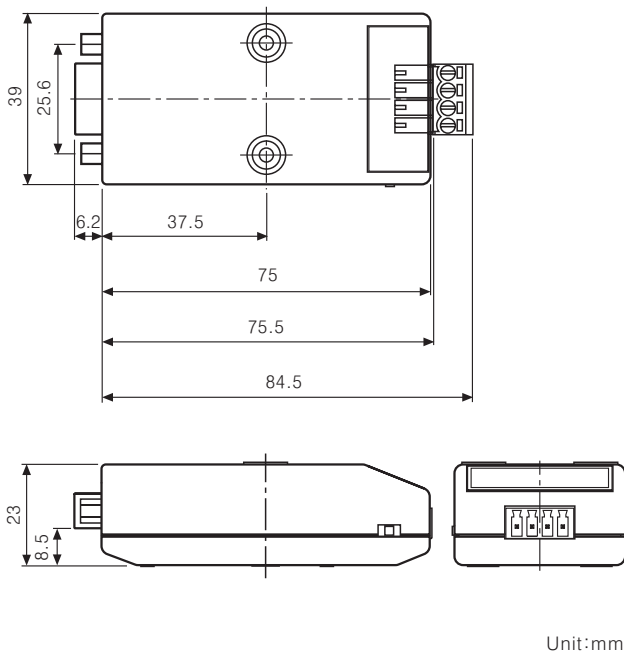
### ■ Specifications

Model		<b>SCM-38I</b>
Power supply		12-24VDC
Allowable voltage range		90 ~ 110% of rated voltage
Power consumption		Approx. 1.7W
Maximum communication speed		1200 ~ 115200bps (1200/2400/4800/9600/12800/25600/56700/115200)
Communication type		Half Duplex type
Available communication distance		Max. 800m
Multi-Drop		Max. 32 Multi-Drop
(Note) Data type	Data Bit	5 ~ 8 Data Bits
	Stop Bit	1 or 2 Stop Bits
	Parity Bit	No/Odd/Even Parity Bit
Connection type	RS232	D-Sub 9Pin
	RS485	4-wire Screw terminal (2wire communication type)
Insulation resistance		Min. 100MΩ (at 500VDC)
Dielectric strength		2500Vrms
Noise strength		±500V the square wave noise (pulse width:1μs) by the noise simulator
Vibration	Mechanical	0.75mm amplitude at frequency of 10 ~ 55Hz in each of X, Y, Z directions for 1 hour
	Malfunction	0.5mm amplitude at frequency of 10 ~ 55Hz in each of X, Y, Z directions for 10 minutes
Shock	Mechanical	300m/s <sup>2</sup> (Approx. 30G) 3 times at X, Y, Z direction
	Malfunction	100m/s <sup>2</sup> (Approx. 10G) 3 times at X, Y, Z direction
Ambient temperature		-10 ~ +55°C (at non-freezing status)
Storage temperature		-20 ~ +60°C (at non-freezing status) □
Ambient humidity		35 ~ 85%RH
Weight		Approx. 46g

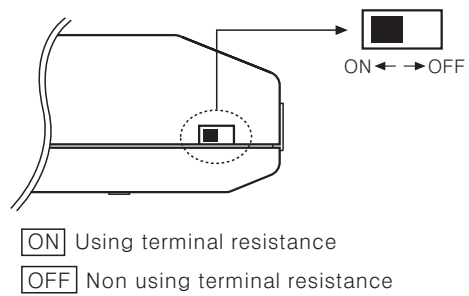
※ (Note) Data type is set by program

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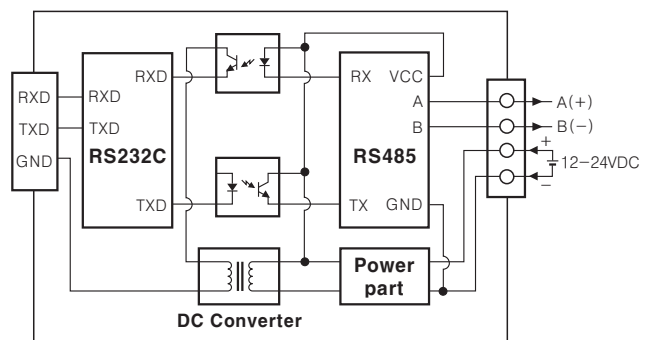
## Dimensions



## Selecting terminal resistance

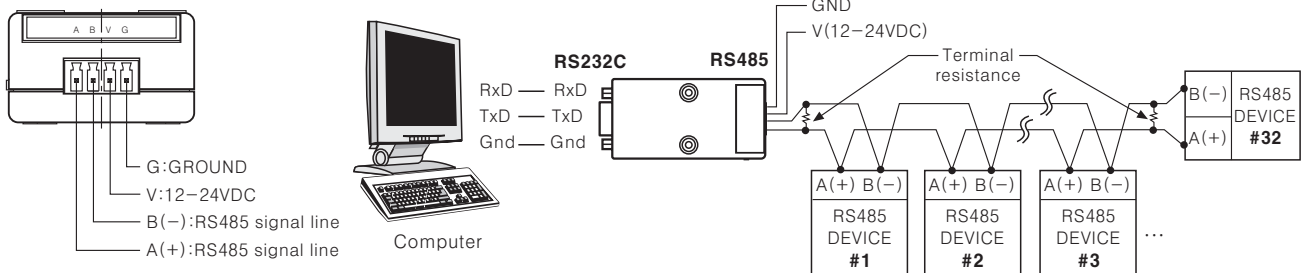


## Function block



## Connections

● Multi-Drop connection method with PC



## Proper usage

- Setting of protocol rule (Start bit, Stop bit, Parity bit, Data bit, Baud rate) can be set by software without external input or internal setting.
- Using the Twist pair cable (24-AWG), which is suitable to RS485 communication is recommended. If the Twist pair cable is not used, be sure preserving the length of A(+) and B(-) cables.
- The extension of communication cable is maximum 800m, and the number of available connecting communication product is 32 items.
- After connecting the communication cable between SCM-38I and lower system, be sure attaching the terminal resistance (100~120Ω). (The terminal resistance of SCM-38I is set by external switch)
- When connecting be making sure that protocol is consisted with each communication product when programming the software program by connecting to other communication products.
- To avoid inductive noise, separate the wires from high voltage cable and power cable.
- Do not this unit as following place
  - A place where vibration, shock is occurred.
  - A place where strong alkali or acid material is used.
  - A place where the direct ray of light is occurred.
  - A place where strong magnetic force or electric noise is occurred.
- Preserving way
 

When preserving long term, please avoid direct ray of light and keep it under the temperature from  $-20^{\circ}\text{C} \sim 60^{\circ}\text{C}$  and the relative humidity less than  $35 \sim 85\% \text{RH}$ .  
The same storing as shipping wrap is the best way.
- Installation environment
  - It shall be used indoor
  - Altitude Max. 2000m
  - Pollution Degree 2
  - Installation Category I

(A) Counter

(B) Timer

(C) Temp. controller

(D) Power controller

(E) Panel meter

(F) Tacho/ Speed/ Pulse meter

(G) Display unit

(H) Sensor controller

(I) Proximity sensor

(J) Photo electric sensor

(K) Pressure sensor

(L) Rotary encoder

(M) 5-Phase stepping motor & Driver & Controller