User's Guide for SG-232   RS232 photoelectric isolation protector

In many communications devices which RS232 standard is used, the equipment of powers supply

system grounding, and many other reasons, making the earth potential between two devices is more than

the normal rate. So the vertical interference was brought to the system. Even worse, the communication

interface may be damaged. SG - 232 is designed to solve the problem above. The use of the photoelectric

isolation makes no electrical contact between devices, only photoelectric transport.   When this product is

connected between RS232 communications port and the original cable, the two can be separated by optical.

Anti-lightning system built-in will ensure the safety of the circuit.

This product is divided into two kinds DB9 and DB25 appearance, were applicable to the 9-pin and

25-pin RS232 interface. One end of DB9M (needle Block) or DB25M (needle Block) connect with the

cable, and the other end of DB9F (Hole Block) or DB25F (Hole Block) connect with the RS232 socket of

9-pins or 25-pins. Its corresponding connection is as follows

9pin	1	2	3	4	5	6	7	8	9
25pin	8	3	2	20	7	6	4	5	22
signal	DCD	RXD	TXD	DTR	GND	DSR	RIS	CTS	RI

technical parameters:

1. Optical isolation voltage: 1000 VDC

2. Power: without an external power supply and   the Serial Port don't need initializes for power

3. The Largest communications distance: 15 m

4. Telecommunications rate Max.: 57600 bps

5. Transmission lines: 0.75 mm2 or more, ordinary or twisted pair wire

6. Work: three-wire full-duplex (transmit RXD, TXD, GND) RS232 standards and can inhibit the strong

lightning and other interference

7. Dimensions: $60 \times 50 \times 17$ (DB25), $60 \times 35 \times 17$ (DB9)

8. Weight: 50 grams (DB25), 35g (DB9).

9. Temperature: -20 ~ +70 ℃

10. Humidity: 0 to 95%

Note: This product is filling plastic seal before manufactured; the quality problems will not be responsible for manufacturers if user open it.

Software:

Because this product doesn't need to initializes RS232 serial port to get power, it's applicable to all communications software, plug and play. You don't need to make any changes on software when using this product.

Wiring:

The DB9 (Hole Block) or DB25F (Hole Block) and DB9 (needle Block) or DB25M (needle Block) of this product are complied with the 9-pins or 25 pins RS232 standards. It sends TXD, RXD, GND signal. When using this product, the DB9 (Hole Block) or DB25F (Hole Block) should connect with the RS232 serial port of the equipment directly, and DB9 (needle Block) or DB25M (needle Block) connect with the original on-line cables. As shown below: