

Chapter One Abstract

KOM200 realizes the optoelectronic switching for the low-rate signals of RS232, RS485 and RS422. It is specially designed for harsh industrial environment that has special requirements for electromagnetic immunity. It offers features as below :

- 1、 1 x RS232 or 1 x V.24 or 1 x RS485/422 interface
- 2、 Transparent Communication, plug & play
- 3、 Special protection for circuit of serial port, supports hot-swappable function
- 4、 Integrated fiber optic module, reliable optical power
- 5、 Complete electromagnetic/ fulminous immunity
- 6、 DIN rail or wall-mounting
- 7、 Able to form single optical fiber network

Chapter Two Parameter of KOM200

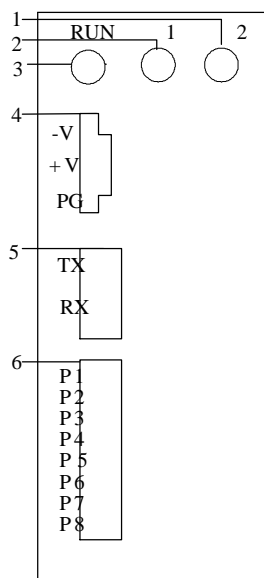
1、 Bit Error Rate	$\leq 10^{-10}$
2、 Asynchronous rate	0--115.2Kbps (adaptive)
3、 Electric characteristics	Comply with relevant requirements of Standards RS232, RS422, RS485; RS-485 interface can be connected to 32-128 nodes; transmission distance: 1200 meters
4、 Physical interface	8 core terminal
5、 Transmission distance	multi-model 2Km、 single-model 40Km
6、 Fiber Connector type	FC/SC
7、 Power	Power +9~30VDC (non-insolated), DC24V , DC48V , AC220V
8、 Relative humidity	0-95% (non-condensing)
9、 Optical power	>-13dbm(single-model system) >-20dbm(multi-model system)
10、 Receiving sensitivity	<-28dbm (single-model system) <-34dbm(multi-model system)
11、 Operating temperature	-35 □ ~+75 □
12、 Storage temperature	-45 □ ~+85 □
13、 Dimensions	75 x 100 x 36 (mm x mm x mm)

Chapter Three Description of KOM200

1 . KOM200 series list

Model	Description
KOM200-S-V.24	Single mode V.24(7 RS232) media converter
KOM200-M-V.24	Multi mode V.24(7 RS232) media converter
KOM200-S-232/422	Single mode RS232/422 media converter
KOM200-M-232/422	Multi mode RS232/422 media converter
KOM200-S-485/232	Single mode RS485/232 media converter
KOM200-M-485/232	Multi mode RS485/232 media converter
KOM200-S-485/232A	Single mode RS485/232 media converter, crossed channel
KOM200-M-485/232A	Multi mode RS485/232 media converter, crossed channel

2 . KOM200 media transition panel diagram :



1. Data Send LED: off ----- No data transmission
Blinking----- DATA TRANSMISSION
2. Data Receive LED off ----- No data transmission
Blinking----- DATA TRANSMISSION
3. RUN LED
ON ----- Local
Blinking second ----- Remote
Quick Blinking----- Error
4. Power Input Terminal V Negative Power Connection L
+V Positive Power Connection N
PG Protection Ground
5. Fiber Interface TX Transmission
RX Receiving
6. P1-P8 Data Interface

Figure1 Panel Diagram

3、Fiber Interface

Optical part employs integrated optical transceiving module, FC and SC are for connection option. When point-to-point communicating, 3-wire RS232, 7-wire RS232, RS485, RS422 data can be transmitted. When networking communicating, RS232 data can be transmitted. When using the devices, connect the TX port of local device through multimode/single mode fiber cable to RX port of the other device, please refer to chapter four for more details.

4、Data Interface

(1) KOM200 -V.24 definition of signal interface :

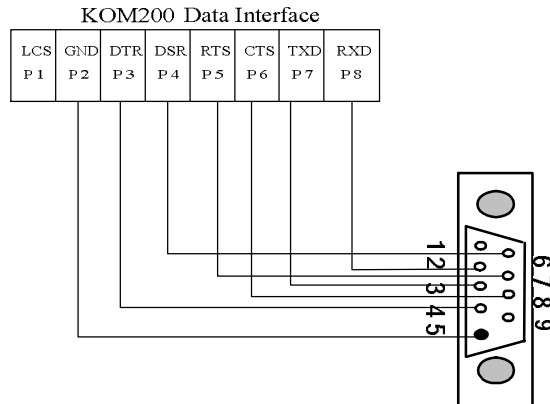


Figure 2 KOM200-V.24 and Electric Port Wiring Diagram

(2) KOM200-485/232/ KOM200-485/232A definition of signal interface :

