

RS-232 to RS-485 opto-isolation converter

Model : MWE485 - B

MAIWE

Brief introduction

The MWE485-B can convert a RS-232 serial port signal to a two wires semi duplex RS-485 signal or a four wires full duplex RS-422 signal, with 2500V photo electricity isolation. It needs a +5V DC power supply.

Main function

- Photo electricity isolation between the RS-232 and RS-485/422 signal
- Particular protecting circuit for the serial port, plus-and-play supported
- Automatically transmit with no delay, no need CTS flow control

Capability parameter

Power Supply	RS485 external power DC5V.
Working Current	<20mA
Baud rate	300~38.4Kbps
Communication distance	RS-485 1.5Km (9.6Kbps)
Max. node	128 nodes
Isolation protection	15kV static protecting and 600W/ms lightning protecting,
Weight	36g(with the terminal block)
Dimension	87mm×33mm×17mm(with the terminal block)
Working temperature	-40~85°C

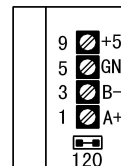
PIN Setting

The RS-232 end is DB9pin , the pin definition is as below:

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

The RS-485 end is DB9 pin, the pin definition is as below:

PIN	1 2	3 4	5	9	6 7
Define	A+	B-	GND	5V	short circuit (120Ω)
Specification	485+	485-	GND	5V	Short circuit 120Ω resistance



- DO not connection any external power between 5V and GND ports, parameters is only for information
- A 120Ωresistor can be added in between the A+ and B- by plugin on the jumper marked as 120

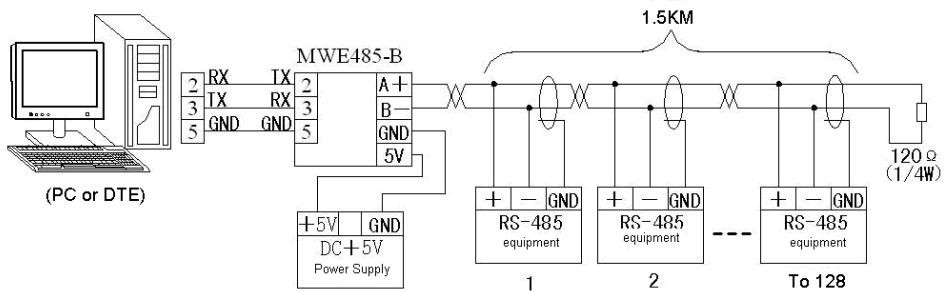


Chart 1: Master-Slave and half duplex communication

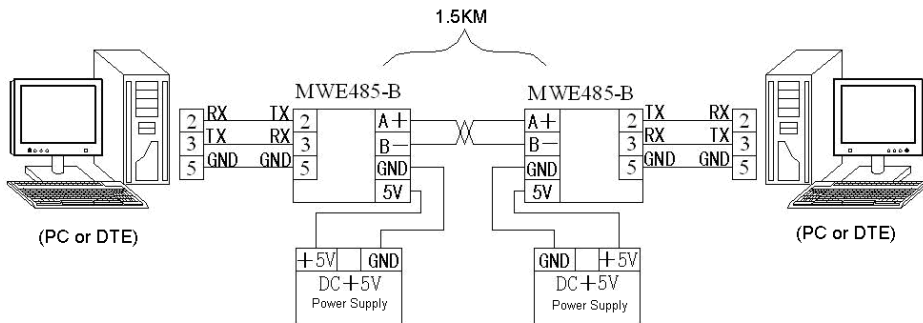


Chart 2: Extend RS232 communication distance

Attention

RS-485 matching resistance

The RS-485 is difference-signal. It is necessary to add a 120Ω matching resistor on the head and end of the communications circuit. When 120 short films (ON), The load ability will reduce when using the matching resistance.

We suggest that it is necessary to use it only when the rate is above 19.2Kbps or the circuitry length is above 200m

Quality promises

- 1We can exchange the product in 2 years for the quality problem.
- 2We guarantee to keep the product in good repair for 5 years.