SC-232-B

RS232 to RS485 Opto-isolation Converter

L-com Global Connectivity

Order online or call 1-800-343-1455

L-com.com

◆ Product Overview

L-Com's SC-232-B features optical isolation to protect your valuable communications equipment from ground loops. Both RS232 and RS485 sides are powered by an external power supply (sold separately).

◆ Main functions

·Optic isolation between the RS232 and RS485 signals
·Plug and play support
·Transmits automatically, CTS flow control is not required

◆ Specifications

Power Supply	Uses 5VDC external power, sold separately
Working Current	<15mA
Baud rate	300～38.4Kbps
Maximum Distance	RS-485:<1.2Km(19.2Kbps),RS-232:15m
Maximum Nodes	128 nodes
Electrical	15Kv static protection, 600W/ms lightning protection and 2500V optic isolation
Weight	36g(with terminal block)
Dimensions	87mm×33mm×17mm(with terminal block)
Working temperature	-40℃ ～85℃

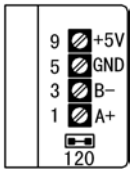
◆ PIN Settings

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 end is DB9 male. The pin definitions are below:

PIN	1	3	5	9	6 & 7
Define	A＋	B－	GND	5V	short circuit（120• ）
Specification	485＋	485－	GND	5V	Short circuit 120• resistance



·Connect the DC5V external power supply to the +5V and GND pins.
· The 120 jumper activates a 120 • resistor between A+ and B- when connected.

◆ Applications

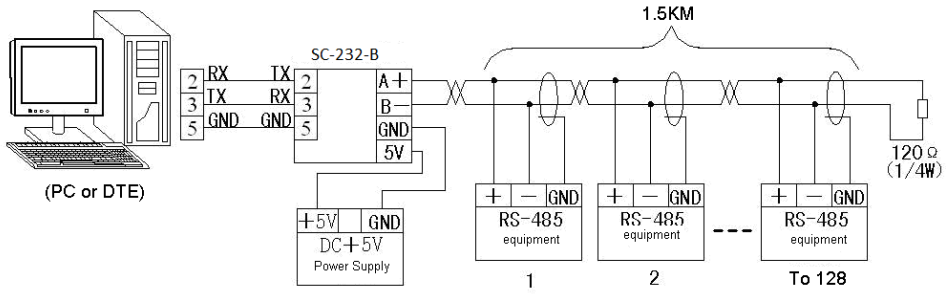


Chart 1: Master-Slave and half duplex communication

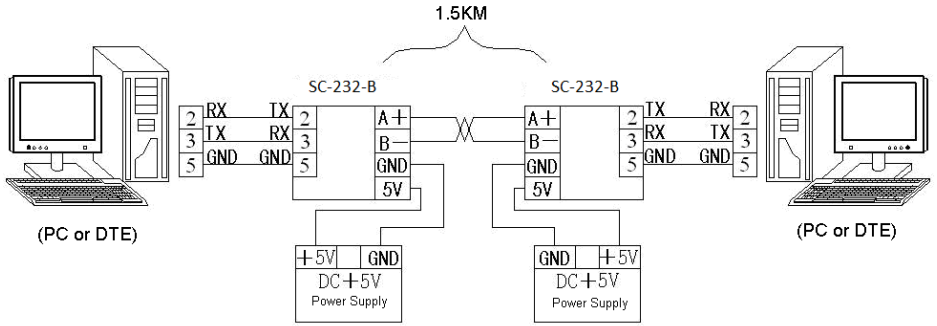


Chart 2:Extend RS232 communication distance

◆ Notices

·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.

· RS485 Grounding

The GND circuits do need to be connected together, but do not link them to earth ground.