

MWF208 Multiplexer Fiber Modem

◆ Brief introduction

MWF208 multiplexer fiber modem can transmit 8 ways RS-232/RS-485/422 signal full-in-one fiber optic line.

◆ Capability parameter

Electronic Port	support RS-232/RS-485/422
Fiber Optic Port	FC/ST/SC
Isolation protection	15Kv static and 600W/ms lightning protection
Power Supply	DC5~12V
Power loss	<5W
Fiber Communication distance	Multi model(-M): 2~5 km; single Model(-S): 20Km (40Km、60Km、100Km could be chosen)
Baud rate	300~115.2Kbps auto adaptive
Bit error rate	≤10 ⁻⁹
Transmission power	≥-10dBm
Sensitivity	≤-34dBm
Wave length	Multi model(-M): 850nm/1310nm; Single Model(-S): 1310nm/1550nm
Applicable optical fibers	Multi model: 62.5/125μm or 50/125μm Single model: 9/125μm
Dimension	225mm×96mm×30mm
Weight	0.6Kg
Working temperature	-20℃~+75℃
Ambient Relative Humidity	0~95%

◆ User guide

1) Indicate lights

POW: Power indicate red,light on
 TXD: Fiber optic port data sent green,Blinking
 RXD: Fiber optic port data receive green,Blinking

TX1-TX8: 8 ways electronic port data sent green,Blinking
 RX1-RX8: 8 ways electronic port data receive green,Blinking
 ERR: Fiber link fault indicate light red; when product power on, if the

fiber line link fault or optic port not receive correct data, the light turn on;when the fiber link well,the light turn off.

2) The dialing switch

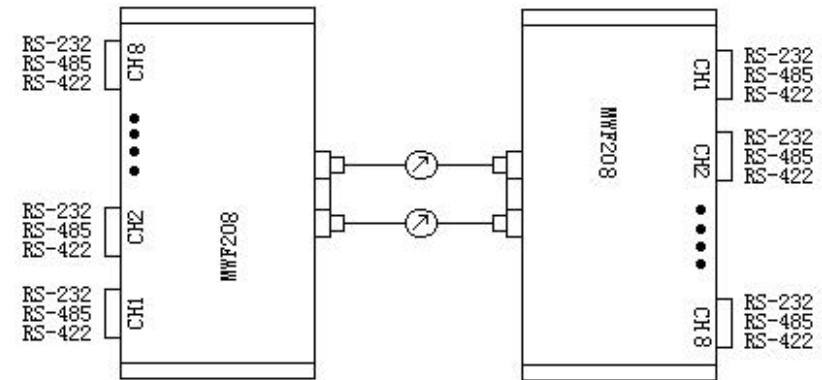
K1 to K8 are dialing switch which control channel 1 to 8 respective. When the switch dialing down,the relevant channel port works in RS485 mode.When dialing up,it works in RS422 mode.

3) RJ45 function

The MWF208 has 8 RJ45 ports for RS-232/485/422.

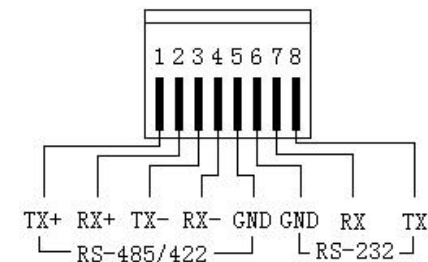
These 8 ports are individual channel, they have no relation to each other,CH1 communicate with CH1, CH2 communicate with CH2,and so on.

Following shows the connection:



The MWF208 has 8 ports,which could either choose RS232,RS485 or RS422.

Port define as following:



RS232 connection guide

RS232 have three lines,it use RJ45 port pin6,pin7,pin8 these three signal line. Pin 6 is GND, pin 7 is RX(RS232 signal from external to MWF208),pin 8 is TX (RS232 signal from MWF208 to external).

Note:When communication in RS232 mode,RJ45 port pin 1,pin 2,pin 3,pin 4 should be hung and not connect to any signal lines. And switch K1~K8 must be in OFF position.

RS485 connect guide:

Please short circuit the TX+ and RX+ as a signal line A+; short circuit the TX- and RX- as a signal B-.The switch should be dialing down.And the pin7,pin8 should be hang and not connect to any signal lines.

RS-422 connect guide

RS422 have 4 lines,TX+, RX+, TX-, RX-.And switch should be dialing up(OFF). And the pin7,pin8 should be hang and not connect to any signal lines.

4) Ground connect guide

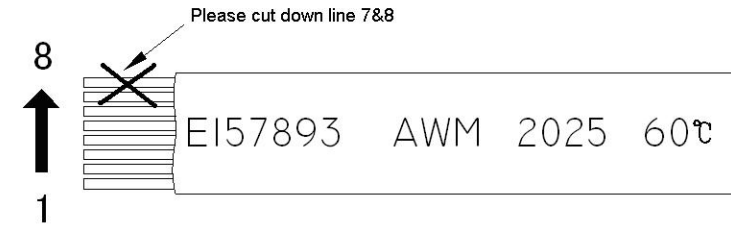
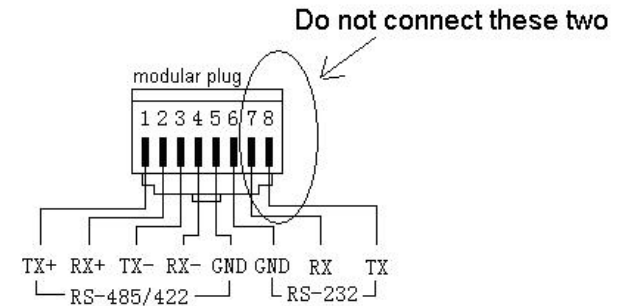
Please connect the GND lines, because the RS485(or RS422) communication potential difference must <12V.RS485 connect with 3 lines(A+, B-, GND),RS422 connect with 5 lines(TX+, TX-,RX+, RX-,GND).Signal GND line connect with each other, but do not connect to the earth ground.

5) Optic port

Connect the two fiber modems by the fiber cable line, TX connect with RX of opposite modem.The ERR light should be off when the fiber link well.

6) RJ45 line guide

The RS-232 signal is easy influence by RS485/422 signal.When the device connect with RS485(or RS422) signal, please cut down the RS232 line(pin7 RX line and pin 8 TX line).Make the RJ45 line as following shows:



(Cut down the pin7 and pin8 line when connect RS485/422 signal)

◆ 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.