

RS-232 to RS-485 port-powered opto-isolation converter

Model: MWE485 – F

◆ Brief introduction

The MWE485-F can convert a RS-232 serial port signal to a two wires semiduplex RS-485 signal,with 2500V photoelectricity isolation.

◆ Main function

- Photoelectricity 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	Technology of stealing current from serial port,no need external power supply
Working current	<10mA
Baud rate	300~38.4Kbps
Communication distance	RS-485 1.5Km
Max node	64 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℃

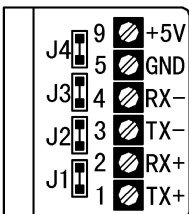
◆ PIN Setting

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

PIN	1	2	3	4	5	6	7	8	9
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) 120Ω	



- Do not connection any external power between 5V and GND ports,parameters is only for information;
- J4 short circuit means 120Ωresistance,push(ON)and it could be connect.

◆ Application

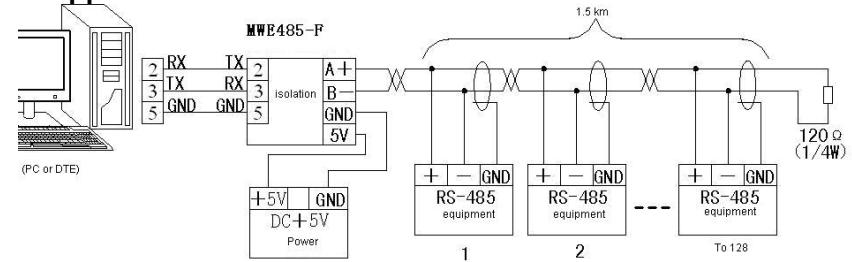


Chart 1 : Master-Slave and half duplex communication

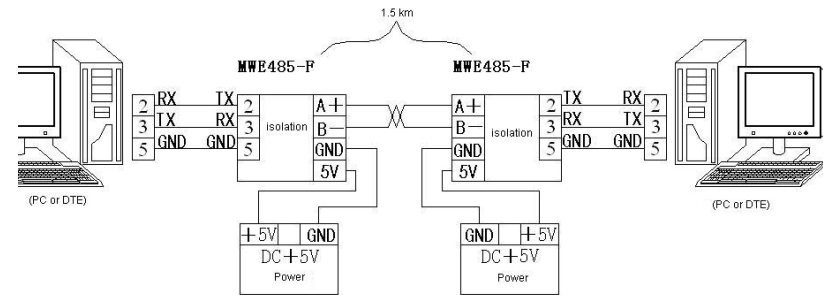


Chart 2: Extend RS232 communication distance

◆ 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

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