

## Model: MWE485 – TDM

### ◆ Brief introduction

The MWE485-TDM can convert a RS232 serial port signal to three wires high speed semiduplex RS485 or a four wires fullduplex RS422 signal,with 2500V optical isolation between the signal and the power.

### ◆ Main function

- Special industrial Din rail module;
- Opto-isolation of high rate between RS-232 and RS-485/422 and power supply;
- Intelligent module design, automatically transmit with no delay,no need CTS flow control.

### ◆ Capability parameter

Power Supply	External power supply,DC5V/DC9~30V
Working current	<15mA
Baud rate	300~115.2Kbps
Com distance	RS-485/ RS – 422 1.5Km(9.6Kbps)
Max. node	128 nodes
Optic isolation	Isolation between RS232 and RS485,Isolation between RS232 and power supply,Isolation between RS485 and power supply
Isolation protection	15Kv static protecting and 600W/ms lightning protecting
Weight	96g(with the terminal block,no include DIN-Rail)
Dimension	117m×72mm×25mm
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-485/422 definition is as below

PIN	1	2	3	4	5	8	9	10
RS-485	A+	B-	GND1			DC5V	DC9~30V	GND2
RS-422	T+	T-		R+	R-			

### ◆ Application

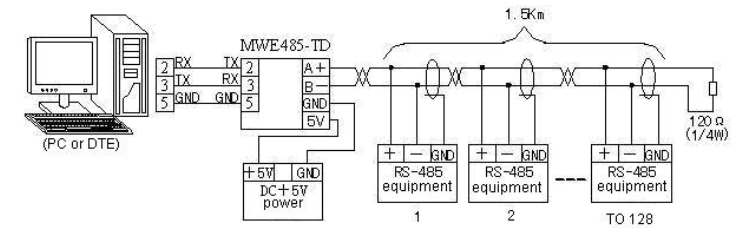


Chart 1 : Master-Slave and half duplex communication

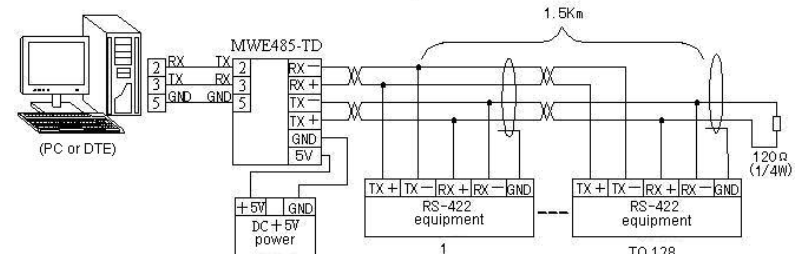


Chart 2 : Master-Slave and half duplex communication

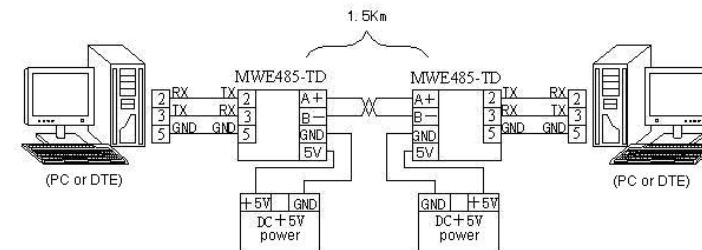


Chart 3 : Extend RS232 communication distance

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