

SC-232-E

RS232 to R-485/422

Port-powered Opto-isolation Converter



Order online or call 1-800-343-1455

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◆ **Product Overview**

The SC-232-E is a port-powered serial converter that converts TxD and RxD RS232 to RS485/422 signals. Additional features include; automatic Send Data Control (SDC) which automatically enables the RS485 driver when data is present on the RS232 side and Opto-isolation which protects attached communications devices from damaging ground loops.

◆ **Specifications**

Power Supply	Powered through the RS232 side, no external power needed.
Working current	<10mA
Baud rate	300 ~ 19.2Kbps
Maximum Distance	RS485/ RS422 1.2Km(19.2Kbps)
Maximum Nodes	64 nodes
Electrical	15Kv static protection, 600W/ms lightning protection, and 2500V optic isolation
Weight	36g(with terminal block)
Dimensions	87mmx33mmx17mm(with terminal block)
Working temperature	-40°C ~ 85°C

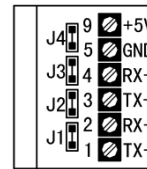
◆ **PIN Settings**

The RS232 end is DB9 female. The pin definitions are below :

PIN	1	4	6	7	8	2	3	5
Define	short circuit		short circuit		TX	RX		GND

The RS485/RS422 end is DB9 male. The pin definitions are below :

PIN	1	2	3	4	5	6	7	8	4
short circuit	J2(ON, OFF)		J3(ON, OFF)			J1(ON, OFF)		J4(ON)	
RS-485	A+(J2 ON)		B-(J3 ON)		GND	J1 (ON)		Short circuit(ON) 120•	
RS-422	(J2 OFF)		(J3 OFF)		GND	J1 (OFF)			
	TX+	RX+	TX-	RX-					



- Do not connect external power to the +5V pin, it is only for measurement and testing ;
- A 120• resistor can be activated on pins A+ and B- by connecting the J4 jumper.

◆ **Applications**

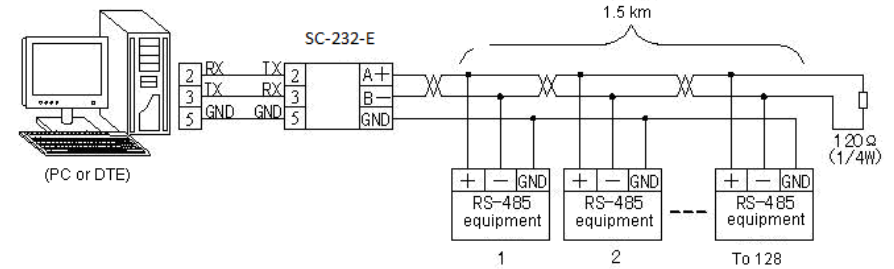


Chart 1 : Master-Slave and half duplex communication

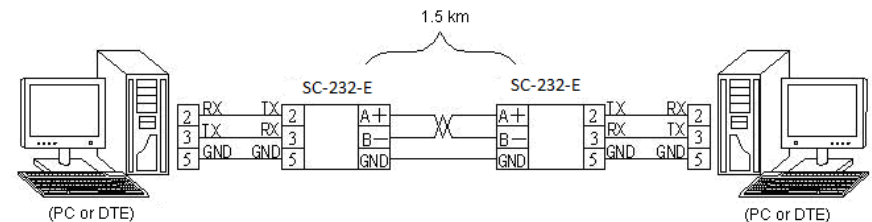
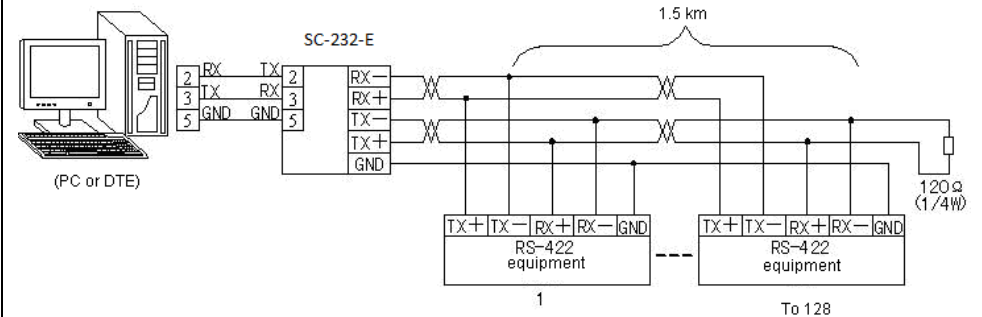


Chart 3 : Extend RS232 communication distance

◆ **Notice**

- Matching the resistance in RS485:

When using the 120 • jumper, it is required to have a similar 120 • resistor on the other end. It is only required to use this feature if the data rate is above 19.2Kbps or the cable length is over 200m.