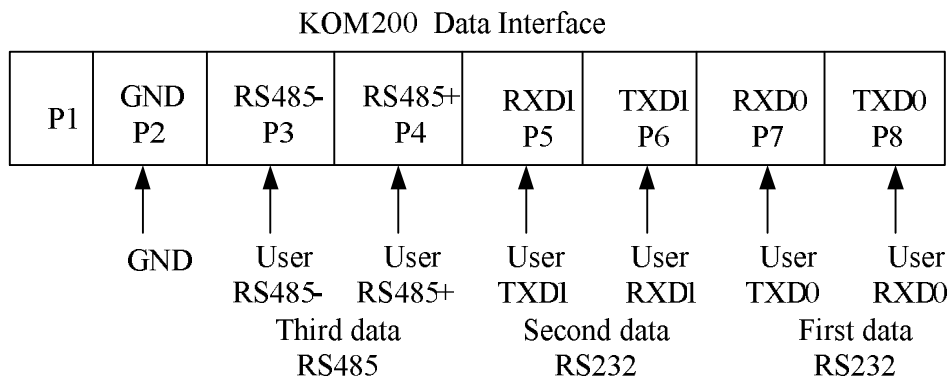


Figure 3 KOM200-RS485/232/ KOM200-485/232 A Interface Wiring Diagram

Notes: Difference between KOM200-485/232 and KOM200-485/232A :

In KOM200-485/232, each channel of 1st RS232 data, 2nd RS232 data and 3rd RS485 data is independent to each other. In KOM200-485/232A, the channel of 1st RS232 data is independent. The 2nd RS232 data and 3rd RS485 data channels are crossed, which means 2nd RS232 data can communicate with the 2nd RS232 data and 3rd RS485 data of another device without configuration.

(3) KOM200-232/422 definition of signal interface :

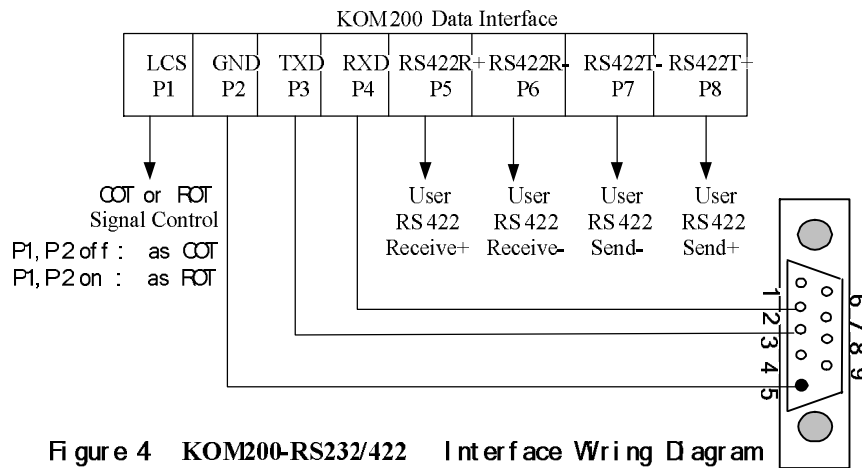


Figure 4 KOM200-RS232/422 Interface Wiring Diagram

Chapter Four Netting configuration

KOM200 support two types of netting, point to point and single fiber ring. The figures as follow :

1 . Point to Point

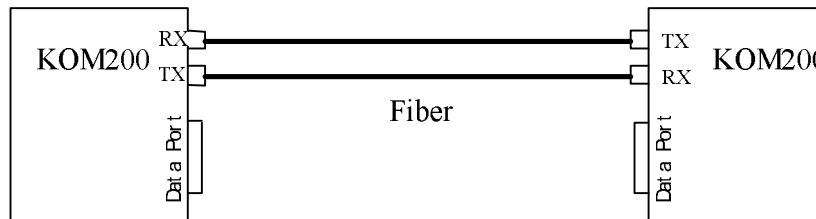


Figure 5 KOM200 Point to Point Diagram

2 . Single Fiber Ring

When P1 and P2 are disconnected, it's Local. When P1 and p2 is connected, it's Remote.

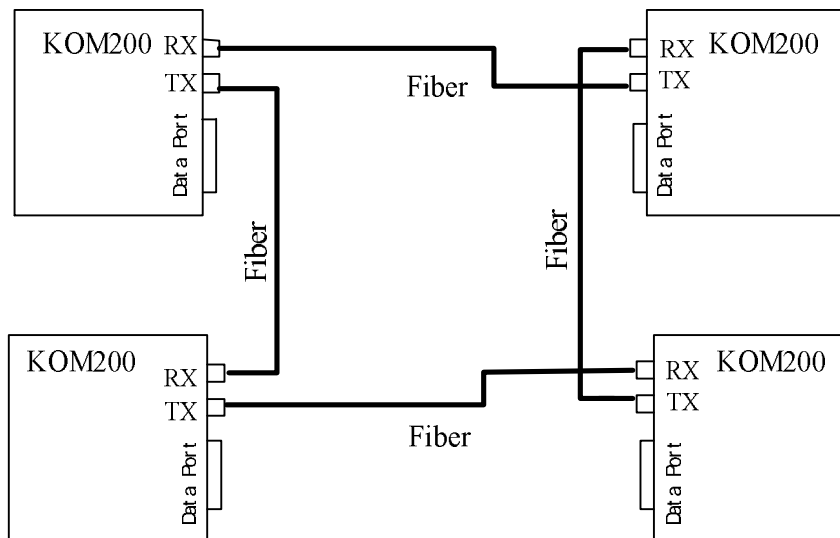


Figure 6 KOM200 Single Fiber Ring Diagram

Attention :

- 1) Do not place the equipments close to water sources or damp places ;
- 2) Please keep optical fiber plugs and sockets clean. Please cover the interface when it's not use.

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